



ENHANCED BURNOUT REDUCTION MODEL AND GUIDELINES FOR  
THREE LAYERED BURNOUT INTERVENTIONS

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## Approval of the Thesis

### ENHANCED BURNOUT REDUCTION MODEL AND GUIDELINES FOR THREE LAYERED BURNOUT INTERVENTIONS

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## Abstract

### ENHANCED BURNOUT REDUCTION MODEL AND GUIDELINES FOR THREE LAYERED BURNOUT INTERVENTIONS

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This study developed comprehensive guidelines for a three-layered intervention and an enhanced burnout reduction model called INVIGORATE. Both serving as valuable tools in clinical and organizational contexts by applying a two-step strategy. The first step involving a comprehensive assessment of individual risk and protective factors. The second step, targetting interventions tailored to address identified risk factors, following recommendations from the INVIGORATE card deck. This method yields beneficial consequences for personal health, team interactions, corporate culture, and the wider societal well-being. Employing a qualitative phenomenological research approach, applying triangulation by integrating data interpretation through the lenses of five established theories: the Job Demands Resources Model, the Conservation of Resources model, the Job Demand-Control Model, the Transactional model, and the Work-life model. In addition, incorporating previous burnout interventions research. Semi-structured interviews were conducted with 40 burnout reduction experts. Study population consisted of psychologists, HR professionals, physiotherapists, and general practitioners, who were purposively selected through non-probability convenience sampling. Experts shared their perspectives on the most efficient burnout reduction interventions through open-ended questions. Thematic analysis of the qualitative non-numerical data was performed using NVivo software. Through the

triangulation the enhanced burnout reduction model; INVIGORATE and three-layered 43-piece card deck guidelines were developed. Overall, offering suggestions to protect well-being and reduce burnout. The results underscored the complexity of addressing burnout and cautioned against a one-size-fits-all approach. The Invigorate model offers guidelines that explain burnout protective and risk factor processes and provides implications for practice, policy, and further research.

**Keywords:**

Burnout; the Job Demand-Control Model; Conservation of resources theory; Interventions, Assessment; the Job-Demands-Resources Model; Worklife Model; The Transactional Model; Card-deck, Invigorate model, Interventions' guidelines

### Declaration

I declare that this thesis has been composed solely by myself and that it has not been submitted, in whole or in part, in any previous application for a degree. Except where states otherwise by reference or acknowledgment, the work presented is entirely my own.

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## Acknowledgments

This dissertation has been dedicated to all of my clients who have been struggling with burnout symptoms. Who shared their experiences throughout the years. As all of you made me think and prompt me to study this topic in order to gain more understanding and motivate me to contribute to burnout solution. I would like to thank to all of the participants involved in this research, to my supervisors Dr Guyo Wario Wako and Dr Elizabeth H. George who were teaching me through this journey. To my colleagues who shared their knowledge and expertise through the lengthy discussions. I would also like to thank to my sister Zuzana who was helping me tirelessly with design of the beautiful electronic image illustrations of the entire burnout reduction INVIGORATE card deck. As well as to my partner Maylon and my two amazing daughters Monique and Mia. You all have been patient and sacrificed our family time. Additional thanks to my mother Jana and step father Svetozar. You are my inspiration for the work that I do. I thank to my friends as I know that the lack of my free time was also taking a toll on our quality time. I was however, having a purpose and truly hope that this research helps the companies and organizations out there making the right decisions and support employees' mental and physical health through the trainings, workshops, and quality time leading towards a better worklife balance.

I have learnt that it all comes down to....:

“When you have balance in your life, work becomes an entirely different experience. There is a passion that moves you to a whole new level of fulfillment and gratitude, and that's when you can do your best... for yourself and for others”. Cara Delevin...and so I than you....

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## **List of Abbreviations**

CBT -Cognitive Behavioral Therapy

CBS- The Central Bureau of Statistics (Centraal Bureau voor de Statistiek or CBS) in the Netherlands

EI- Emotional Intelligence

EU-European Union

Fig-Figure

ICD- the International Classification of Diseases

II-Individual Interventions

JDR-Job-Demands-Resources Model

OI-Organizational Interventions

TI-Team Interventions

TNO- (Toegepast Natuurwetenschappelijk Onderzoek) is an independent research organization in the Netherlands

WHO-the World Health Organization

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# **Chapter: 1 Introduction To Burnout and Its Impact**

This doctoral dissertation aims to delve into the multifaceted nature of burnout, examining its various dimensions and exploring potential strategies to alleviate and prevent its adverse effects. The introductory chapter briefly outlines a background information related to burnout research. Explains the problem statement, and presents the research aim and objectives, along with the significance of the study and studied research questions. The chapter one serves as an introduction to the thesis, focusing on its key aspects. It provides necessary context, identifies gaps in existing information, and establishes the rationale for conducting the burnout reduction model and its' three layered interventions' study. The core research topic, along with its goals and objectives, is clearly defined. Drawing upon burnout literature, the main theoretical concepts and scope are identified. Providing valuable insights into the significance of the study, which is to contribute to the theory, clinical practice related to burnout support, as well as improved organizational policies related to employees' health and care. Furthermore, the chapter emphasizes the study's contributions in terms of empirical, theoretical, and practical knowledge. Finally, a concise summary of the thesis chapter is presented.

## **1.1 Study Background Related to Burnout Condition**

Burnout is characterized by a profound sense of physical and mental energy depletion, heightened mental distress, overall negative outlook, a growing sense of detachment from work roles often manifested as cynicism, as well as lowered sense of accomplishment and productivity (WHO, 2019). For this reason, it has garnered significant attention in recent years. Despite of these symptoms, it is not classified as an illness but widely recognized as a

condition rooted in psychological factors and a challenging work environment, encompassing various risk stressors such as excessive shift work, inadequate supervisor support, a sense of ineffectiveness, and/or ultimately, diminished productivity (Leone, et.al., 2007). This phenomenon has not only attracted considerable scholarly interest but has also profound implications for individuals, organizations, and society as a whole (e.g Wigert & Agrawal, 2018; Bianchi et al., 2018; Wiederhold et al. , 2018) . Understanding the underlying causes, effects, and potential interventions for burnout is essential for promoting well-being, enhancing productivity, and fostering healthy work environments.

### **Burnout Concept and its Characteristics**

The concept of burnout has been initially introduced in the 1970s by Herbert Freudenberg. Who defined this condition as a range of non-specific physical and psychosocial symptoms which are caused by excessive work-related energy requiring demands (Freudenberg, 1974). It needs to be however emphasized, that this early understanding of burnout condition is prevalently based on informal observations. Rather than through application of any systematic and standardized methods (Maslach, 2003). In order to create such a systematic way of assessing and studying burnout, the standardized tools such as the Maslach Burnout Inventory and Burnout Measure are eventually developed in the 1980s. Which has enabled empirical examination of burnout by the experts in that field (e.g. Maslach & Leiter, 2017; Wigert & Agrawal, 2018; Parola et.al, 2022).

Burnout manifests itself due to the prolonged exposure to work-related stressors. For this reason, the concept of burnout was redefined by Maslach and Leiter (1997) “as a crisis in work-related interactions”. Even though it was firstly believed that mostly caregiving and

service providing professions, are much more susceptible to suffer from burnout in comparison with other professions. As these are the types of occupations revolving around the relationship between the caregiver and the recipient of a specific type of care (Maslach & Leiter, 2017). Nowadays its' becoming, however more apparent that this condition may affect anyone and it is not only limited to specific care giving or medical occupations (Maslach & Leiter, 2017). Despite of that fact it shall be noted that up to date, a majority of burnout studies still include only mostly samples of medical professionals or students (e.g. Izdebski, et.al, 2023; Ayyala et.al, 2018 & Parola et.al, 2022). Therefore, more research is needed to explore burnout amongst the samples of various professions' populations.

Maslach and Leiter (2017), belong to the most cited researchers addressing burnout studies , who further characterize burnout and subdivide it into three dimensions including: emotional exhaustion, depersonalization, and a lack of personal accomplishment at work. These three dimensions are occurring within the individuals, especially when any effective coping strategies may fail. The following sections will explain these three intrapersonal dimensions more in detail.

### **Emotional Exhaustion**

According to Maslach and Leiter (2017), the first dimension of emotional exhaustion manifests when employees or professionals reach the ends of their limits. The symptoms of emotional depletion may include experiencing a depletion of emotional energy and an inability to respond emotionally. It is an expected reaction to workplace stressors that over time have become chronic. Some of these stressors may include excessive workloads, that are

continuously exerting high pressure on individuals, eventually leading to emotional exhaustion which is diverse from physical fatigue (Maslach & Leiter, 2017).

### **Depersonalization**

While, depersonalization, which is the second dimension of burnout involves developing an impersonal and distant approach towards either patients if working in health care field or colleagues in any other working environments. Such distant approach is further accompanied and expressed by negative feelings and cynical attitudes. It is suggested that depersonalization may develop as a coping mechanism in a form of protective response due to increased exhaustion. When, in order to cope individuals may reach for a mechanism to detach themselves emotionally from work and others. Maslach and Leiter (2017) further emphasize that depersonalization may often lead to the “loss of idealism and dehumanization of others over time”. Thus, resulting that the individuals suffering from burnout eventually decrease in every day functioning, as well as they reduce their engagement and exhibit minimal effort (Maslach & Leiter, 2017).

### **Lack of Personal Accomplishment**

Additionally, the third burnout dimension, has been identified as the lack of personal accomplishment referring to the negative feelings about ones’ competence and professional success (Maslach & Leiter, 2017). It results in a decline of motivation and productivity at work. This dimension further represents the self-evaluation aspect of burnout. As an example can serve when, health care professionals may “perceive their tasks as inadequate and

experience a diminished sense of accomplishment when they are emotionally exhausted and depersonalize” (Parola et.al., 2022). As could be seen, all of the above three dimensions of burnout point towards the severity and debilitating effects of this condition on one’s self of well-being, relatedness to others and overall productivity at work.

### **It is not a Personal Shortcoming**

Based on the previous research (e.g. Parola et.al., 2022; Maslach & Leiter, 2017; Izdebski, et.al, 2023), it is widely acknowledged that burnout is not indicative of personal shortcomings on the part of the professional. Rather, it points towards a significant transformation within the work environment and the nature of the job itself. Consequently, burnout shall not be viewed as an individual failing, but rather as a consequence of series of complex interactions between employees and their conditions and interactions in the workplaces. Along with social and organizational dimensions within the specific work environment. Both individuals/professionals and their organizations shall take a part in having a shared responsibility in making the work environment as much emotionally as physically, a safe place in order to optimize people's efficacy and their job performance (e.g. Parola et.al., 2022; Maslach & Leiter, 2017; Izdebski, et.al, 2023). What can be seen is that there are many risk factors within work environments or in someone’s personal life that can contribute to burnout prevalence.

## **Deciphering burnout as a physiological response**

There are three stress-related concepts that necessitate comprehension and can be visualized along a continuous spectrum. Positioned at one end is general stress, defined as a typical physiological and emotional reaction to everyday demands or changes in the environment. This can be linked to acute stress, where the body releases cortisol (a steroid hormone of the adrenal glands) affecting almost every organ in the body (Taylor, 2023) in response to stressors, returning to its baseline state once the stimuli subside. An instance of general stress could be crossing a street, wherein arousal occurs upon noticing a nearby car.

Midway along the spectrum lies chronic stress, which often originates from general stress but persists at high intensity for prolonged periods, sometimes lasting months or years. This prolonged exposure can overwhelm the body emotionally and physically, challenging its coping mechanisms and impacting health. Chronic stress involves the sustained release of cortisol, hindering the body's ability to return to a resting state. Causing dysregulated cortisol secretion, which may take weeks to return to baseline (Karin et.al., 2020). An instance of chronic stress might entail navigating a work environment characterized by high demands and unmanageable pressure in one's job.

At the opposite end of the spectrum of a stress response lies burnout, which is also characterized by chronic stress but to a degree where the body eventually depletes its own resources and can no longer function effectively. Physiologically, suggesting that cortisol levels, in severely affected individuals may exhibit hypocortisolism. Also known as adrenal insufficiency “hypocorticism”, characterized by insufficient production of cortisol by the adrenal glands (e.g. Lennartsson, 2015). Since cortisol is a vital hormone regulating various bodily functions, including metabolism, immune response, and stress response, it starts affecting one's overall health and well-being (Thau et.al., 2023).

The physiological reactions described above, along with their intensity, are influenced by a combination of individual stressors, social interactions, team dynamics in the workplace, and organizational factors. These factors collectively contribute to vulnerabilities and increase the risk of burnout in individuals. Therefore, this dissertation aims to explore the effectiveness of support mechanisms and interventions at various levels—individual, team, and organizational—in mitigating these vulnerabilities. Therefore, the following section delves into the prevalence of burnout and some of its' risk factors.

### **Burnout Prevalence Across Different Countries Including Netherlands and Slovakia**

One significant risk factor contributing to burnout could stem from a lack of widespread awareness and understanding of burnout within society. Delving deeper into workplaces, their individual policies, and the level of support provided to employees can significantly impact the prevalence of burnout. Which can be seen, as burnout rates have been found to vary across different European countries. Finland reports a burnout prevalence rate of 4.3%, while Slovenia stands at 20.6%, Albania at 13%, and Turkey at 25% (Wilmar & Leuven, 2018). While in the Netherlands CBS and TNO (both are Dutch governmental agencies) reported, that 17 % of Dutch working population show signs of burnout.

In Slovakia, such national survey has not been conducted but in a recent study by Morovicsova and Valus (2022) examining the prevalence of burnout syndrome among 182 doctors (psychiatrists) shows that over one third of these Slovak psychiatrists report a low sense of personal achievement, which is of the three components of burnout. A quarter of them indicate high levels of depersonalization (the second component), and half of their sample report a high degree of emotional exhaustion (the third component of burnout). The

female sample of psychiatrists exhibits not only higher levels of emotional and physical symptoms as well as overall higher level of burnout when compared to males. Even though, the Slovak study cannot provide overall prevalence of burnout representing the whole Slovak population, the study still highlights an increased need to address burnout issue in this Central European Country. As authors recommend, focus on support of mental well-being of healthcare professionals throughout Slovak community. As well as they urge improving preventative measures in all psychiatric workplaces, involving both employers and the psychiatrists themselves. Such disparities across countries can be attributed, in part, to variations in supportive policies implemented by European countries to safeguard the working conditions of employees.

Overall, in 2017, the National Institute of Occupational Safety and Health which has investigated burnout support and governmental approach to this condition reports that only 39% of 23 participating EU countries consider burnout to be a work-related disease (Lastovkova et.al, 2017). Nine of these countries including Netherlands and Slovakia officially recognize burnout as an occupational illness. Five of them including Denmark, France, Lithuania, Portugal, and Sweden are taking support to a higher level as they deal with burnout in a similar manner to other health issues, in terms of providing financial compensation or help from the state government. That still leaves majority of EU countries without acknowledgement of burnout as an occupational condition. (Lastovkova et.al, 2017).

Understanding the factors contributing to burnout and its diverse impacts is crucial for increasing awareness as well as developing effective strategies to address and mitigate this pervasive issue. It is for this reason that this doctoral dissertation aims to delve into the complex nature of burnout. As it briefly describes its' causes, and consequences in later Chapters, with the main focus on investigating the potential broader three-layered (individual,



team, organizational) interventions targeting both prevention and burnout treatment. Due to the recognition of burnout as an occupational condition the burnout interventions are studied amongst burnout reduction professionals in the population of these two countries. Along with the further goal of promoting well-being, enhancing organizational performance, and fostering healthier work environments.

### **Burnout Prevalence Across Different Professions**

Another risk factor that has been explored potentially escalating prevalence of burnout, while posing significant risks to the well-being of workers and the overall performance of organizations, has been explored across different work professions (Eurofound, 2018). For example, research by Medscape Lifestyle, using a substantial sample of 20,000 physicians in the United States, reveals an alarming burnout rate of 51% in 2017 (Alexander & John, 2018). On the other hand, other studies suggest a lower substantial proportion of burnout amongst people from the labor force, indicating that it may be ranging from 13% to 27% (Adriaenssens, et.al., 2015). Despite of these range percentage differences in burnout prevalence, the studies are still highlighting the widespread nature of the burnout issue across different professions emphasizing its significance as a societal concern (Alexander & John, 2018; Adriaenssens, et.al., 2015).

Burnout prevalence rates are indicative that a significant number of individuals across various professions, industries or work fields are experiencing the detrimental effects of burnout, necessitating attention and proactive measures to address this continuously growing problem (Alexander & John, 2018; Adriaenssens, et.al., 2015). Even more so after the

immediate increase in burnout symptoms after the outbreak of coronavirus disease 2019 crisis (Kok, et.al., 2021).

### **Risk Factors in Work Environments**

The prevalence of burnout as a significant issue has been further substantiated by a study conducted by Wigert and Agrawal (2018). In their comprehensive investigation, involving a sample of 7,500 full-time workers, the authors reveal compelling evidence. Astonishingly, their findings indicate that as many as 44% of these employees acknowledge experiencing burnout at various stages throughout their employment. These results shed light on the alarming extent of burnout and its pervasive impact on a large portion of the workforce, emphasizing factors that need to be considered in a work environment. Some of the negative work practices contributing to burnout include, providing unfair treatment (including bias, favoritism, mistreatment), unmanageable workload, not discussing clearly responsibilities and expectations within a role, lack of communication and support from a manager, and unmanageable time pressure (Wigert & Agrawal, 2018).

Therefore, pointing towards the pressing need for proactive measures to address and mitigate this concerning phenomenon in a work place. Having a comprehensive awareness of the sources currently available for burnout treatment, and the manifestation of burnout symptoms, as well as strategically using the treating professionals' reflections of what has been helping people who have been suffering from burnout through their recovery is crucial. As it increases understanding and assists with development of an enhanced burnout reduction model as well as with creating specifically prescribed guidelines for prevention and treatment. Such knowledge further enhances support of any burnout sufferers on an

individual, team/group and organizational levels. The integration of these three layers of interventions: individual, team and organizational can form a comprehensive and multifaceted approach to the prevention and intervention of burnout.

### **Risk Factors also Within a Private Life and Coping**

Throughout the studies, it can be seen how complex burnout is and that it not only includes work environment factors but also touches on a personal life factors. Listopad et.al's (2021) study attempts to investigate burnout through various dimensions including biological, psychological, social, spiritual, and cultural factors. Through a systematic narrative review of existing literature, the article aims to provide insights into the complex interplay of these work as well as personal life factors in understanding and addressing burnout. Arguing that burnout needs to be addressed holistically. Authors identify 40 burnout related factors assigned into 10 categories including life style, physical and mental health, self reference (resilience, perfectionistic striving, adaptive coping etc.), relaxation (sufficient sleep, and recovery/psychological detachment), work to life interrelation (avoidance work conflict, appropriate distribution of working hours), support (private, vs collegial), working environment, big five personality traits (emotional stability, extraversion, conscientiousness, agreeableness, openness), perceived meaningfulness (spirituality, faith, belief, meaningfulness of work etc.) and sense of homeliness (sense of community, value congruence, effort-reward balance) involved in onset of burnout (Listopad et.al., 2021).

Suggesting that if individuals take care of the above mentioned 10 studied categories, while adopting a healthy lifestyle, including regular physical activity, balanced nutrition, and stress management, may reduce the risk of burnout. Along with adequate sleep and

psychological detachment, effective coping mechanisms, establishing a healthy balance between work and personal life, including effective conflict management, feeling connected to a supportive community and having alignment between personal values and organization may all act as protective factors against burnout. Listopad et al.'s study (2021) highlights the intricate and multifaceted nature of burnout, pointing towards the necessity for equally comprehensive and multifaceted interventions that shall address both within individual and working environment layers.

### **Definitions of Individual/Team/Organizational Interventions**

Individual interventions aim at supporting an individual's healthy life style physically and psychologically in order for such individual to function well in their work environment. Team interventions shall be focusing on early detection and support of individuals within their immediate team at work. While supporting those who are at risk of burnout, as well as those who already suffer and have been diagnosed from this condition. While organizational interventions shall assist companies or organizations with protective plan and regulations to support those who are already experiencing burnout, or creating a preventative measures and a safe work place for all the employees. Such combined approach of all these three layers recognizes the complex nature of burnout and the need for multifaceted strategies to address its various dimensions. By adopting this enhanced burnout reduction/prevention approach, organizations and individuals can work together to create a more sustainable and supportive environment that not only prevents burnout but also effectively intervenes when it arises, therefore overall promotes general well-being and productivity (Bianchi et al., 2018).

### **Need for a Burnout Reduction Model (for Prevention/Treatment)**

Recent research and its implications for psychiatry by Leiter and Maslach (2016) focuses on providing an overview on burnout and its implications. The authors have been focusing on the conceptualization and measurement of burnout, including the three core dimensions: the emotional exhaustion, depersonalization, and reduced personal accomplishment, discussed earlier in this chapter. Leiter and Maslach (2016) explore the prevalence of burnout in various occupational settings and highlight burnouts' negative consequences on individuals' well-being, their job performance, but also the negative impact on organizational outcomes. Their research further explores the underlying factors that contribute to burnout, including work-related stressors, individual characteristics, along with organizational factors. The implications of burnout for the field of psychiatry, emphasizing the importance of recognizing and addressing burnout as a significant mental health concern. The authors further discuss potential interventions and strategies for preventing and managing burnout, both at the individual and organizational levels. While, shedding light on the understanding of burnout and its implications for organizations, revealing that increased burnout levels result in reduced income for companies due to the significant amount of employee work-time spent on sick leaves annually (Leiter & Maslach, 2016).

Consequently, building up on Leiter's & Maslach's findings (2016), the development of an effective burnout reduction model becomes crucial as a preventive measure for maintaining the well-being of a healthy working population and as an intervention for individuals experiencing clinical symptoms. Even the authors themselves emphasize how burnout, initially believed to be associated with "people-oriented" job roles, including healthcare professionals, police officers, and teachers, has become increasingly evident as a condition possibly manifesting in individuals of any career (Maslach & Leiter, 1997). Their

research confirms the pervasive nature of burnout and the importance of addressing it comprehensively across various occupational domains.

For this reason, the current study attempts to derive an enhanced burnout reduction model partially based on Leaters and Maslach's (1999) Work-life model. While additionally, building up on other theoretical underpinnings that could explain burnout manifestation and support its' interventions including the Job-Demands- Resources Model, (Demerouti, et.al., 2001), the Conservation of Resources model (Hobfoll, 1989; Halbesleben, & Buckley, 2004), the Job Demand-Control Model (Karasek, 1985; Van der Doef, & Maes, 1999), and the Transactional model (Lazarus & Folkman, 1984). These theories and their relations to burnout and its' interventions are discussed more in depth in Chapter 2.

### **Need for Structured Guidelines**

Despite of these theories, there is a repeated research challenge related to a lack of having structurally defined guidelines for the types of interventions, as well as specifically designed burnout reduction model that is combining the risk and protective factors as well as a broad support on individual, department (team/group) and the whole organization/work levels. Such study shall increase the intervention's effectiveness as previously suggested by a few experts in the burnout field (e.g. Leiter & Maslach, 2016).

Designing specifically defined guidelines for the intervention provides a possibility for future research to assess its efficacy across different times, populations and compare different studies. As well as creates an opportunity to have an additional stepping stone to clinical and evidence based future burnout interventions and organizational support. With such structure in place focusing on individual, team and whole organization, employee

experiencing burnout at a work place shall get adequate help by applying the combined three-layered guidelines. While even the non-diagnosed employees shall be supported by creating a more preventive balanced work-life environment. Majority of interventions currently available, tend to apply either individual support (Scheepers, et.al., 2019; Buruck et al. , 2018; Murray et al. , 2016), while exploring the effectiveness of prevention and intervention programs. These studies have focused on implementing techniques that aim to alter or support individuals' perceptions and thinking patterns (Scheepers, et.al., 2019). With the main purpose of these interventions is to bring about individual changes and reinforce positive transformations within the person.

While other studies are exploring the preventions and interventions within organizations. Focusing on individuals' status at work, rewarding salary, pleasant work conditions, company policies and administration, regular supervision, positive working relationships or having a sense of security (Moss, 2019). Not emphasizing the differences in risk and protective factors between teams and the whole organizations. Despite of the suggestion of the experts in burnout field that covering all three layers of support (individual, team, organizational) may be more effective (Leiter & Maslach, 2016).

### **Need for Combined Burnout Support**

Although, Wiederhold et, al. (2018) point out, such combined burnout design may be time consuming, requiring more resources and willingness from the organizations. That may serve as an obstacle and a reason why up to date there is such a limited number of studies combining more layers of support. Bianchi et al (2018) argue that an evidence-based burnout reduction model with specific structural guidelines may become more convincing for

organizations to support employees, if created in a way that could potentially save more time, energy and resources. Therefore, such subdivision between team and organizational interventions and a proposed broader support of employees on all three layers (individual, team and organizational) has been a topic for exploration in the current research.

Based on the aforementioned justifications and the pressing need to address burnout in the broadest and an effective way, the present chapter introduces the problem statement, and justifications of this research aims and objectives. With the main focus of the research on the exploration and development of an enhanced burnout reduction model. Which aims to provide specific guidelines for individual strategies, group approaches, and organizational mitigation. The facilitation of the implementation of this intervention model, is applied in a unique format, employing a 43-piece card deck. Introduced more in detail in the later chapters. By utilizing this innovative, novel approach, the current research endeavors to offer a practical and accessible framework for combating burnout, promoting well-being, and fostering a general healthier work environment.

## **1.2 Defining Research Problem Including Shortage of Burnout Studies**

Burnout has been undeniably linked to detrimental outcomes like heightened absenteeism, increased illness symptoms, elevated job dissatisfaction, and a heightened probability of work disengagement (West et al., 2016; Boritz et al., 2006). Despite the well-documented adverse effects, there remains a conspicuous shortage of research dedicated to identifying and implementing targeted interventions (Elbarazi et al., 2017). Knowing that the prevalence of burnout is continuously increasing more studies battling the prevention and treatment are warranted (Kok et al., 2021). For this reason, the current study specifically



explores the effective interventions reducing or treating burnout symptoms. The following sections are listing further limitations of previous research.

### **Absence of Evidence-Based Burnout Reduction/Interventions Models**

The existing body of research on burnout further shows shortages in providing comprehensive evidence-based models for reducing burnout. These models shall not only encompass the identification of the most harmful risk factors, but also propose corresponding antidotes as protective measures. Additionally, such model shall extend beyond individual-level interventions, incorporating a broader three-layered approach that addresses individuals, teams (departments), and the overarching organizational context (Wiederhold et al., 2018). The enhanced burnout reduction model, can serve as a base for researchers to design and empirically test specific interventions and measure their efficacy in burnout suffering populations. Having a specific model can potentially reduce the heterogeneity of previous burnout studies that have been repeatedly noted in previous research (e.g. West et al., 2016). For this reason, the current study proposes a burnout reduction model exploring risk factors, antidotes and most importantly specific three-layered interventions based on previous research as well as gathering experiences from burnout reduction experts. As that is yet another gap identified from previous research.

### **Lack of Three-Layered Burnout Reduction Interventions**

Notably absent in previous research on burnout are three-layered intervention strategies. These are necessary as a combination of all three of them encompass targeted

measures aimed at individuals, teams, and the broader organizational structure. The lack of such comprehensive interventions represents a significant gap in the burnout treatment field (Wiederhold et al., 2018). As existing studies have primarily focused on evaluating interventions based on a single within person typology (Wiederhold et al., 2018; Maslach & Leiter, 2016; Schaufeli & Buunk, 2003). For this reason, the current study not only proposes the enhanced burnout reduction model, but also specific guidelines targeting three-layered (individual, team, organizational) support that can serve as a prevention and treatment. Additionally, to the lack of burnout research, missing burnout reduction model, and specific guidelines for a broader three-layered support, there appears in general an insufficient focus on a combined intervention (combining individual and organizational support simultaneously) across previous research (e.g. Gnerre, et.al., 2017).

### **Insufficient Focus on Combined Interventions**

There is another noted shortcoming in burnout studies, which is the limited focus of research dedicated specifically to combined interventions. One of the challenges is that the existing studies often exhibit heterogeneous methodologies, making comparisons and drawing conclusive findings or replicating these studies challenging (e.g., West et al., 2016). The interventions, which integrate both individual and organizational support, are a critical area that demands deeper exploration (e.g. Gnerre, et.al.,2017). As they both target a combined intrapersonal risk factors as well as the work environment risk factors. Thus, there is a pressing need for a study that explores a three-layered support system, drawing on the knowledge and expertise of experienced burnout treatment professionals, as well as combining knowledge from previous studies (e.g., West et al., 2016; Wiederhold et al., 2018) to provide a fresh perspective and an enhanced form of support in the field of burnout

prevention and intervention. Such combined intervention proposal is partially explored in the current study.

Implementing the comprehensive three-layered interventions simultaneously and creating a burnout reduction model hold the potential to improve overall health, foster a more balanced work-life environment, prevent burnout, and conserve valuable time, energy, and resources for organizations. Systematic database searches have revealed a gap in the literature concerning the analysis and proposal of an effective burnout model (e.g., West et al., 2016; Wiederhold et al., 2018). Key deficiencies include the absence of universally structured, science-based guidelines for interventions that address specific individual, departmental (team), and organizational needs and shall be addressed by current research.

### **Building up on Previous Burnout Risk and Protective Factors Models**

The three layers interventions framework, and the enhanced burnout reduction model incorporating also interventions, are somewhat aligned with the Worklife model based on Maslach's multidimensional burnout theory (Maslach & Leiter, 2016) along with other models such as the Resources Model, (Demerouti, et.al., 2001), the Conservation of Resources model (Hobfoll, 1989; Halbesleben, & Buckley, 2004), the Job Demand-Control Model (Karasek, 1985; Van der Doef, & Maes, 1999), the Transactional model (Lazarus & Folkman, 1984). Which all provide a solid foundation for understanding burnout as a detrimental phenomenon arising from a misalignment between individuals, their work, and the organization as a whole. Building upon these theoretical frameworks, this study aims to investigate the development of an enhanced burnout reduction model addressing as risk factors, their antidotes also specific three-layered interventions. By utilizing the Maslach

multidimensional theory as a cornerstone, the research seeks to delve into the various dimensions of burnout and explore interventions that effectively address the burnout underlying causes and consequences within the workplace. This study acknowledges the significance of the three layers intervention framework and its alignment with the theoretical framework proposed by Maslach, thereby contributing to a more comprehensive understanding of burnout and informing the development of targeted and evidence-based interventions for burnout prevention and reduction.

### **Prevention and Intervention for Burnout may Overlap in Strategies**

Prevention strategies for burnout include identification and addressing risk factors before burnout occurs. Involving strategies that promote work-life balance, provide stress management training, foster a positive work environment, encourage social support among colleagues, and implement policies reducing excessive workload or improve job control and autonomy. While treatment for burnout involves interventions that decrease symptoms and restore well-being amongst those who already experience burnout. In this case, treatment includes specifically tailored interventions that contributed to one's burnout and help individuals recover from its effects like cognitive-behavioral therapy, time management techniques, mindfulness-based stress reduction interventions, and lifestyle modifications (e.g. Corney, 2021). As can be seen, there is some overlap between prevention and intervention of burnout.

### **1.3 Purpose of the Study Including Research Aims**

There are three main aims in the present qualitative phenomenological research. One is to develop an enhanced burnout reduction model using triangulation as the data analysis method. The second purpose of the current study also consists of creating structured guidelines for a science-based intervention. Furthermore, the third aim is to design a support on all three layers including the individual, department (team), and organizational levels. The following section explains further objectives and justifications for the current research.

### **1.4 Research Objectives**

The objective of the current study is to apply triangulation in order to gain a more comprehensive and scientifically grounded perspective on burnout effective interventions, understanding more in depth some of the risk factors or protective measures against this condition. The qualitative phenomenological nature of the current study is aiming to provide a different perspective when compared to the majority of previous burnout studies which applied quantitative methods (e.g. West et al., 2016; Wiederhold et al., 2018).

- This study aims to understand burnout and its treatment by gathering insights from experts in psychology, medicine, physiotherapy, and human resources. Through semi-structured interviews, the study seeks to provide a comprehensive understanding of burnout and how to manage it.
- to recommend the most efficient tools and techniques that can be applied to support people suffering from burnout.
- to compare the primary data collected through the interviews with archival data from previous research, and analyzed through the lens of five burnout

theoretical approaches, including the Resources Model, the Conservation of Resources model, the Job Demand-Control Model, the Transactional model, and the Work-life model in order to give data more substantial and less biased outcome.

As previously mentioned, the motivation for this study mostly stems from the scarcity of information on combined three-layered burnout interventions found in systematic reviews evaluating burnout studies (e.g. West et al., 2016; Wiederhold et al., 2018). Where the studies combine either only individual interventions with organizational while not subdividing the organizational interventions into team and organizational as two separate layers of support (e.g. Gregory, 2015; Aryankhesal et.al, 2019). It is often presumed that certain organizations may boast excellent and employee-friendly policies. However, individual experiences may vary, and conflicts with colleagues or a high-pressure, discordant supervisor within a specific team or department can arise. Especially in cases, if a supervisor deviates from established protocols on behalf of the organization, which can potentially pose either a risk factor or protection against burnout. Consequently, the dynamics within teams and organizations can function unaligned where one is either a risk or protective factors. For this reason, it is imperative to make a clear distinction between these two types of interventions. Which shall assess team and organizational functioning separately thus target the relevant treatment to the areas focusing precisely where mostly needed.

Due to the lack of comprehensive support tools for individuals in their workplaces, as well as within their specific teams or departments, and across the entire organization (Elflein, 2019), the current research attempts to implement a broader multi-layered supportive approach. As it has the potential to provide numerous benefits simultaneously. Including an

improved personal well-being, stress reducing and resilience building. Along with a more supportive team/department environment, while also targeting the implementation of policies which promote or improve the physical and psychological health of employees. The conclusions drawn from the triangulation analysis will be presented in Chapter 3 form the basis of the enhanced burnout reduction model, and the three layered burnout reduction interventions which will be specifically found in more detail in Chapters 4 and 5.

### **1.5 Nature of the Phenomenological Qualitative Study**

The current research attempts to gain deeper textual insights into the beliefs, experiences, attitudes, behaviors, and interactions of professional burnout reduction participants regarding their understanding of the most effective treatment practices related to the individual, team and organizational layers of burnout symptomatology support. Understanding such human experience is best suited for phenomenology for exploring the lived experiences of individuals (Williams, 2021). Rich, contextual insights have been gathered through detailed, context-specific information provided by the burnout reduction professionals. Which provides a deeper understanding of the complexities and nuances of a burnout phenomenon, highlighting a more holistic perspective. Due to the fact that phenomenological research allows the exploration of complex and multifaceted phenomena. Additionally, the application of the phenomenological research also contributes to the theory enhancement. Through a careful examination of experiences, specific patterns related to the interventions has been uncovered exposing new underlying patterns that contribute to the five theoretical frameworks used in the current study (Williams, 2021).

This use of the phenomenological research complements previous quantitative methods (e.g. West et al., 2016; Wiederhold et al., 2018) because of its' qualitative perspective. Offering insights into the meaning-making processes that quantitative data alone has not been able to capture (Williams, 2021). For this reason, the current study also offers a human-centered approach which prioritizes the experiences and perspectives of individuals. Which is a valuable knowledge in the fields of psychology, healthcare, education, and sociology where understanding the human experience is paramount. Having further implications for contributions to policy and practice whether in private or public sectors of psychological practices, and other health care sectors as well as within HR or organizational fields. The insights gained from this phenomenological research is aimed to have practical implications for policy-making, intervention design, and improving services in various domains (Dibley,et.al., 2020).

The comprehensive triangulation data analysis of the current research allows for a deeper understanding and validation of the findings, as two different data sources and five theoretical perspectives are considered and integrated. In the initial step of the research a semi-structured interview with questions are developed. These open-ended questions will be described more in detail in the third Chapter of this dissertation. To provide accuracy the interview questions are designed in a way to have section exploring specifically the three-layered intervention (individual, group/team, organization).

In the second step of the research, the ethics committee's approval for the research is granted. With that the recruitment of the participants shall start. Participants are recruited purposefully via the private psychological clinic in the Netherlands that have connections to the networks of professionals in two different countries (Slovakia and the Netherlands). Any professional who has been supporting people suffering from burnout and has approached the



clinic for a psychological treatment are asked whether they would like to participate in this phenomenological burnout qualitative research. If they agree, they are included in the study. The same questions are asked repeatedly to each participant. Justification for these countries will be explained more in detail in Chapter 3 of this dissertation.

Ethical considerations are strictly evaluated and a strong emphasis is specifically placed on respecting and valuing the perspectives and experiences of participants. Ensuring that all participants' voices are heard, while diving deeper into exploring and understanding the experts' subjective perspectives in relation to their knowledge of treatment practices.

## **1.6 Collected Data are Thematically Analyzed**

After the interviews, all data will be collected, prepared, coded and later analyzed using NVivo software program for qualitative data analysis. The thematic analysis is used due to its' flexibility and adaptability to the research questions and data three-layered intervention types. Thus, chosen to provide a possibility of in-depth exploration related to all four research questions and provide inductive approach and qualitative understanding and holistic view of data. Mostly because the process of identifying and organizing themes is intuitive, organizing the themes into three layers of interventions that can be easily understood (Kiger & Varpio, 2020). As well as this specific analysis can be applied to process complex datasets, which will be the case in the current research. As the whole data set comprises of primary set as well as secondary set of data. It further enables to compare and contrast these themes across different contexts, or modalities of individual, team, and organizational interventions. Thus, further facilitating a nuanced understanding of variations in experiences or perspectives (Kiger & Varpio, 2020).

There are additional two reasons for this specific nature of study covering the phenomenological philosophy as well as thematic analysis for its' data. Including its' facilitation to enhancing the five theories used in the current study as well as providing a possibility of transparent and replicable analytical process, which enables other researchers to easily follow, assess and further validate the current findings (Kiger & Varpio, 2020).

### **1.7 Significance of the Current Study: To Enrich Clinical/ Theoretical Knowledge**

The findings of the current research provide a base to develop an enhanced burnout reduction model/Invigorate model and structured guidelines that can enrich practical as well as theoretical knowledge benefitting HR professionals or anyone who supports organizational policies related to the employees' health and well-being, psychologists, other health care professionals working with people suffering from burnout as well as burnout suffering individuals. As the models and the guidelines highlight specific effective interventions that can be used for prevention and treatment of burnout across work environments, in clinical practice or can be utilized as self-help tools amongst those who suffer from burnout.

Additionally, a recent study by Lambreghts et.al. (2023) that conducts a systematic review of burnout studies concludes that it is crucial to engage more qualitative feasibility studies as they provide valuable insights into the various factors that influence the effectiveness of burnout interventions. Which is also one of the objectives of the current study. The following section dives more in depth into the practical and theoretical significance.

## **Practical Significance**

Practical significance of this research offers a more structured perspective on burnout risk factors, its' protective remedies or interventions where practitioners may use the structured guidelines as an additional tool in therapy. The employees or patients themselves may use the guidelines in a form of a card deck as a self-help tool for home or support in the work environments.

Another practicality of the guidelines lies specifically as a support for HR professionals/organizations where they can understand better the symptomatology, the risk factors and apply the knowledge from the enhanced final contextual burnout reduction model, to improve work policies and regulations in order to increase general burnout awareness, conduct assessment and provide better mental and physical health support and safe environment at work. This is particularly significant considering that a substantial number of HR leaders, as reported by Kronos (2017), have identified burnout as a major obstacle that undermines workforce retention, affecting a significant 95% of organizations. By implementing the burnout reduction model and adhering to the recommended guidelines, HR leaders can proactively address this critical issue and work towards creating a healthier and more sustainable work environment for their employees.

Due to the fact that burnout is constantly on rise, endangering lives of workers and performance of organizations, as reported by Eurofound, (2018), and the scant data of previous research, as well as not having data that specifically combines a three-layered individual, team/group and organizational intervention, more research related to burnout phenomenon and its' interventions is needed. Current research, specifically proposes the possibility of a broader support of employees on all three layers with specific three-layered guidelines. As it examines collected effective methods as tools for the enhanced burnout

reduction model and the three-layered interventions. To support a wellbeing of employees in various work environments. As it offers a comprehensive approach that encompasses various dimensions, including workload management, workplace culture, employee well-being, and work-life balance. By adopting this model, HR leaders can gain insights into the factors contributing to burnout within their organization and develop tailored strategies to mitigate these issues effectively. It is essential for HR leaders to recognize the significance of addressing burnout as a strategic priority. By doing so, they can not only mitigate the negative impact of burnout on workforce retention but also enhance employee engagement, productivity, and overall organizational performance. The burnout reduction model and guidelines serve as valuable resources that can empower HR leaders to take proactive steps towards creating a more supportive and fulfilling work environment, ultimately benefiting both the employees and the organization as a whole. Thus, findings of the study can be utilized for burnout prevention, speeding up recovery and re-integration to work after the recovery.

### **Theoretical Significance**

The current research holds theoretical significance as it expands upon the five existing theories included in this study. Which are thoroughly explored in subsequent chapters. One notable theoretical extension will provide a fresh outlook on guiding future research endeavors. Furthermore, it will furnish an enhanced comprehension of the mechanisms and processes underlying burnout, thereby enriching awareness of its associated risks. While, the final enhanced contextual burnout reduction model will help organize and systematize already existing knowledge in the burnout field it will also offer a new predictive power which can be valuable for making future practical applications and interventions. Although,

current research does not offer a final theory or model it proposes a part of the theory and develops INVIGORATE model and guidelines which can be tested and empirically verified in future research to either support or refute this contribution (e.g. Suppes, 2014) to the five theories that will be presented more in depth in the next chapter.

Investigating burnout, and the effectiveness of its' supporting interventions may potentially lower prevalence of burnout that has been on rise, since a few years ago. One of the most recent reports show an alarming result of 70% of employees struggling in a work place especially after the outbreak of Covid -19, where 36% of these employees admit that their organizations are doing nothing to prevent burnout. In the same report another disturbing 46% of HR professionals say that burnout makes up for almost half of their annual turnover (Grucela, 2023). Pointing out that any research looking into potential remedies of this condition is profoundly needed.

## **1.8 Research Questions**

There are three research questions, as well as one exploratory question proposed for the study of burnout topic, its' intervention guidelines, and the enhanced burnout reduction model as indicated below.

RQ1.

- “What burnout methods are (the most) effective in clinical/organizational settings for Individual support?” Individual interventions, include a definition as “a support of a person, suffering from burnout on an

individual level including their general mental health, energy levels, thought and emotional processes, decreasing life/work stressors and buffers”.

## RQ2

- “What burnout methods are (the most) effective in clinical/organizational settings for Team support?” The teams support is defined “as a support of an individual within their immediate team at work around their colleagues, peers and/or their manager or supervisor”.

## RQ3

- “What burnout methods are (the most) effective in clinical/organizational settings for Organizational support?” While, the organizational interventions are defined “as a support of an individual within their company or work organization by creating an empathic and friendly work culture, providing personal growth/educational opportunities, mentoring support, and setting up optimal mental health/physical health support regulations, sick leave pay and other supportive regulations etc”.

## **Exploratory Question Related to the Combined Intervention**

The current dissertation also studies the opinions of burnout reduction professionals about the combined (individual, team and organizational) intervention simultaneously. In particular, from the perspective of experienced burnout reduction professionals “do they

believe that applying combined individual, team and organizational support is more effective rather than applying those approaches of support separately?”

## **1.9 Summary of Chapter 1**

In conclusion, the current chapter discusses burnout as a pervasive issue characterized by emotional exhaustion, mental distress, and disengagement from work. It has garnered significant attention due to its detrimental impact on individuals and organizations. This doctoral dissertation aims to contribute to the understanding of burnout by exploring its dimensions and investigating strategies to alleviate and prevent its effects. Throughout this dissertation, the problem statement, research questions, and overview of the current state of burnout research have been introduced. The following section introduces Chapter 2 of this dissertation that provides a literature review, describes the five theoretical constructs and conceptual frameworks related to burnout, and outlines the nature of the individual, team and organizational interventions.

## **Chapter: 2    Literature Review**

The second chapter of this dissertation reviews the literature related to burnout condition topic, the types of interventions applied in previous research specifically related to the individual and organizational layers of support and their reported efficacies. It will also propose an initial model that has been derived from the reviewed literature, which can be found towards the end of this Chapter.

### **2.1 Introduction to Burnout Topic Previous Research**

Numerous studies have been conducted to explore the prevalence and symptoms of burnout, as well as different intervention approaches and their efficacy (Elflein, 2019; Rupert, et.al., 2015; Vandercammen, et.al., 2014). However, the existing body of burnout research falls short in terms of comprehensive information on interventions. Specifically, there has been limited implementation of a combined three-layered burnout intervention, despite its potential as a valuable tool for individuals both on a personal level and within their work environment. It is imperative to expand the scope of research in this domain, particularly considering the ongoing increase in burnout cases (Elflein, 2019). While studies have shed light on the occurrence and manifestations of burnout, the focus on interventions has been relatively narrow. Most studies have examined individual interventions or organizational interventions separately, without fully exploring the potential benefits of a combined approach (e.g. Pijpker, et.al. , 2019).



## 2.2 Integrating Interventions Across the Three Layers

A three-layered burnout intervention encompasses individual-level, organizational-level, and team-level interventions, recognizing that burnout is a complex issue influenced by multiple factors. By integrating interventions across these three different layers, it is possible to create a more holistic approach to addressing burnout. The individual-level interventions within the three-layered approach can target the personal well-being and coping strategies of individuals. These interventions aim to enhance individuals' resilience, coping skills, and self-awareness, enabling them to better manage stress and prevent burnout. Team-level interventions involve broader within team norms, supportive collegial policies within a specific department, and attitudes between co-workers. This may include, addressing team pressures related to productivity and success, and fostering a culture within a team or department that values employees' well-being. Organizational-level interventions focus on improving the work environment and addressing systemic factors that contribute to burnout (e.g. Pijpker, et.al. , 2019; Holmes et.al., 2017). This may involve initiatives such as workload management, job redesign, fostering a supportive and inclusive workplace culture, providing resources for work-life balance, and implementing policies that promote employee well-being. These interventions recognize the role of organizational practices and structures in shaping individuals' experiences and aim to create a healthier and more sustainable work environment. Such interventions acknowledge the influence of multifaceted factors on individuals' experiences at work and seek to create a more supportive and balanced context (Holmes et.al., 2017).

By integrating interventions across these three layers, a more comprehensive and effective approach in addressing burnout can be achieved. However, further research is needed to explore the feasibility, implementation, and long-term effectiveness of a combined three-layered intervention approach. This is crucial in order to advance our understanding of

burnout and provide evidence-based recommendations for individuals, teams, organizations, and society at large. Therefore, the following sections will delve deeper into the topic of burnout, its assessment, the types of interventions available, and their effectiveness among individuals functioning within organizations. Along with exploring different burnout interventions concepts including cultural and age differences, and gaps in previous literature. Building upon these findings, an enhanced burnout reduction model is developed, drawing upon the insights from the aforementioned studies.

### **2.3 Literature Search Approach: The Keywords**

Several electronic databases have been used for the research of peer reviewed scholar publications (e.g. Aryankhesal et.al, 2019; Bresesti, Folgari, & De Bartolo, 2020; Lee, et.al 2013). Including Psyc ARTICLES, PubMed, PsycINFO and Science direct, because these publications provide more robust evidence based experimental data. The search key terms include: identification of burnout research, the Job Demand-Control Model, burnout's three dimensions, conservation of resources theory, interventions, assessment, burnout diagnosis, individual intervention, organizational intervention, combined intervention, burnout theories, the Job-Demands-Resources Model, Worklife Model, The Transactional Model. The search includes any burnout intervention papers published in English language between the years 2015-2023. As well, as the research paper includes the snowball technique, using the reference lists of some of the relevant papers for the literature review. The origins of the theories were older than the last five years and dating back to 1980-ies. But they are still relevant to the recent burnout research and have been repeatedly applied within the previous studies. These were mostly included for the theoretical constructs' definitions. The following sections start with the theoretical framework that provides basis for the burnout reduction model.

## 2.4 Theoretical Framework

Burnout interventions in the literature have been drawing upon various theories to address the complex nature of burnout. Among the most commonly utilized theories are the Job Demands Resources Model (Demerouti, et.al., 2001) and the Conservation of Resources model (Hobfoll, 1989; Halbesleben, & Buckley, 2004). These theories have been commonly used in the research field of burnout while exploring types of occupational stress. They highlight the role of chronic stress and distress as major contributors to burnout. They also emphasize the significance of job and personal resources in preventing and reducing burnout. By influencing an individual's motivation and engagement at work, these resources can act as buffers against job demands (Rupert, et.al., 2015).

The theories further provide valuable insights and framework into the underlying mechanisms of burnout and offer guidance for developing effective interventions. The soon mentioned five theories highlight the importance of job demands, job resources, and the availability and depletion of personal and social resources that all play a role in the development of burnout. By considering the interplay between demands and resources, organizations and individuals can individually identify and develop strategies to reduce burnout, enhance well-being, and promote engagement in the workplace (Demerouti, et.al., 2001; Hobfoll, 1989; Halbesleben, & Buckley, 2004). These two theories along with additional 3 theories including The Job Demand-Control Model (Karasek 1985; Van der Doef, & Maes, 1999), The Transactional Model (Lazarus & Folkman, 1984) and The Work-Life Model (Leiter & Maslach, 1999) are discussed more in details in the following sections.

As the five theories together have been commonly used in burnout field research and are strongly relevant to a prevention and treatment on all three layers (individual, team, organizational) of support. Additionally, next sections will discuss either separately

used or combined applications of both individual and/or organizational interventions noted in previous research. Therefore, next sections will be presented in the following order:

## **2.5 The Job Demand-Control Model (Karasek 1985; Van der Doef, & Maes, 1999)**

## **2.6 Conservation of Resources Theory (Hobfoll, 1989; Halbesleben, & Buckley, 2004)**

## **2.7 The Job-Demands-Resources Model (Demerouti, et.al., 2001)**

## **2.8 The Transactional Model (Lazarus & Folkman, 1984)**

## **2.9 The Work-Life Model (Leiter & Maslach, 1999)**

## **2.10 Studies Related to the Individual Intervention**

## **2.11 Studies Related to the Team/Organizational Intervention**

## **2.12 Studies Related to the Combined Intervention**

## **2.13 An Initial burnout Reduction Model**

## **2.14 Reflections Summary**

## **2.4 The Job Demand-Control Model (Karasek 1985)**

The Job Demand-Control Model, has been originally proposed by Robert Karasek in 1985. It introduces a theoretical framework that focuses on the relationship between job

characteristics and employees' well-being, especially in relation to the work-related stress. This model proposes two key dimensions of the work environment: job demands and job control.

According to the Job Demand-Control Model, job demands refer to the physical, psychological, social, or organizational aspects of a job that require sustained effort and are associated with potential physical or psychological costs. Examples of job demands may include high workload, time pressure, conflicting demands any quantitative aspects of role conflicts, as well as physical and emotional demands. Job control, on the other hand, relates to the degree of autonomy and decision-making authority that an individual has in their job. It encompasses the freedom to use acquired skills, make freely decisions, and have an influence throughout the work process (Karasek, 1985).

The Job Demand-Control Model has later expanded by Van der Doef and Maes (1999) by inclusion of a couple of hypotheses to the model. One of them, the "strain hypothesis" proposes that high strain jobs are contributing to mental or physical illnesses and decrease overall well-being. The other, "buffer hypothesis" focuses on the interactive effects between demands and control in which control reduces the negative effects of job demands on one's well-being. These hypotheses are not the opposites of each other rather can be viewed as parts of each other.

### **Combination of Demands and Control**

Particularly, the model suggests that the combination of high job demands and a low job control creates a high-stress work environment, increasing the likelihood of experiencing negative outcomes such as work-related stress, burnout, and a variety of health problems. This combination is referred to as the "high-strain" situation. High job demands without

adequate control over one's work can result in the feelings of being overwhelmed, experiencing a lack of control, and an inability to cope effectively with job demands (Van der Doef & Maes, 1999).

On the other hand, a positive supportive aspect of this model further proposes, that when individuals experience high levels of job control, they can effectively manage job demands and be a part of a more positive work environment. This is referred to as the "active" or "low-strain" situation, where individuals have opportunities for skill development, decision-making, and utilizing their resources effectively. These situations have different implications for employees' overall well-being (Van der Doef & Maes, 1999). While, the job control has been related to the skill discretion, defined as an opportunity to apply one's own skills. Another part of the job control is decision authority, defined as an extension to which one is autonomous at work regarding the timing, and decision methods (Häusser, et.al.,2010).

It needs to be noted that the Job Demand-Control Model has been selected as one of the supportive theories in the current study as the burnout reduction model and the three-layered interventions in a form of guidelines will be partially based on it. One reason for this inclusion is not only the model's relatedness to burnout but also because balancing one's stressors and checking for their resources in order to increase the personal physical and mental coping is an important aspect of psychological interventions.

### **Job Demand-Control and Burnout**

The Job Demand Control model has been evaluated in Häusser et.al.'s research (2010) which reviews 83 studies and confirms the additive effects of demands, control and social support on general psychological well-being. Especially in cross-sectional research. Therefore suggesting, either reciprocal or reversed causation for the association between job

demand control (JBC)/job demand control-support (JDC-S) dimensions and the job-related well-being. Their research however, does not confirm the interactive effects of the buffer hypothesis of the JDC/JDC-S models. Some longitudinal studies that have shown the likelihood of finding such buffer interactions in the past have more likely been linked to the degree of match (close definitions/or measuring the same constructs) between demands, control and strains (de Jonge & Dormann, 2006). Even though, according to Häusser, et.al.'s research (2010) the demands and resources and their balance does not fully explain one's predisposition for burnout. Both such conclusions are a part of older research.

In the newer meta-analysis of Kim et al. (2021) of systematically reviewed studies that also applies the demand-control-support model, the studies show different results. The authors examine burnout in the sample of students and adapt this model specifically to the context of students. They recognize the unique stressors and challenges that students need to face within their educational settings. The method of their meta-analysis includes a comprehensive search of relevant literature and rigorous inclusion criteria. The selection of studies includes analyzes to determine the effect sizes of the relationships between demand, control, support, and student burnout. The results include identification of the overall effect and potential moderators. Which show significant associations between high demands and student burnout.

Such results indicate that if students experience academic pressure and workload, these contribute to increased levels of burnout symptoms. Additionally, low control over academic tasks and not having a social support are also found to be significant predictors of student burnout. Such results emphasize the importance of considering the psychosocial factors and support systems in educational settings to mitigate burnout amongst students. Some of the suggestions of the authors include interventions that shall target workload management, sense of autonomy enhancement, and social support. Kim et al. (2021)'s meta-

analysis allow comprehensive and systematic review of the literature, which enhances the robustness of their findings. The study employs rigorous inclusion criteria and conducts appropriate statistical analyses to synthesize the results effectively and sheds some light on the factors contributing to student burnout along with practical implications relevant for educators and policymakers. (Kim et al., 2021).

However, a few limitations also need to be considered, which are noted by the authors including studies with potentially different measures and methodologies. These differences in methodologies could have influenced the consistency of the results. One needs to be mindful, that such heterogeneity of studies has been a repetitive issue across any meta-analytical burnout studies (e.g. Kim et al. 2021; Häusser, et.al., 2010). The Job Demand-Control Model, developed by Robert Karasek in 1985, is a widely recognized and influential theoretical framework in occupational health psychology. It posits that the combination of high job demands (e.g., workload, time pressure) and low job control (e.g., decision authority, skill utilization) can lead to increased job strain and subsequent negative health outcomes for workers.

### **Strengths of the Job Demand-Control Model (Karasek, 1985)**

There are several strengths observed in the Job-Demand-Control model. Including the model's empirical support (e.g. Kim et al. 2021; Häusser, et.al., 2010). As the model has received substantial empirical support over the years, providing the evidence for the relationship between job demands, job control, and various health outcomes such as stress, burnout, and cardiovascular health. The model also provides a practical framework for understanding and addressing workplace stressors that may contribute to employee strain, enabling organizations to implement targeted interventions and has to a certain degree its' predictive power: As it can predict a range of health-related outcomes, including



psychological well-being, physical health, and job satisfaction (Karasek, 1989, Kim et al. 2021; Häusser, et.al., 2010). Which practitioners and researchers may use to their benefit when exploring interventions.

### **Weaknesses of Job Demand-Control Model (Karasek, 1985)**

There is an argument that this model may not fully capture the complexity of burnout in the modern work environments. Where other additional factors need to be explicitly addressed by the model. For this reason, additionally, to the Job Demand-Control Model (Karasek 1985) there are other four theoretical models included in this study. Covering more risk factors related to the burnout condition. Therefore, the following section will introduce the second theoretical construct which additionally explains a variable of motivation as an underlying link influencing the development of burnout.

### **2.5 Conservation of Resources Theory (Hobfoll, 1989)**

Conservation of Resources Theory, is also known as a theory of motivation, suggesting that human beings are highly motivated to protect their current resources, conservation-may include personal bonds, strength, and continuously acquire new ones (acquisition). Resources in this case may be general definitions of objects, states, conditions, and other aspects that humans put values to, as originally proposed by Hobfoll (1989). Such values of resources may differ, depending on the individual experiences and situations. As an example, could serve spending time with a family member which may be highly valuable for some people while others may consider it as a threat. Threat that can be characterized or related to cases of abusive relationships.

There are several principles to this theoretical construct including the principle one. Principle one includes primacy of resources loss-related to a psychological explanation of feeling a greater harm due to the losses of resources, rather than feeling the benefit of gaining the resources. With this principle, there come two additional deductions implying that losses at work will have more impact than similarly valued gains (such as losing the same amount of pay would feel more painful rather than the same gain in pay would be helpful).

The second principle is called resource investment principle which suggests that people need to invest resources in order to prevent resource losses, recover from them or gain more. Some are even connected to the investment with the means of coping (e.g. Ito & Brotheridge, 2003) or as a complex process, driven by several psychological factors where the same type of an investment may be either a gain or threat, depending on the individual values.

The third principle, also called as gain paradox states that resource gains will take on a larger meaning when applied in a context of resource losses (such as gaining a job would be greater after a long period of unemployment). While, the fourth principle; also referred to as a desperation principle proposes that when resources are close to or exhausted, human beings enter a defensive mode (manifested by being more aggressive, irrational) in order to preserve the self (Hobfoll, et.al., 2018; Hobfoll & Freedy, 1993; Vinokur & Schul, 2002). Overall, all of these principles contribute to ones' motivation to either avoid certain situations due to the losses or to approach them due to the gains. Major hypotheses of the Conservation of resources theory related to burnout is that certain work places may reinforce chronic stress by creating limited opportunities for renewal of resources (finances, social bonds etc.), or complete losses of them which in turn affects one's well-being (Halbesleben et. al. 2014; Buchwald & Hobfoll, 2004).

Recently Hobfoll et.al. (2018) examined the theoretical framework of their conservation of resources theory and its implications for attempting to understand organizational behavior. More specifically, provided insights into how individuals and organizations manage and mobilize resources to cope with certain stressors and challenges.

The authors wanted to understand the nature of resources, resource acquisition and loss processes, resource investment, and the consequences of resource dynamics. Hobfoll et.al (2018) discuss the impact of resource availability and scarcity, as well as resource investment strategies, and the role of individual differences in resource management. They also examine the consequences of resource depletion, such as burnout, job dissatisfaction, and turnover. Which is highly valuable for understanding burnout in the work environment and for target of interventions.

### **Strengths of Conservation of Resources Theory (Hobfol, 1989)**

One strength of this theoretical framework includes application possibilities in various organizational contexts, including work-family interface, leadership, team dynamics, and employees' well-being. Hobfoll et.al (2018) have been supporting the relevance and applicability of the Conservation of Resources theory in relation to understanding organizational behavior. More specifically, this theory posits that resources serve as potent motivational forces deeply rooted in universal values, operating within a hierarchical framework.

### **Weaknesses Conservation of Resources Theory (Hobfol, 1989)**

It is also crucial to acknowledge a few limitations in Hobfoll's et.al paper and their theory. That is that even though the authors' paper primarily focuses on the theoretical

propositions of the Conservation of Resources theory, there is little emphasis on the methodological considerations and the application of their empirical findings. The Conservation of resources theoretical construct (Hobfoll, 1989) has been used across burnout or chronic stress studies. However, it also brings with it some criticisms due to the diverse loose definitions of resources, their fluctuations in dynamics and measurements across studies (e.g. Halbesleben et. al, 2014). The Conservation of resources model proposes that individuals seek to obtain, retain, and protect resources. Which is a debatable definition that is broad and may include subjective, psychological resources, which can be difficult to operationalize and measure consistently across studies. Similar limitation can be applied to the loose definition of resource loss vs. gains. Which may indicate that the model tends to treat individuals as relatively uniform in pursuing the resources and applying coping strategies. Despite of the fact that there are individual differences in how people perceive and respond to resource stressors (Bon & Shire, 2022). Such lack of definitions and their complexity can make it difficult to apply the model in practice. This can lead to ambiguities and contradictions, potentially exacerbating the heterogeneity observed in research studies. As studies use the term "value" with an implication that resources need to lead to positive outcomes. However, even the positive things may lead to negative outcomes with an example of someone having great resources at work which could however potentially increase work-family conflicts (e.g. Grant, 2011).

Halbesleben et. al. (2014) argued that such loose ends of interpretations could be corrected may be by focusing on one's perception of a resource. This could be done by helping an individual to attain a goal rather than checking whether a resource brought a goal attainment. The authors believed that having a goal-focused definition may improve the understanding of resources as values of resources are highly dependent on the context. As mentioned, some resources may seem valuable on the surface, but may not be valuable for a

particular individual, or could be counterproductive if context changes. For this reason, the processes how the individuals determine a value of resources is the biggest limitation of the Conservation of resources theory and may be even more skewed due to cultural/societal/personal differences (Halbesleben et. al, 2014).

Gagne and Deci (2005) build on it with a self-determination theory proposing that even motivation is complex and can be viewed on a continuum scale starting as intrinsic motivation with various resources fulfilling extrinsic motivation. Where this continuum scale of motivation gets further enhanced by fulfilling three needs of autonomy, competence and relatedness, therefore reinforcing in individuals achieving a goal through intrinsic motivation and improved well-being (Vandercammen, et.al., 2014).

Nevertheless, despite of these limits, the Conservation of Resources theory (Hobfoll, 1989) still offers an important value to the enhanced burnout reduction model and the structured guidelines. Therefore, it is a second supportive theory used in the current study. Due to mostly possible explanation of the motivation behind someone's approaching or avoiding tendencies within one's organization. As well, as its' connection with consequences that such behavior brings and shall be implemented to the knowledge and the design of the three-layered burnout reduction interventions.

Thus, overall the Conservation of resources explains a part of the motivation behind one's behavior, therefore leading to certain consequences affecting ones' well-being at work. Which shall be a part of the supportive theory in the current research. While, the inclusion of yet another, the third theory shall also propose more in-depth specific risk factors related to job stress and burnout. This theory is called The Job-Demands-Resources Model (Demerouti, et.al., 2001) and shall be introduced more in depth in the following section.

## **2.6 The Job-Demands-Resources Model (Demerouti et.al , 2001)**

The Job-Demands -Resources model is a theoretical framework that has been firstly proposed by Demerouti, et.al (2001). This model attempts to explain the relationship between job characteristics, employee well-being, and work outcomes. According to this model the job demands and job resources play important roles in determining employees' levels of engagement, burnout, as well as overall job satisfaction. Furthermore, it is an occupational stress model that consists of specific risk factors linked to the job stress including demands. Demands can be characterized as physical, psychological, organizational and social constantly requiring mental and physical efforts. Thus, demands include certain physiological or psychological costs. Such costs cause personal work life misbalance. An example of a demand includes time pressure and/or high workload, conflicting roles in a work environment that are negatively affecting health and energy for a period of time. Consequently decreasing job performance (Demerouti & Baker, 2011). Job demands are also seen as potential stressors that, if excessive or not properly managed, can lead to negative outcomes such as burnout and decreased overall well-being (Demerouti, et.al., 2001).

Resources on the other hand, may involve physical, psychological, social, and/or organizational characteristics of the job, and include positive factors stimulating personal growth, learning and development (e.g. receiving a support from the higher management, gaining a positive feedback for a work, or having a sense of autonomy etc.; Shahnawaz Adil, & Braig, 2018). The resources of a job help employees achieve work goals, and reduce job demands. These resources are seen as motivators that enhance employees' well-being, performance, and job satisfaction.

The model further incorporates a distinction between workplace resources (e.g. social support) and personal resources (e.g. a specific personality trait like self-efficacy) (Jie, et.al, 2016). It is an alternative model of the demand-control model, explained in the previous

section, and has been enhanced by a wide range of working conditions along with both positive and negative outcomes. Outcomes in this particular model describe someone's energy levels and a sense of well-being. According to this theory when job demands and resources are high, one may expect high strain and motivation. While if low demands and low resources conditions are present, the expectations include absence of strain and motivation. In cases of high demands and low resources conditions, there is a prediction of high job strains and low motivation. Opposingly in cases of low demands and high resources situations, there is an expectation of no strain and high motivation (Shahnawaz Adil, & Braig, 2018). Since, the Job -Demand-Resources model hypothesizes that demands increase strain/stress, while resources increase one's motivation, this model was also selected in the current study, to further support the selections of methods in the design and assessment of the three-layered interventions.

Additionally, according to the Job-Demand-Resources Model, if a person continuously experiences high job demands, this may eventually lead to exhaustion and burnout. Especially, if employees lack the necessary resources to cope with these demands. On the other hand, if employees have access to sufficient job resources, they are more likely to experience high levels of work engagement. This has been found to lead to positive outcomes such as increased job satisfaction and performance (Li, et.al., 2020; Demerouti, et.al., 2001).

### **High Demands, Lack of Resources Lead to Burnout**

The research of Li, et.al. (2020) recently investigates the impact of teaching-research conflict on job burnout among university teachers and finds a significant positive relationship between teaching-research conflict and job burnout. Teaching-research conflict defined as a phenomenon experienced by university teachers when the demands and expectations relate to

their teaching responsibilities clash with those associated with their research activities. In the academic context, university teachers need to engage in both teaching and research activities. There are prolonged moments when the allocation of time, effort, and resources between these two domains can create conflicts and challenges for faculty members. (Li, et.al., 2020).

In their research the authors specifically identify emotional exhaustion as a mediator in the relationship between teaching-research conflict and job burnout. Highlighting that teaching-research conflict leading to emotional exhaustion. Consequently, contributing to higher levels of job burnout. Another finding highlighted by the researchers is, that work-family conflict exacerbates the impact of teaching-research conflict on emotional exhaustion and job burnout. Thus, proposing an integrated model within their article consisting of various factors influencing this relationship, including work-family conflict, emotional exhaustion, and job satisfaction. Authors conclude that the interplay of these factors in examining the impact of teaching-research conflict on job burnout is off great importance.

The implications of Li, et.al.'s study (2020) suggest the need for universities and educational institutions to address teaching-research conflict and its potential consequences for faculty well-being. Strategies such as promoting work-life balance, providing resources for managing conflicting demands, and fostering a supportive work environment can help mitigate the negative effects of teaching-research conflict on job burnout. Overall, the study highlights positive relationship between teaching-research conflict and job burnout among university teachers. Which contributes to knowledge in the burnout field. Pointing how high demands and lack of resources lead to burnout condition. Even though, some limitations are noted in this study including the study relying on self-report measures only, which may introduce common method bias and the generalizability of the findings may be restricted due to the specific context and sample used in the study.



The Job-Demands-Resources Model (Demerouti, et.al., 2001) suggests that the combination of high job demands and low job resources is particularly detrimental to employees' well-being, as it increases the risk of burnout and decreased motivation. However, when employees have access to both high job resources and high job demands, they can experience positive work engagement, referred to as "workaholism," which is associated with high levels of energy, dedication, and absorption in their work (Demerouti, et.al., 2001).

### **The Job-Demands-Resources Model (Demerouti et.al , 2001) Strengths**

There are several strengths to use the Job-Demands-Resources model. Firstly, this model has a strong comprehensive framework enabling researchers to gain understanding of the relationships between job characteristics, employee well-being, and work outcomes. It takes into account both the demanding and resourceful aspects of a job (Schaufeli & Taris, 2014).

Another positive of this model includes clear and testable propositions about how specific job demands and resources may have an impact on various outcomes such as burnout, engagement, or job performance. This makes it suitable and applicable for empirical research. Which was further demonstrated by empirical support from previous research that validates the relationships predicted by the model (Li, et.al., 2020). Showing its applicability across different occupational fields. As could be also seen the Job-Demands-Resources model has integrated certain aspects from earlier models one of which was the Demand-Control model (Karasek 1985), therefore increasing the comprehension of the work-related stress process. Overall, this model has brought many practical implications for organizations (Schaufeli & Taris, 2014). As long as the organizations can identify specific job demands and

resources, then they can implement interventions to improve employee well-being and their productivity.

### **The Job-Demands-Resources Model (Demerouti et.al , 2001) Weaknesses**

Just like any model, even the Job-Demands-Resources model (Demerouti et.al , 2001) has its' limitations. Firstly, the model does not extensively account for individual differences in how employees perceive and respond to the job demands and resources. Especially since, people have different resilience to stressors, and a different perception of resources. The model does not provide clear interaction of demands and resources (Baker & Demerouti, 2017). As demands may also have a positive influence if they are provided as a challenge rather than an obstacle. Both demands and resources have a cumulative effect and cause spirals of gains and losses, which are the main part of the Job-Demand-Resources framework along with the workplace aggression (Baker & Demerouti, 2017).

It can be seen that the model acknowledges that job demands and resources interact, it does not fully capture the complexity of these interactions in all situations. These relationships between specific demands and resources can be often context-dependent (Schaufeli & Taris, 2014). Another downside to this model is the fact that it assumes a unidirectional causality from job characteristics to outcomes. In practice, it may be often seen that there is a possibility that employees' well-being and performance also influence their perceptions of job demands and resources. The Job-Demands-Resources model (Demerouti et.al , 2001) also mostly focuses on factors within the work environment. While certain non-work factors (e.g., personal life, external stressors) may influence the stress process within employment (Schaufeli & Taris, 2014).

Due to the all the strengths of the Job-Demands-Resources model (Demerouti et.al , 2001) , the current study utilizes it, however also in combination with other theories in order to apply their strengths while compensating for some of their limitations. For this reason next section will introduce the fourth theoretical framework Transactional model (Lazarus & Folkman, 1984) and its' definition of stress and how its' perception relates to burnout.

## **2.7 The Transactional Model (Lazarus & Folkman, 1984)**

The Transactional Model of Stress and Coping, has been proposed by Lazarus and Folkman in 1984. It is known as a psychological framework that explains how individuals perceive and respond to various stressful situations. According to this model, stress is not solely determined by the external events but is also influenced by an individual's internal cognitive appraisal and coping mechanisms. The Transactional model relates to one's perception of stress, with a notion that imbalances in job stressors, individual strain, and defensive coping may eventually lead to burnout. In this model the stress is mediated by primary appraisal, influenced by individual factors (such as self-efficacy, coping success), helping to identify their stressor (Lazarus & Folkman, 1984). While the secondary appraisal, identifies the ability to cope with the stressors (appraised as threatening vs challenging). Lazarus and Folkman emphasize the importance of individual interpretation and subjective appraisal in determining the impact of stress. They argue that the way individuals appraise a stressful event influences their emotional and physiological responses. For example, if an individual perceives a stressor as a threat to their well-being and believes they lack the resources to cope, they are more likely to experience negative emotions such as anxiety, fear, or anger.

Therefore, according to Lazarus and Folkman (1984) coping plays a central role in the Transactional Model. It's associated with the cognitive and behavioral efforts individuals

make to manage the demands of a stressful situation. Coping strategies can be either problem-focused. With the main aim to address the root cause of the stressor. Another coping strategy can be emotion-focused, focusing on regulating emotions and managing the psychological impact of stress. The effectiveness of coping strategies depends on their fit with the individual's appraisal of the stressor and their available resources. It needs to be mentioned that the Transactional Model (1984) recognizes that stress is a dynamic process. With continuous feedback between the individual and the environment. It emphasizes that stress and coping are not fixed traits but rather a continuous interaction influenced by personal factors, social support, and the nature of the stressor itself.

The major hypothesis of this model suggests that the outcome of appraisals results either in burnout vs engagement. More specifically, if an individual constantly appraises the stressors as threatening, and has maladaptive coping strategies, he or she may end up with a chronic mental or physical strain one of which can be burnout (Folkman, et.al., 1986). It is the individual appraisal of the stressors and the coping abilities based on the Transactional model, that are supporting the design of one layer (individual) of the three interventions, in the current study.

### **Active Energy Preservation at Work Decreases Burnout**

This link of the impact on health, due to the perception of stressors and coping are a central role of Lazarus and Folkman's Transactional Model (1984). Which has also been demonstrated in the recent study that had looked at the prediction of burnout according to one's coping styles, the personality characteristics amongst principals and their assistants of primary school region of Tehran (Sorkhehei & Fazel, 2019). In this study, it becomes apparent that it provides valuable insights into the factors contributing to burnout in educational leadership role settings (Sorkhehei & Fazel, 2019). The authors employ

standardized measures for assessing coping styles, personality characteristics, and burnout. The results show a significant relationship between coping styles, personality characteristics, and burnout in principals and assistant principals. More specifically, the authors demonstrate that one of the components of coping strategies, the "acceptance of responsibility", can have a positive effect on job burnout. Meaning that when individuals in leadership positions are more willing to accept responsibility for their actions and outcomes, they feel more in control.

Such responsibility serves as a protective factor against job burnout. Additionally, the authors find that another component, so called "exhaust-avoidance" of burnout may negatively predict job burnout. Meaning that individuals who are able to actively avoid exhaustion or preserve their energy levels effectively are less likely to develop burnout in their jobs. Sorkhehei and Fazel (2019) also notes that the component of "acceptance of liability", a type of one of the coping strategies is a more powerful predictor than the exhaust-avoidance component. Suggesting that taking responsibility for one's actions and outcomes has a stronger influence on reducing job burnout when compared to avoiding exhaustion.

Such findings can provide insights into design of burnout reduction interventions that can be specifically targeting an individual support for energy preservation (coping) and creating a sense of control in a work environment by accepting responsibilities of own actions. In regards to personality traits, and their relation to burnout, the authors also find that extroversion and conscientiousness are both negatively correlated to job burnout. Suggesting that those individuals who are more extroverted and conscientious tend to in general experience lower levels of burnout. Definition of extroversion includes characteristics of being outgoing, sociable, and energized by social interactions, which according to authors may contribute to better stress management and job satisfaction. While, definition of

conscientiousness includes characteristics of being diligent, organized, and responsible. Such characteristics can help individuals effectively manage their workloads and prevent burnout.

One limit of Sorkhehei and Fazel (2019)'s study noted, however has been that the authors do not mention any potential confounding variables that may have further impacted the relationship between coping styles, personality characteristics, and burnout. Addressing those limitations would have strengthened the article's impact and potentially relevance to the larger school employees' population. Overall, the study by Sorkhehei and Fazel (2019) has been well conducted and further highlighted how ones' coping and characteristics may be influencing one's perception of stressors. Which is linked to the Lazarus and Folkman's Transactional Model (1984). Thus, inducing specific coping styles (such as avoiding exhaustion and acceptance liability), may serve as protective factors against burnout. The link of effect on health, the perception of stressors and coping are an important role of Lazarus and Folkman's Transactional Model (1984), which is also a reason, why the Transactional model is utilized as a base for the development of the three-layered intervention for burnout reduction in the current study.

### **The Transactional Model (Lazarus & Folkman, 1984) and Strengths**

One of the strengths of Transactional model is its'holistic approach to understanding stress. As it is one model that is taking into account both cognitive appraisal processes and coping strategies (Lazarus & Folkman, 1984). Which allows for a comprehensive examination of how one perceives and responds to stressors. The model also acknowledges the individuals and how they vary in their appraisal of stressors and in the strategies they employ to cope. Along with recognizing that stress is a dynamic process associated with ongoing interactions between the individual and their environment. Due to this dynamic process, it allows re-appraisals and coping efforts due to change over time. The Transactional

Model is a model that can be applied to a wide range of stressors and contexts, including work stress, personal relationships, and health-related challenges (Peeters, et.al., 1995).

### **The Transactional Model (Lazarus & Folkman, 1984) and Weaknesses**

There are a couple of limitations that can be observed within the Transactional model. One of which is that the model mostly focuses on cognitive and psychological processes, while not fully incorporate the role of biological factors (e.g., physiological responses to stress) in influencing the stress experience. It also appears to focus on immediate coping responses to stressors. While it does not explain how people may develop and uphold long-term coping strategies. The current study proposes a model that suggests prevention and coping skills and regular self-care in order to maintain long-term coping. As can be seen Transactional model and its' focus on cognitive processes during stress is highly valuable, and an important addition and base for the current study. Along with the fifth theoretical model, called The Work-life model (Leiter & Maslach, 1999) which will be introduced more in detail along with its' relevance in the current study in the next section of this chapter.

### **2.8 The Work-life Model (Leiter & Maslach, 1999)**

The Work-life model, was developed by Leiter and Maslach in 1999. It is the fifth and last theoretical framework used in the current study that aims to understand the complex interactions between work and personal life. As well as the impact of these interactions on employee well-being and burnout. The purpose of the model is on the concept of work-life balance and how it influences employees' engagement and burnout. Leiter and Maslach (1999; 2004; 2016) postulate a theory of burnout, viewing this condition as being on a

continuum scale. With burnout being experienced on one end of the scale and engagement on the opposite end.

### **The Work Life Model and its Three Personal Dimensions**

The Work Life model has proposed three personal dimensions covering individual characteristics including energy, involvement and effectiveness. According to this theory, burnout is first associated with low energy levels or exhaustion due to depletion from one's work. Secondly, low levels of involvement, (which are also referred to as depersonalization or cynicism) are associated with withdrawal from personal interactions. Thirdly, low levels of effectiveness that can be referred to as feeling of minimal accomplishments (Gregory, 2015). It needs to be noted that on the engagement scale, all three dimensions would be scored on high levels. Leiter and Maslach (1999), propose that a person can score anywhere and anytime within the burnout continuum.

### **The Work Life Model and its Six Specific Work Environment Domains**

For this reason, burnout shall not be viewed as an absolute state that is either present or absent, but rather perceived as being of various degrees and seen as match vs mismatch, between a person (their three individual characteristics) and six specific work environment domains (including workload, control, reward, community, fairness, and values). Of these six work environment domains- workload examines job demands, and resources that are available. Control assesses active participation in various work decisions. Reward domain checks for financial, institutional or social rewards that are valuing work. The community domain explores the quality of social interactions. The fairness assesses the perception of fairness in decisions. While the final domain of values examines the match between personal and work values (Gregory, 2015).



It can be seen that the Work-life model (Leiter & Maslach, 1999), proposes three key components that influence the work-life balance and its outcomes. That can be divided into work context, personal resources and worklife balance itself. Work context includes factors within the work environment that may be affecting work-life balance. Types of work context may include job demands, such as workload and time pressure, but also job resources, such as autonomy and social support. High job demands and a lack of resources can disrupt work-life balance, leading to increased stress and burnout. Another key component influencing the worklife balance and its' outcomes include personal resources. It particularly refers to an individual's personal characteristics and resources that can influence their ability to manage work and personal life effectively. Types of resources can include coping strategies, self-efficacy, and social support outside of work. Individuals with strong personal resources are better equipped to maintain work-life balance and prevent burnout. The third key component influencing is referred to as work-life balance defined as a state of equilibrium or harmony between work and personal life domains. Achieving work-life balance involves effectively managing and integrating the demands and responsibilities of both work and personal life. If an individual achieves work-life balance, it can lead to increased job satisfaction, well-being, and reduced burnout (Leiter & Maslach, 1999).

### **The Work-Life Model (Leiter & Maslach, 1999) Strengths**

Based on all five theoretical models presented in this Chapter, the Worklife model appears to be explaining the largest proportion of variables influencing the onset of burnout including individual characteristics, as well as working environment such as resources, or demands. Thus, it appears to be of holistic perspective. This is also a reason, why the Worklife model (Leiter & Maslach, 1999), has been selected as a strong theoretical base for the current study. The Worklife theoretical model (Leiter & Maslach, 1999) is used in the

present study for the design supporting all three layers of the burnout reduction interventions. As this model places large emphasis on well-being. The Worklife Model (Leiter and Maslach, 1999) has been chosen as one of the main theories because of its' detailed, rich, over a couple of decades strong empirical and theoretical construct (Gregory, 2015; Gascon, et.al., 2019). Part of this theoretical construct combines the resource- based model supporting the notion that individuals have the need for acquiring and maintaining resources (e.g. Hobfoll & Freedy, 1993). When resources are perceived threatened or depleted, the outcome results in stress (Folkman et.al., 1986).

Another notion of this theory includes its' underlying complex mechanism of match vs mismatch between a person and their environment. Therefore, making this model more applicable to modern (the last decades) workforce. The application of the Worklife model is (Leiter & Maslach, 1999) also quite practical. Where if match is high, the assumption is that the demands and resources of the workplace are balanced resulting in a positive outcome (e.g. harmony and engagement). Contrary, to this, previous research has also found and confirms the Worklife model notion that if there is low match between a person and their environment such as depletion of resources at work, consequently causing incongruency, distress and eventually burnout (Gregory, 2015).

### **High Workload Leads to Burnout**

The applicability of the Work-life Model (Leiter & Maslach, 1999) and the relationship between different areas of work life model and burnout was also explored by Jarzynkowski, et.al., (2022) who applied a sample of nurses and doctors working in operating theaters in Poland. The authors aimed to identify specific aspects of work life dimensions that can predict burnout. Their research was concerned about burnout occurrence among healthcare professionals, wanting to better understand the factors contributing to

burnout development in order to potentially contribute to future overall well-being of medical staff and the quality of patient care by providing insights that can be targeting the interventions. The findings of this study provide valuable insights into areas of work life as predictors of occupational burnout. More specifically, the analysis show that there is a relationship between three of the six variables. Particularly, as the workload increases, the level of burnout among participants also increases, along with the categories of honesty and values.

Authors conclude that their research shows that occupational burnout among nurses and doctors in operating theaters occurs in all dimensions of this phenomenon including the emotional exhaustion, depersonalization, and job satisfaction. Jarzynkowski et.al. (2022) also demonstrate that the areas of work life including the workload, control, community, rewards, fairness, and values are predictors of occupational burnout.

By identifying specific areas of work life that can significantly impact burnout, can benefit to interventions and strategies development aimed to prevent or reduce burnout in this specific healthcare setting or any other work environments. Given the significance of the burnout topic, Jarzynkowski et.al.'s (2022) study contributes to the existing body of knowledge regarding occupational burnout especially in healthcare setting. Which is essential for healthcare organizations or policymakers to understand the factors that influence burnout as that way they can use the knowledge to provide more supportive work environments promoting the well-being of employees and medical professionals. The current research seeks to develop such guidelines for supportive interventions. To fulfill this essential purpose, the study incorporates the Worklife model (Leiter & Maslach, 1999) as a theoretical framework for designing a comprehensive intervention that addresses individual, team, and organizational components as they all are contributing to burnout. By utilizing this three-layered approach, the researcher aims to create effective guidelines that can support

employees and promote or support overall well-being within the challenging work environment.

### **The Work-life Model (Leiter & Maslach, 1999) Weaknesses**

There are a couple of areas that may not be fully explained even by such a comprehensive model as the Worklife model is. In particular, the model provides a broad framework, however not explicitly addressing specific work-related or non-work-related factors that can impact on an individual's well-being. As well as not emphasizing that in real life often balancing work and personal life can be challenging. Which may create internal conflicts within individuals when looking at their work-related responsibilities and personal commitments. The Worklife model may not specifically provide a clear solution for managing these conflicts. Despite of some of these downsides of the model, the current research uses the Worklife model as the most comprehensive base for the enhanced burnout reduction model and the three-layered interventions guidelines. As this model is highly relevant to overall well-being in a work environment. The following section will explore the three types of interventions more in depth as well as their utilization in burnout field research.

## **2.9 Burnout in European Countries (Slovakia and Netherlands)**

Burnout condition has been recognized and addressed as an occupational health issue differently across various EU member states. It is for this reason that policies and practices related to burnout can differ significantly from one country to another.

As has been demonstrated through data collection by the National Institute of Occupational Safety and Health in 2017 (Lastovkova et.al., 2018). The findings of the survey show, that only 39% of EU countries, (thus 9 countries out of the 23 countries that responded

to the questionnaire) have recognized burnout as a work-related disease (Lastovkova et.al., 2018). Which leaves a majority of EU countries, that do not officially recognize this condition as an occupational illness. However, a couple of years after this survey the WHO characterized burnout as a condition resulting from chronic workplace stress that has not been successfully managed. Rather than as a physical or mental illness listed in the 11<sup>th</sup> revision of a globally recognized system for classifying diseases, health conditions, and related factors (ICD) (WHO, 2019). Slovakia and the Netherlands belong to these nine acknowledging countries. Where the situation in the Netherlands shows that 37% of working population indicates that work pressure and stress has been a reason to take time off work, 40% of the working population reported applying at least some measures against stress resulting from their jobs. While, in the year 2021, 11million days of that year have recorded as work absence days due to the employees reported stress (Seveno, 2023).

The situation in Slovakia also demonstrates that burnout is an increasing issue in recent period (Morovicsova, 2022). Even though, the number of burnout studies in Slovakia is limited, a recent study on 182 psychiatrists does show that above 67% of the studied sample has reported critical level on at least one of the three burnout dimensions. These include low sense of personal achievement, high levels of depersonalization, and a high degree of emotional exhaustion amongst their participants. Indicating that burnout is an issue at least amongst this particular group of health care professionals.

That is why it's been acknowledged in these countries that more and steps need to be taken to facilitate recovery including following therapy, having sufficient rest, adjusted work hours, that shall be tailored according to individual needs (e.g. Molina, 2017). In the Netherlands the regulations also include an employer's financial compensation of 70% of the salary for the first 104 weeks of this condition (Molina, 2017). Sick leave and recovery come

with significant costs, making it a prudent move to invest in prevention and enhance tailored interventions for long-term benefits.

### **Concepts of Burnout Prevention and Intervention**

This section is focusing on the burnout studies and the efficacy of individual approach as a prevention or intervention. Firstly, it needs to be mentioned that burnout is not an “official medical diagnosis”. Even though, this state certainly affects mental and physical health. Thus, the general definition of burnout and its’ diagnostic criteria have not yet been fully established. Therefore its’ assessment is also somewhat puzzled across different health care fields (Chirico, 2016).

#### **2.10 Burnout Symptoms and Assessment**

To give an idea of assessing an occurrence of burnout symptoms, for example Mayo clinic (2021) publishes a set of questions that can be used to evaluate whether someone exhibits burnout symptoms (view Table 1).

**Table 1***Questions Assessing Burnout Symptoms*

Have you become cynical or critical at work?
Do you drag yourself to work and have trouble getting started?
Have you become irritable or impatient with co-workers, customers or clients?
Do you lack the energy to be consistently productive?
Do you lack satisfaction from your achievements?
Do you feel disillusioned about your job?
Are you using food, drugs or alcohol to feel better or to simply not feel?
Have your sleep habits changed?
Are you troubled by unexplained headaches, stomach or bowel problems, or other physical complaints?
Do you find it hard to concentrate?

*Note.* Adapted from *Mayo clinic*, by Pruthi et.al. (2023).

**Individual Within Person Characteristics and Burnout**

For many years, researchers try to understand what makes an individual more prone to experience burnout and find that certain individual personality characteristics such as emotional instability which can be characterized as ineffective coping, not controlling emotions or impulses, along with low self-efficacy, low levels of openness, characterized as a tolerance for new ideas may all act as moderators of burnout (e.g.Magnano, et.al., 2015). Other characteristics like perfectionism, defined as a fear of failure if things are not perfect, pessimism, described as expecting bad things to happen all the time, as well as Type A personality that shows as time impatience and free-floating hostility in people, are also considered as significant risk factors (Scott, 2020).

Additionally, a meta-analytic research points out that characteristics such as low self-esteem, low internal locus of control, low level of extraversion, being related to energy, as well as the way how someone perceives or responds to certain stressors, in particularly having increased perception of threat at work belong to the individual within person risk factors. Along with the individual physiological reactions, specifically being heightened when experiencing stress, neuroticism, low levels of mental alertness, low levels of confidence and a sense of power, negative affectivity, and low consciousness which is defined as orderliness, responsibility and reliability are too related to all three dimensions of burnout of emotional exhaustion, depersonalization, and personal accomplishment (e.g. Angelini, 2023; Alarcon, et.al., 2009; Rostami, et.al., 2012). Based on the above studies, it is apparent that the individual characteristics explain at least partially the link to burnout.

Although, Alarcon et.al. (2009) pointed out that the strength of this link is not definitive because some of the personality traits yielded stronger relationships than others and yet it is still not clear how exactly this interaction, their combination or the levels of impact on burnout they have. However, based on these conclusions, it is evident that there are also other factors contributing to the link of burnout outside of the individual characteristics accounting for its occurrence. This was the main reason why the current study targets both the individual but also environmental factors in a form of specifically designed interventions to increase one's protective factors in both areas (individual/organizational), and diminish a risk of developing burnout.

## **2.11 Burnout Interventions**

There have been numerous detrimental consequences associated with burnout in a work place, including an increased staff turnover, long-term absenteeism, various injuries, accidents, health issues, conflicts in a work environment as well as a decreased productivity



or efficiency of work in general (Elbarazi, et.al., 2019). Burnout has been a complex interaction between a within person factors as well the environmental context, in which a person is placed into. This highlights an inevitable need for improved preventions, interventions or rehabilitations, specifically focusing on addressing both the individual or within the person factors and work environment. The within person factors include personality characteristics, individual attitudes to work, maladaptive coping styles, demographics e.g females have been shown to report a higher prevalence of burnout, compared to men, as well as younger people compared to older ones, unmarried compared to married etc. (e.g. Morovicsova, 2022; Ong, et.al., 2020). While, the work environment factors include the amount of allocated tasks, given responsibilities, sense of control, social connections, clarity of job expectations, just to name a few (e.g. Mayo clinic, 2021; Magnano, et.al., 2015).

### **Primary, Secondary and Tertiary Interventions Typology**

Burnout interventions (regardless whether they are individual or organizational) have been divided into three groups across studies involving the primary, secondary and tertiary interventions, based on the aims within studies.

### **Prevention**

The main aim of the primary interventions includes a prevention or reduction of known burnout risk factors amongst all employees.

## **Increased Risk**

The secondary interventions aim to target only a selected group of employees, who have been assessed as being at an increased risk of burnout development.

## **Burnout Confirmation**

While, the tertiary interventions aim to support employees, who have already been found to suffer from burnout. The purpose of the tertiary interventions is to minimize the consequences of burnout such as inability to focus or function at work (Ahola, et.al., 2017). As can be seen, any support associated with burnout needs to first determine whether the support focuses on developing and evaluating a prevention intervention or a treatment intervention.

## **Content of Interventions (Individual and Organizational)**

In addition to the aims of the interventions across studies, there is another criterium, that contributes to the burnout intervention classification and that is their specific content. It is the content of the intervention that can be then further divided into individual, organizational or combined (combining individual and organizational together) interventions. The examples of the content of these interventions used in previous studies and their aims can be viewed below in Table 2.

**Table 2**

*Characteristics of the Interventions Amongst Medical Staff and its' Effectiveness*

<b>Content of the intervention</b>	<b>Intervention's description</b>	<b>The effect found on burnout</b>
Psychiatric interventions	Application of yoga, meditation, mindfulness practices	Increases Self-care, significantly decreases emotional exhaustion, stress & burnout
On-line programs	Interventions delivered electronically	Significantly reduced depression
Thankful events	Practicing appreciation in the workplace	Increased performance, reduced depression and burnout
Psychosocial training intervention	Training implements practice of more positive attitudes towards others	Significantly improves burnout rates

*Note.* Adapted from the research analysis of Aryankhesal, et.al (2019).

Based on previous even though, limited research, the current study aims to explore some of the most effective types of individual, and organizational interventions supporting people individually their energy, involvement, effectiveness as well as within their organizations. The organizational interventions are also subdivided in the current study, into team and the whole organization. In order to provide more information and explore and better fit the typology of support for a specific team, and the organization as a whole. The design of interventions incorporates tools to aim decreasing stress, and influence the six Worklife

dimensions (thus decrease workload, and increase sense of control, reward, community, fairness, and values). Based on the transactional theory and Work-life balance theory.

There have been a few limits observed in the previous research including studies and meta-analyses that have examined separately either person directed or organization directed approaches (e.g. Maricutoiu, et.al., 2016). Majority of the studies do not provide specific guidelines of their interventions (as noted by Maslach and Leiter, 2016; Wiederhold, & Riva, 2018) and no combination of individual, department/team and the whole organization are included. Additionally, a majority of published data incorporates studies on healthcare professionals (mostly physicians and nurses) 40.9% when compared to other professions like office workers 27.3%, students 18.2 %, teachers, 9.1%, or manual workers 4.5% (Jaworska et.al., 2016). Even though, burnout affects people from any work profession. For this reason, the current study explores the effectiveness of burnout interventions that have been applied by the burnout reduction experts on individuals from various occupational fields.

The following sections discusses the individual interventions, organizational and combined interventions examined in burnout studies. Their resurfacing shortcomings are mentioned. As well as the individual, organizational interventions are linked to the five theories. Starting with the individual factors and treatment associated with burnout.

## **2.12 The Individual Interventions**

Along with the content classification of burnout interventions, there has been a proposition that an intervention shall incorporate the following five basic components (Sallon, et.al., 2015).

**Cognitive Aspect**

Where one includes the cognitive aspect of support such as practicing mindfulness to be non-judgmental and more in control and decrease repetitive thought processes.

**Somatic Aspects**

The other aspect being related to the somatic type of support such as learning to enhance relaxation of the physical body, practice focused attention of bodily sensations, or other types of exercises activating parasympathetic nervous system (such as progressive muscle tension, guided imagery, breathing relaxations etc.). The purpose of such exercises includes shifts in weight and movement to relief pain due to long standing or sitting positions at work.

**Emotive/Expressive Aspect**

The third area of intervention content shall cover the emotive/expressive component such as drawing, journaling, or attending to one's emotions also via group meetings where different participants are offered a possibility to listen to each other and vent what goes for them emotionally.

**Dynamic/Interactive Aspect**

The fourth component of the intervention shall comprise of a dynamic-interactive part that could involve expression of movements such as dance.

## **Hands on Aspect**

While the fifth component shall include hands on intervention such as either via self-activation of trigger points or treatment by someone else while applying acupressure, doing shiatsu (palm massage) or any other form of touch therapy.

These interventions are decreasing common stress related conditions including pains, fatigue, or insomnia. The above described five components of support relate to the “self-care tool box” addressing both physical and emotional causes and consequences of an increased stress in work environment (Sallon, et.al. ,2015).

## **Exercise**

A number of studies utilize various types of individual intervention, targeting bringing on a change within a person, thus aiming to reduce burnout symptoms (e.g. Bretland & Thorsteinsoon, 2015). Findings show, that one such intervention can be an application of physical exercise. As it significantly increases one’s positive well-being, personal accomplishment, decreases psychological/physiological stress, along with emotional exhaustion. One physiological explanation for these findings can be that a big part of the physical exercise reinforces serotonin production which is a neurotransmitter in the brain, that promotes mood elevation, its’ stabilization, feelings of happiness and general well-being. Serotonin does not impact only on the brain but also on the whole body by improving sleep, eating, digestion therefore, greatly contributes to stress reduction (Bancos, 2018). Exercise, as a part of individual intervention, further reinforces a release of endorphins, often referred to as so called “happy hormones”. These are naturally produced by the nervous system to boost happiness and assist with coping with pain or stress (Berry & Biggers, 2018). Due to the physiological benefits and its’ stress response reduction and mood boost, exercise has been concluded as an important type of effective individual treatment for burnout or general

stress release (Bretland & Thorsteinsson, 2015; Kumar, 2016; Jaworska-Burzynska et.al, 2016). Contrary to findings of Ochentel et.al. (2018), who conduct a systematic review and meta-analysis on the efficacy of exercise therapy in treating burnout in the occupational setting. The authors find six studies with a total of 248 participants through electronic databases for randomized controlled trials on exercise therapy interventions for burnout. The meta-analysis shows no clear difference between intervention and control conditions. Cautioning against assuming that exercise therapy is a successful means to alleviate burnout symptoms. They suggest that future studies focus on the specific efficacy of different exercise modalities and their combination with other types of interventions. Overall, it can be seen that results of various research are conflicting.

### **Relaxing Time as Part of Work**

Other suggestions of individual interventions other than exercise, include having a possibility of regular retreats without having to take time off work, psycho-education about the burnout symptoms as their prevention, teaching the employees coping strategies for self-care including self-awareness of tiredness, learning to take regularly proper rest, setting limits on working hours, being positive and general balance in life (Kumar, 2016). These kinds of individual interventions cover teaching employees about their own needs, reading their own signs of tiredness, setting enough rest time by creating boundaries for work-life balance through education and psychological interventions.

### **Mindfulness**

As in the individually focused approach, the main emphases lie in the strengthening one's individual resources of physical and mental resiliency. Exercise has been found to

support the physical resiliency, while both mental as well as physical health can be also strengthened via actively implementing a variety of relaxation techniques to activate one's parasympathetic nervous system. One such relaxation technique includes mindfulness. Which can be practiced in a form of a meditation or as a life philosophy. Characterized predominantly by an awareness that emerges when attentively focusing on the present moment (right here right now) without any judgment (either positive or negative), rather as a neutral observer. Embracing openness, acceptance, and curiosity. Originally, developed by Jon Kabat-Zinn who established Mindfulness-Based Stress Reduction (MBSR) in 1977, aimed at reducing stress levels in various healthcare applications (Kabat-Zinn, 1990). Mindfulness approach integrates Buddhist along with other contemplative practices with contemporary psychological insights on stress management and building resilience. Benefits of applying mindfulness, and its' utilization for example in a form of self-help information and practice as a type of an individual intervention have been confirmed in a Murray, et.al.'s systematic review (2016). Where authors assess mindfulness amongst other interventions on a group of 997 general health care professionals and show a statistically significant improvement in their self-reported mental health levels including burnout.

More recent systematic review of 15 included studies also explores the effects of psychological interventions incorporating elements of mindfulness techniques on burnout and well-being among healthcare professionals (Selič-Zupančič et.al., 2023). Their paper finds that regardless of a specific type of the intervention, its' duration or setting (whether in an individual or group), if mindfulness is applied it shows positive impact on one's well-being and more specifically on burnout. Indicating it to be an important addition to the tools or interventions minimizing burnout and improving overall well-being. There have been other significantly beneficial types of individual interventions for burnout reduction. The following section addresses another type, called cognitive behavioral therapy.



## **Cognitive Behavioral Therapy and its' Theory**

Cognitive Behavioral therapy (CBT) is established on a base of cognitive behavioral theory. That has been widely used psychological approach emphasizing the interaction between thoughts, emotions, and behaviors (Parvez, 2024). It is based on the idea that our thoughts are changeable which in turn change feelings and behaviors. With a main assumption that cognitive distortions (inaccurate thinking) cause psychological distress. Where an individual may deviate from reality through the self-created falsehoods. For this reason, the main goal of the CBT is to correct for the faulty thought patterns and connect the individual with a more accurate reality. By adopting a more realistic perspective, individuals experience improved emotional well-being (Buruck, et.al., 2018). As well as, through this therapeutic approach tap into the problem-solving strategies and implement behavioral adjustments by being consistently reinforced.

Overall, previous research demonstrates that CBT has efficacy in alleviating work-related stress, depression, anxiety, chronic pain, chronic fatigue syndrome, and insomnia (Imamura et.al., 2015; Ojala et.al. 2019) as well as burnout (Murray, et.al., 2016). Additionally, CBT has been further found to be effective in enhancement of work engagement among employed population (Imamura et.al., 2015). Emphasizing a connection to overall well-being and motivation.

## **Application of the Transactional Theory over the CBT in the Current Research**

Cognitive behavioral theory is also a valid theoretical framework for burnout interventions, especially when it comes to the second dimension of burnout, depersonalization (Maslach & Leiter, 2017). However, the current research opts to use the Transactional Theory of Stress and Coping by Lazarus and Folkman (1984) as one of the five theories for this study for its' understanding of burnout and effective interventions. Which

offers several advantages over a strictly Cognitive Behavioral Theory (CBT) approach. Some of the main justifications are provided in the next section.

### **Individual Interventions and Connection to the Transactional Theory**

As could be seen the individual approach to prevention or intervention methods for burnout can be extensively leaning on the transactional theoretical model (Lazarus & Folkman, 1984), described in the earlier section.

- Firstly, using Transactional theory of stress and coping, as a framework for burnout and interventions is closely relevant because of the transactional nature of burnout (Lazarus & Folkman, 1984). Transactional theory acknowledges the dynamic interaction between individual, their environment, in the appraisal and coping process. Which aligns with complex multifaceted nature of burnout.
- Second advantage of Transactional theory is that according to this model, stress develops from the subjective appraisal of the stressor (Lazarus & Folkman, 1984). Meaning, if stressor is seen as overwhelming or exceeding one's resources it is in turn negatively impacting on one's well-being. Therefore, the stress is occurring if the individual believes that their well-being is threatened, when interacting with the environmental factors, which includes both external stressors or individuals.
- Thirdly, this theoretical model depicts, stress as transactional as the individual and environment constantly interact together. If demands of the environment are larger than the perceived social and personal resources available to the individual, that causes stress to become apparent (Lazarus & Folkman, 1984). Burnout involves chronic stressors such as high workload, lack of control or experiencing interpersonal conflicts. Assessing and understanding how one appraises the stressors, and coping may offer understanding of one's development of burnout and potential remedies.

- Fourth advantage of Transactional theory application in the current study includes model's emphasis on awareness of own coping strategies such as positive affectivity, awareness of personal power or strength, adaptability to challenging situations (Lazarus & Folkman, 1984). In many cases burnout may be a result of ineffective coping, or mismatch between demands and one's resources. Understanding coping mechanisms within context of burnout may lead to tailoring specific interventions enhancing resilience.
- Fifth positive point of the Transactional model is, that it acknowledges individual differences in stress appraisal and coping strategies (Lazarus & Folkman, 1984). All individuals experience burnout differently, therefore understanding such differences shall offer personalized interventions to prevent or treat burnout.
- Lastly, the Transactional model, can be applied to an individual stressor appraisal as well as it reflects the organizational issues involving excessive workload, role ambiguity, lack of recognition and others. Thus, highlighting the need for assessment and interventions on an individual level as well as within organizations. In order to offer more comprehensive support.

For all above raised justifications, the current study design of the individual intervention is related to the transactional theory as it applies methods reinforcing one's positive attitude, coping, confidence and other within person characteristics.

As fatigue, chronic illness or burnout are all a result of frequent exposure to stressors. Based on the transactional model theory a large portion of the negative consequence such as chronic stress, prolonged fatigue, or burnout are a result of one's perception of their situation, which covers their cognitive processes, as well as their assessment of how to deal with it and evaluation whether or not they have the means to cope. When looking at burnout from this

point of view, one may assume that applying individual interventions shall implement teaching individuals to “train their positive appraisal” as one of the most efficient way of decreasing the perceived stress, therefore minimizing the symptoms of burnout.

### **Positive Perception and Thought Patterns**

Several burnout studies (e.g. Scheepers, et.al., 2019; Buruck, et.al., 2018; Murray, et.al., 2016) decide to test such prevention, and intervention programs and focus on the application of techniques involving changing or supporting one’s perception, thinking patterns, by applying to individuals the cognitive-behavioral therapy, cognitive restructuring, didactic stress management, relaxations, teaching them to schedule changes, mindfulness and others (e.g. Scheepers, et.al., 2019). Therefore, intervening by reinforcing a change within a person individually.

The application of only individual interventions’ and reaping their benefits as the most efficient burnout treatment, are however not confirmed in another systematic review by Ahola, et.al. (2017). Who evaluate the effects of both individually focused as well as occupationally focused burnout interventions. Of 4430 initial abstracts amongst the searched studies, are chosen 14 individually focused and four occupationally focused studies. The complexity of the previous research includes the variations of contents of the interventions, the inclusion of the participants, their reporting in the study which, results in mixed findings. Ahola’s et. al. (2017) meta-analysis review, finds only four similar enough individually based intervention studies for their statistical analysis. Their conclusion in the study does not show any significant effects of the improvement on two dimensions of burnout scale, specifically on exhaustion and cynicism. Suggesting that the individual interventions alone, do not succeed in decreasing burnout symptoms. The authors further conclude that in order to

understand burnout, future studies need more systematic evaluation as well as the intervention development with specific definition and assessment of burnout.

### **Is Burnout Rooted in the Organizational Coherence?**

Similarly, and in line with Ahola et al.'s study (2017), there has been yet another systematic review and meta-analysis on physicians that finds the individually based interventions having very small significant reductions in burnout (Panagioti, et al 2017). The authors argue that, there is no evidence that the interventions' content, including mindfulness, communicational, or educational components, or their intensity increase benefits to burnout reduction. Authors additionally compare the individual approaches to the interventions with the organizational interventions. The organizational interventions are found to be more efficient (as can be seen more in detail in the next section of this paper). The conclusions provide an argument that burnout is rooted in the organizational coherence and have little to do with an individual or their characteristic as such. Based on such suggestion one may assume that if burnout is an issue of the whole organization, then the individual approaches cannot reduce burnout symptoms on its' own.

### **Individual Interventions and Time Effectiveness**

Such conclusions are however, opposing some of the older studies, that indicate that effects of stress and burnout symptoms can be improved on an individual level however mainly, shortly after the intervention. In this case a word "short" relates to an effectiveness of the intervention for up to 6 months straight after the provided intervention is concluded (Awa, et al., 2010; Westermann, et al 2014). Timing is not the only influencer of the effectiveness of the intervention, but also the type of content applied. This is demonstrated in a recent systematic review of studies by Jaworska-Burzynska, et al. (2016) who examines

burnout studies of a mixture of medical and non-medical participants. When examining in depth what content or type of therapy/intervention is the most efficient to reduce burnout, it has been noted that mindfulness techniques bring unpredictable results. In certain studies, there are significant positive changes (Cohen-Katz, et.al., 2005; McFarland, Hlubocky & Riba, 2019) in burnout reduction while in others not (De Vibe, et. al , 2013; Barbosa, et.al , 2013). This is despite the fact that of the individual interventions, mindfulness techniques are the most frequently proposed as an intervention against burnout across studies (Jaworska-Burzynska et.al., 2016). Other types of individual therapy/psychotherapy like cognitive behavioral techniques (techniques teaching positive thought patterns) have been found to be significantly stronger at burnout reduction and certainly brought a significant improvement in every cited paper of Jaworska-Burzynska et.al.'s study (2016). Thus highlighting, an individual psychotherapeutic form of intervention as a beneficial suggestion. Also, highlighting that “cognitive appraisals” of one’s situation are a strong predictor or protector related to burnout. Which confirms the applicability of the transactional theory specifically related to the individual approach to burnout prevention or treatment.

### **Stress Awareness and Teaching a Variety of Coping Strategies**

A recent publication by Public Health England offers an alternative perspective, focusing on the evaluation of both individual and organizational interventions (Public Health England, 2016). After conducting an extensive literature review of individual and organizational burnout interventions, it has been indicated that the impact and stress of burnout has been effective more frequently in an individual or a small group of participants, especially when compared to the organizational or structural level of work. Their report concludes that individually focused approaches aim to train staff/conduct workshops related to topics of stress awareness, coping strategies, cognitive-behavioral therapy show moderate

positive evidence in burnout reduction and work-related stress (Bagnall, et.al , 2016).

Overall, the authors still conclude that individual interventions on their own produce moderate positive results in burnout prevention or intervention. Which means that in order to increase their effectiveness, one needs to incorporate a combination of both individual and organizational interventions.

### **Weakness or Shortcomings of Individual Intervention**

As can be seen, an individual intervention has been found to be only partially effective on an individual level and for a short (up to 6 months) period of time (Awa, et.al., 2010; Westermann , et.al., 2014). It also appears that when compared with the organizational approaches to interventions, they are less effective (e.g. McFarland, et.al., 2019). Implying that if there is a choice, the use of organizational or combined interventions appears to be a more effective option to decrease burnout or work-related stress. This is why the current study intends to explore a combination of a three-layered approach to the burnout reduction model and the intervention. As well as this, a few types of individual interventions have been studied, but the only consistency in their effectiveness on reducing burnout has been found in the application of the cognitive behavioral therapy (McFarland, et.al., 2019; Jaworska-Burzynska et.al., 2016; Scheepers, et.al., 2019).

This information provides a base for the design of the individual intervention. It proposes to support employees on an individual level to increase their coping, as well as on a team/department level to synchronize their cooperation, social connection, equally share the workload along with the organizational level. Part of which is a design of support employees within the whole organization. The non-definitive and somewhat puzzled findings across studies propose to partially rely on the Transactional theory model explaining the “cognitive appraisal” of the situation, coping and therefore stress but pointing out a need to incorporate

also additional theoretical models that relate to both the environmental as well as individual factors. One of which is Worklife model (Leiter and Maslach, 1999) that current study also incorporates as one of the most supportive theories. The Worklife model combines the personal individual characteristics and their match with the working environment, therefore it may explain a larger variance of burnout. Such “combinatorial strategies that combine efficacious individual level interventions with systemic level / organizational interventions, and enhance workflow may provide the most sustainable model for preventing and treating burnout” (McFarland, et.al., 2019). Lastly, but not least the current study outlines a detailed guideline of what interventions are proposed as a suggestion from the burnout reduction experts and previous research to make it clear and easy to replicate and test their effectiveness in future studies.

### **Past Research Applicability to the First Layer- Individual Intervention**

After establishing, that the individual intervention is not sufficient enough to prevent or minimize the risks of burnout on its' own, the current study aims to design a more detailed intervention covering the within person characteristics as well as the environmental factors. However, the first layer of intervention shall solely focus on the reinforcement of individual strengths including the bodily responses to induce relaxation, the cognitive restructuring to train one's mind to apply a variety of cognitive resiliencies such as positive thought patterns, not giving into “cognitive biases”, increase awareness of ones coping strategies, as well as teach what some of the coping strategies are and how to apply more of them. In order to cover all these areas into the effective interventions, a group of various health care and HR professionals are interviewed to suggest the most efficient form of support on an individual basis and create a guideline for the efficient self-care tool kit.



The following section introduces the concept of organizational interventions, including a discussion on some of the risk factors within a work environment, the content of organizational interventions used across different studies as well as the findings of their effectiveness.

### **2.13 The Organizational Interventions**

As previously mentioned, the WHO (2019, May 28) characterizes burn-out in the International Classification of Diseases with an official recognition as “occupational phenomenon”, and not as a medical condition. For this reason, this condition cannot be accounted strictly for one’s individual responsibility. It has been recorded that in high pressure companies, health care costs are 50% greater than in other work places (Moss, 2019). The American Psychological Association, reports that employees suffering from burnout are 2.6 times more likely to search for another job, as well as 23% of them are more likely to go to an emergency room, and 63% of such employees are also more likely to take a sick day. While 13 % of these employees report lower confidence in their performance and are half as likely to approach and talk about the performance with their manager (Wigert & Agrawal, 2018). These statistics emphasize, the overall healthcare costs of burnout, the higher turnover and lower productivity at work which all become an inevitable result of the companies if they do not provide support for their employees’ health and well-being (Moss, 2019).

#### **Burnout Contributing Organizational Risk Factors**

A survey targeting 7500 full time employees by Gallup lists top five reasons contributing to burnout that are organization related (Wigert & Agrawal, 2018).

- **Unfair Treatment**

First one includes, unfair treatment at work, biases, favoritism, mistreatment by a co-worker or unfair compensations or policies (Wigert & Agrawal, 2018).

- **Unmanageable Workload**

Second contributing factor involves unmanageable workload, which may contribute even to high performing employees to feel hopeless, and to affect their self-confidence and self-esteem (Wigert & Agrawal, 2018).

- **Lack of Role Clarity**

The third contributing factor identifies lack of a role clarity. Especially if the accountability, expectations or targets keep constantly changing at work. Such issue in turn, keeps increasing employees' exhaustion (Wigert & Agrawal, 2018).

- **Support from the Manager**

The fourth contributor, involves lack of communication and support from the manager (Wigert & Agrawal, 2018).

- **Unmanageable Time Pressure**

While the fifth one includes unreasonable time pressure (Wigert & Agrawal, 2018).

There have been other risk factors identified to contribute to burnout including monotonous job (Mayo Clinic, 2021). These listed risk factors point towards the fact, that having a healthy and supportive work hygiene is unavoidable and one shall be supported to fulfil a desirable status at work, have a rewarding salary, work in pleasant conditions, employees' friendly company policies and administration, regular supervision, positive working relationships and having a sense of security, as protective elements (Moss, 2019). As

it has been established that the organization and its' management may directly contribute or establish some of the risk factors and increase employees' chance of developing burnout.

There is an important question that any manager shall ask: "What are some of the symptoms or signals amongst the employees of my team? "; " What shall I keep regularly checking on amongst my team members?" This is essential to prevent exhaustion from reaching a point where an employee experiences burnout. These questions are partially answered in the following section.

### **Warning Signs Within the Organizations**

The following table contains a list of questions (Table 3) that can be used as an orientation for managers to gather indication that their employees' well-being may be jeopardized and that there is an increased risk or suspicion for burnout

**Table 3***Orientation Questions for the Managers*

Do your employees feel overwhelmed with the work demands?
Do your employees seem not to receive enough support from your work place?
Do your employees seem physically exhausted and “wiped out”?
Do your employees seem tired all the time?
Do the employees seem careless in relationship to clients, service recipients, patients and others?
Do your employees complain about their incompetence when dealing with work tasks?
Do you hear them saying “I can’t take it anymore” ?
Do your employees seem frustrated because of the work?
Do your employees seem to have lost their enthusiasm for the work?

*Note.* Adapted from Korunka et.al (2020).

The more of the yes answers to the above questions serve as an indication or urgency that certain things within the team or the organization need to be investigated and addressed as soon as possible. Along with providing a support or immediate intervention to the asked employee. Such answers can be viewed as signals or warning signs for the managers or leaders to discover what are some of the problematic areas perceived by their employees. What is the impact of burnout symptoms on an individual at an organizational level? That question is answered in the following section.

## **Symptoms and Reduced Effectiveness at Work**

One of the initial signs of distress among employees often manifests as diminished effectiveness, subpar work performance, and reduced productivity (Korunka, et.al., 2020).

This is accompanied by four additional areas of concern, namely:

- affective signals that could be characterized as lowered satisfaction or attitude that someone feels towards their job.
- cognitive signals that could be linked to expressing cynicism about one's work role, or showing signs of distrust towards management, and colleagues.
- behavioral signals that could be defined by reduced effectiveness, reduced work performance and one's productivity, high turnover within the organization, absenteeism, increased sick leave, accidents or showing signs of over dependence on supervisors.
- motivational signs that are related to the loss of work motivation, resistance to attend work, general low morale (Korunka, et.al., 2020).

Although, there can be a variety of symptoms of burnout manifesting within the individual it also appears to be a process that goes through different escalating stages. Even though, researchers seem to be in no agreement about the specific order of these stages or symptoms that follow up (Korunka, et.al., 2020; Bursich, 2006). The basic aspects of the burnout process may be “presumed” in the following stages (Korunka, et.al., 2020; Bursich, 2006).

### **Four Stages of Burnout in Symptoms Manifestation**

1. In stage one an employee experiences high workload, high level of job stress and high level of job expectation. Thus, job demands exceed job resources, and the job doesn't fulfil one's expectation.
2. In stage two, an employee feels physical and emotional exhaustion. Including experiencing chronic exhaustion, when an employee continuously invests higher levels of energy to get the tasks done, while also experiencing sleep disturbances, susceptibility to headaches, or other pains.
3. In stage three, there is an experience of depersonalization, cynicism, and indifference. Which may show in a form of apathy, depression, boredom, negative attitude towards the job, colleagues or other people whom the employee comes in contact with. Along with withdrawing from the work, and reduced work effort.
4. In the fourth stage, an employee goes through despair, sense of helplessness, and aversion. Aversion could be experienced to himself/herself, other people or things around. Along with experiencing feelings of guilt and insufficiency (Korunka, et.al., 2020).

Below, we discuss an alternative perspective that categorizes burnout into five stages.

### **Five Stages of Burnout and its' Progressive Development**

Burnout also appears to be developing progressively with increased intensity and frequency of stressors nonlinearly on a continuous scale. Starting with stage 1- honeymoon phase, which is the initial stage of enthusiasm, high motivation, and strong purpose at work to eventual onset of stress (Castleberry, 2023). Stage 2, called the onset of stress. Involving an

increase in demands causing an individual to start feeling overwhelmed physically, emotionally as described above (Korunka, et.al., 2020). In stage 3, chronic stress arises. Where an individual starts noting changes to coping. Leading to more persistent and pervasive stress with physical and emotional symptoms like fatigue, insomnia, and physical pains. Entering a real burnout stage, stage 4. Defined as experiencing a physical and emotional depletion, developing negative outlook in general. Eventually, followed by stage 5, so called habitual burnout. Where on the opposite end of this scale a person experiences crisis leading to various mental and physical health conditions filled with decreased overall quality of life (Castleberry, 2023).

### **The Four and Five Stages of Burnout Manifestation and Theories**

The above four and five stages of burnout can lean on the theories, outlined in the present dissertation. As an example, the theory of the Job Demand-Control Model (Karasek 1985) proposes that high demands, decrease a sense of control, and increase constraints. Thus, contributing to adverse health effects and reduced overall well-being. The stages of burnout also relate to the Job-Demands-Resources Model (Demerouti, et.al., 2001) that proposes that the increased demands increase constrain, as well as focuses on the perceived resources that could be decreasing a risk of burnout. One of such resources can be the psychological resource related to one's expectations (in terms of is the expectation too high and demanding?). The stages of burnout manifestation appear to be in line with the aspect of Transactional model (Lazarus & Folkman, 1984) that stipulates how the cognitive appraisal has an effect whether someone perceives the situation as stressful or not. Moreover, these stages of burnout's manifestation additionally depicted the Worklife model (Leiter & Maslach, 1999), which proposes that burnout is on a continuum scale (depending on the stage of burnout process). With one end an individual may experience engagement while burnout

on the other. This may also explain why individuals suffering from burnout experience withdrawal or feelings of helplessness in the final two stages, as the symptoms escalate.

As can be seen, all of the above-mentioned theories provide a substantial structure for the three-layered intervention in the current study. It needs to be however noted, that although the stages of burnout are an important part offering an understanding of its' development, and incrementally increasing symptomatology, the current research questions and objectives are covering the investigation of the effective three-layered intervention in general, rather than investigating these interventions in specific stages of burnout. Partly due to study's priority on understanding the interventions in general, with the main focus on the three-layered support as that has not been addressed in previous research. Other practical implications and justifications for this decision are included in the methodology section of this dissertation.

The following section introduces some of the organizational interventions used across studies that are found to decrease or prevent burnout. Additionally, their effectiveness is discussed more in detail.

### **Organizational Risk Factors**

The current section highlights burnout studies that explore the effectiveness of organizationally focused interventions. Which aim to improve a variety of work-related factors including:

- the environment,
- the work procedures within the organization,
- design of procedures,



- and management

### **Improving Work-Related Factors that Decrease Burnout**

Several examples of work-related factors that may lower burnout manifestation include restructuring tasks, increasing a supervision support, or work control, as well as enhancing a level of decision-making processes. Some of the other crucial features of positive work/organizational environment include creating a family-friendly work conditions, flexible working hours, protection from occupational risks, improving job security, possibility of child care opportunities, compensation for reduced employment, maternity and fraternity leave. As these features support the employees work life balance (Kumar, 2016). By creating a more supportive work environment, an employee gains a greater sense of control in their work (Buruck et.al., 2018).

### **Organizational Support Has More Long -Lasting Effects than Individual Support**

Bagnall's et.al. research (2016), indicates in their public health report a section related to the organizational intervention and its' effectiveness on burnout prevention or treatment. The authors find that organizational approaches produce longer lasting positive effects when compared with the individually focused interventions related to burnout. Such findings are in line with several older studies that too find the organizational support to induce more long-term effects on burnout (e.g. Awa et.al, 2010; Westermann et.al. 2014). In this case, the long-term effects define effects over 12 months period after the application of intervention (e.g. Awa et.al, 2010; Westermann et.al. 2014). This is also one of the reasons why larger companies/organizations have been suggested to create alternations to their employees' workloads, their work practices, and applications of increased managerial support in order to

reduce stressors to achieve a greater likelihood of positive effects on burnout. The above studies suggest that the organizational levels of support may bring with them more effective and long-lasting support of employees when compared to the individual interventions.

### **Psychoeducation Within Companies as a Successful Organizational Intervention**

It needs to be also noted that there is a standardized procedure study that explores the implementation and evaluation of the organizational intervention, conducted by Buruck et.al. (2018). In which, the authors attempt to come up with a more standardized procedure, theoretically based on the areas of Worklife theoretical model and its' six work related factors (for more explanation refer to the Theoretical section-part of Worklife model of the current study). Their evaluation processes focus on the initiation phase, comprising of the management support, communication, and information strategy. Activities that involve providing employees with psycho-education on burnout, and its' triggers based on Worklife model-Control-Workload-Fairness-Values-Reward-Social support. As well as, the implementation of 7-12 solution-based strategies which are developed to target the institution specific problems across nine health care institutions.

Some of the implementation strategies include management meetings, and action plans. Within a year the institutions are able to implement at least 70% of the recommendations, and are found to be a successful organizational intervention. The results show that the initiation where researchers communicate the importance of the prevention/intervention program as well as aim, time line, standardized records, is highly crucial to increase organizational awareness and commitment/motivation of both employees and management team. The effectiveness of prevention and intervention program lies in inclusion of the intervention suggestions into every daily work practices. Findings in the Buruck's et.al. study (2018) further indicate that from the intervention activities based on the

Worklife model, workload has been the highest mismatch risk factor for burnout between employees and the workplace.

### **Worklife Model and Previous Studies**

Additionally, to the workload, reward and social support are found to be the most important issues where solutions need to be targeted accordingly. Psycho-education of the employees needs to be an initial step for a successful outcome of the intervention, according to the authors (Buruck's et.al., 2018). As it makes employees empowered, and understand the importance of the intervention process. While, the implementation strategy, prepares the management for a short-term application of solutions and planning. The authors also emphasize that throughout each stage of the study, the actions and their combinations need to be monitored, reported, and considered in depth prior to drawing any conclusions on the effectiveness of the interventions. The long-term application and evaluation of the steps is where a strength of Buruck's et.al. (2018) study lies as they are assessing the implementation of each solution for over a year period. One of the limitation of their study is a reliance on self-reported data. It may have been interesting to compare the participants' results with the observers-based data evaluations.

The organizational risk factors of burnout have been also explored in other studies (e.g. Gregory, 2015; Mudallal, et.al., 2017; Gascon et.al., 2019). One such study by Gregory (2015) supported the Worklife model theory while examining a notion that work environment factors significantly contribute to burnout, on a sample of primary care physicians. It is concluded that particularly, three areas of the Worklife model, including the workload, control and values belong to the most significant contributors to burnout. Similarly, Gascon et.al. (2019) indicate that the emotional exhaustion has been the best explained personal dimension, linked to workload and the most contributing factors to burnout. Such knowledge

is an important pointer, in the current study, for a design of the department and organization interventions aiming to decrease burnout. Although, Gregory's (2015) study has a specific medical sample it shall be interesting to see whether the same findings are confirmed in a broader non-medical community of the current study.

In a cross-sectional and correlational study conducted on Jordanian nurses, burnout risk factors are assessed, ultimately confirming the validity of the Worklife model. Nurses scoring high on burnout also show high scores on emotional exhaustion, depersonalization (Mudallal, et.al., 2017). What is more controversial, however that this study shows moderate levels for personal accomplishments in their sample. Even in this study, the authors find high workload, and certain organizational traits, significantly contributing to the development of burnout. Therefore, their results suggest future organizational policies to focus on manageable workload through for example, additional staffing (to decrease exhaustion), improving access to information, distribution of resources fairly (fairness), providing professional development opportunities (to improve sense of efficacy, and accomplishment), improving leadership skills such as decision making, and empowerment (to provide sense of control) (Mudallal, et. al., 2017). To lower burnout risk factors and generally improve one's Worklife balance.

Ahola et al. (2017) conducted a systematic study that evaluates occupationally focused burnout interventions as a central component of their research. Their findings relate to the four occupationally focused studies and show only modest results in effectiveness of burnout treatment. Ahola et.al study concludes to be too weak to make any conclusions. Mostly, due to the limited sample sizes of the included studies. Therefore, the results can not shed a light into the levels of effectiveness of the organizational interventions.

Contrary, to the Aholaet.al.'s study (2017), there has been recent meta-analyses on physicians that demonstrates a significantly higher efficacy of organizational interventions,

when compared to the individual interventions associated with burnout reduction (Panagioti et. al., 2017). These particular meta-analyses, conduct controlled comparisons of 20 meta-analysis from which majority uses at least 10 burnout related intervention studies. For this reason, the authors argue that their study provides a reliable estimate, model heterogeneity levels, assessment of publication bias along with an adequate power. In this study, the significant differences of the content of interventions, their study designs, the quality of research, and the length of follow-up treatment results are observed. The findings indicate that the treatment effects are significant but small, equal to a reduction in the emotional exhaustion domain of the MBI. However, due to the indicated low quality of research, the evidence does not allow to provide any practical suggestions for the most effective interventions. The only finding being confirmed, is the fact that the organizational interventions are more likely successful in burnout reduction levels than the individual ones. The authors are not able to confirm the most effective content of the interventions due to the large variations of approaches amongst the studies. There is an indication that the combination of several most effective elements create an important ingredient to decrease burnout, and may need to include:

- the structural changes within the organization, fostering communication amongst staff, cultivating a sense of team work, and job control.

These kinds of intense organizational approaches are rare, and have not been evaluated widely according to Panagioti et.al. (2017). Authors report that a majority of organizational approaches include reductions in workload and schedule changes. The more complex interventions are connected to concerns of organizations due to the interventions' delivery costs (Awa et.al, 2010).

Overall, based on the above studies, the organizational interventions appear to bring with it a longer lasting positive effect on employees' health and a decrease of their burnout symptoms compared to the individual interventions. Workload seems to be repeatedly the most significant risk factor of the six areas of Worklife model related to burnout across a number of studies (Gregory, 2015; Buruck et al., 2018; Gascon et al., 2019). Other positive improvements within organizations include teaching the staff members some strategies to improve the communication, enhance decision making as that increases empowerment and gives a sense of control, and having friendly connections with people at work (Mudallal, et al., 2017). As can be seen, not all variance has been explained purely by the organizational interventions, which points towards the idea that the combination of both individual and organizational interventions seems to support employees the most. As it covers the individual support as well as applies adjustments in their work environments. That way, the employee continuously strengthens own individual resilience along with the work setting. One of which relates to the pacing of the workload and shall be the top priority. This is one of the reasons, why the current study combines both individual and organizational interventions. The following section addresses some of the suggestions for managers or leaders to support their employees.

### **How Can Managers Help?**

Several practices have been proposed for managers as highly effective organizational support. The support of employees shall encompass regular dialogues between management and employees regarding their roles and performance objectives, collaborative efforts in order to establish clear and aligned expectations, as well as the cultivation of trust and psychological connection to imbue the work with meaning (Korunka, et al., 2020). Other forms of managerial/organizational support include providing a rewarding salary, creating

pleasant work conditions and environment, clear and pleasant company policies/administration, having regular supervision to enhance one's skill learning and growth, enhancing a culture of positive working relationships and providing a sense of security for each employee. Previous organizational research has also resurfaced certain shortcomings which are addressed in the following section.

### **Weakness or Shortcomings of Organizational Interventions**

Despite, of the above recommendations, it is noticed that throughout a variety of studies, the study designs/interventions are greatly heterogenous, and with limited methodological qualities, which create uncertainties in the effectiveness of the interventions, also confirmed by Bagnall et.al. (2016). Another challenging issue across studies, includes conceptualizing a workplace as a homogenous placement, especially considering the fact that the workplaces are diverse in their sizes, management, levels of trust, functions or cultures (Bagnall et.al., 2016). Thus, creating a challenging obstacle to develop a “one fits all” intervention across different work environments. Literature, suggests to distinguish amongst the non-adaptive strategies that are focused on emotion, and adaptive strategies that are focused on the problem (Korunka, et.al., 2020). For this reason, the current study utilizes combined three-layered interventions to cover a broader level of support for the employees. Based on the findings and recommendations from the 40 burnout reduction experts used in the current study who have a clinical practice and experience across different fields. Involving general practitioners, physiotherapists, psychologists as well as HR experts who all cooperate within the organizational sector. These experts are interviewed about their successful approaches applied to tackle the burnout issue. Furthermore, the interventions proposed for the guidelines apply problem focused strategies that are found to be effective

across studies and may give employees certain tools or specific strategies to increase a sense of control and coping.

### **Theories as Building Blocks for Guidelines and Burnout Reduction Model**

The WorkLife model (Leiter & Maslach, 1999) appears to be repeatedly applied and tested across different studies and samples (e.g. Gregory, 2015; Buruck et al., 2018; Gascon et al., 2019). It appears to be covering a broader area of matching factors between the person and their environment. Some of these factors seem to be more organization related such as workload, control, reward, and fairness, often related to the organizational or structural policies and may be influenced by particular managerial or leadership styles. While the community and values factors from the model can be related to both the individual characteristics of an employee such as their personality, coping styles, or relatedness to others as well as the organizational environment such as the leadership or managerial style that either promotes or suppresses a positive, cooperative, collegial connections.

The current study applies exploration into a combination of a three-layered intervention, this broader model and its' different spheres within the person as well as the environment seem to provide the most detailed theoretical base for the current methodology. The Work Life model additionally, proposes more in-depth explanation for burnout symptoms by its' three personal dimensions in which burnout is associated with low energy levels from one's work, low levels of involvement from personal interactions, and low levels of effectiveness or having feelings of minimal accomplishments (Gregory, 2015). The three areas are all important indicators for a proposal of prevention or intervention of burnout, while gathering qualitative data from the burnout reduction professionals. Further incorporated in the later presented specific guidelines for the intervention.



The Conservation of resources theory (Hobfoll, 1989), is highly relevant to the current study for its' major hypotheses linked to burnout. Proposing that certain work environments/organizations may reinforce chronic stress by limiting their employees' opportunities for renewal of certain resources such as finances, bonuses or contribute to employees' losses of resources (e.g. taking away certain incentives at work) which in turn affects one's overall well-being (Halbesleben et. al., 2014; Buchwald & Hobfoll, 2004). The nature of human mind is to feel motivated to either avoid certain situations (due to losses) or to approach them (due to gains). The three-layered intervention appears to benefit from teaching the employees the strategies that increase coping by reinforcing the positive interaction between colleagues, and supervisors, teach tools to increase one's awareness of resources, things that are going well and creating a culture in a work environment where load is shared and support provided if feeling too overwhelmed or out of control.

The concept of the Job Demand-Control Model (Karasek 1985) and its' main idea that jobs too high on demands and constraints and low on control, are more likely to contribute to the adverse health effects and reduced well-being. There seem to be certain overlaps amongst all of the above-mentioned theories and their connection with the WorkLife model and its' related areas of workload (demand) and control (control). Therefore, the three-layered intervention appears to benefit from the Worklife model, as its' primary theory along with the Job Demand-Control Model, Conservations of Resources, the Job Demands Resources model, and Transactional model theories, useful building blocks to create an enhanced burnout reduction model.

The following section explores the combined interventions, their effectiveness and findings across a number of studies.

## **2.14 The Combined Intervention**

A number of studies (e.g. Gregory, 2015; Aryankhesal et.al, 2019) have attempted to explore an effective intervention or prevention for burnout symptoms. Neither individual nor the organizational interventions can fully support an employee at work on their own. The strongest support for an employee appears to be provided by offering combined interventions.

### **Characteristics of Combined Interventions**

Combined interventions are characterized by combining both an individual intervention along with the organizational intervention in one study (Pijpker, et.al., 2020). Several researchers have proposed that combining strategies of efficacious individual interventions with systemic level-organizational interventions such as enhancing workflow provides the most sustainable model for preventing and treating burnout (e.g. McFarland, Hlubocky, &Riba, 2019). The current study utilizes a combined intervention, proposing to support employees on three layers-individually, within their team and within the whole organization. Based on the current study's data it further proposes an enhanced model of burnout reduction and interventions. The following section provides a brief introduction to previous research that had applied the combined interventions on burnout and explored their efficacies.

### **Previous Research on Combined Interventions**

A systematic review by Aryankhesal et.al. (2019) explore the studies with the combination of individual and organizational approaches and find that such combination significantly reduces burnout across all of the studies included in their review (e.g. Aryankhesal et.al, 2019). The identified interventions of both individual and organizational

interventions in Aryankhesal et.al's study include a number of tools or strategies like motivational programs. Including gratitude, thankful events, communication training skills, electronic support methods, as well as psychiatrically designed programs that are related to the individual part of support. Most of these interventions on their own have a positive impact on reducing burnout symptoms and improve overall mental well-being as they are found to increase employees' motivation. Aryankhesal et.al's study (2019) evaluates a sample that comprises only of physicians and nurses. Their findings need to be interpreted with caution, and certainly cannot be generalized across a broader range of population. It shall be interesting to replicate this study on a random sample of population. One could argue that people who work in a medical field may be more likely to be open and motivated trying out new strategies, since it's a field in which they work. The authors also warn that the heterogeneity of the group samples, their demographics, the dispersion and multiplicity of mental health criteria across the examined studies may have all implicated on their findings. More research is needed that applies the combined interventions and assesses their effectiveness while using broader community samples and compares more heterogenous studies.

### **Facilitation of Rehabilitation in Employees on Sick Leave**

Similar positive findings are detected in another systematic review study by Pijpker, et.al (2020), that examines the efficacy of combined interventions on burnout. The authors find 4110 abstracts related to the burnout topic, but only 10 studies fulfill their selection criteria. Including the sample of participants, interventions, comparators, outcomes, study design of combined interventions. The authors report that despite of the fact that, the examined studies show high risks of bias, all of the combined interventions in the studies show significant efficacy in facilitating rehabilitation in burnout suffering employees.

Highlighting the importance of tackling the burnout problematic with the combined approach. In relations to the reduction of burnout symptoms, the combined interventions - both short terms (after 4months post intervention), and the long term (after 12 months post intervention) appear to decrease a sense of exhaustion, cynicism (depersonalization), and increase sense of professional efficacy (personal accomplishment). The authors' findings show that one of the most effective interventions include the involvement of employees in decision making, providing support in enhancing their job control, social support, along with eliminating the stressors. One criticism that Pijpker et. al 's research (2020) emphasizes, is that only three studies of such large database have looked into assessing the mediators of change. Authors argue that such assessments can provide an insight into explanation of how the combined intervention work. The limited empirical data show that enhancement of employees' sense of job control like an increase of the job authority, decisions, and social support by receiving positive feedback from their supervisors, participation in decisions by selecting stressors and mismatches, and reduction of overall workload can all facilitate rehabilitation in employees on sick leave.

The above studies are based on the theory or assumptions related to the job control, social support and reducing stressors. Further supporting the choice of using a mixture of the theoretical frameworks including the Job demand-control model (Karasek 1985), the Job-Demands-Resources Model (Demerouti, et.al., 2001), the Transactional model (Lazarus & Folkman, 1984) and the Work-life model (Leiter & Maslach, 1999), as a base for the current study's burnout reduction model. They all relate to determining the stressors at work and suggesting how to minimize them when proposing prevention or intervention program. More specifically, emphasizing the importance of exploring with employees the relations between demands versus resources or control. Not only eliminate stress but also enhance the positive outcome in job satisfaction, organizational commitment, or employees' participation in a

productive and sustainable way (Pijpker et.al, 2020). Based on the findings from previous research and theories, the current study designs the three-layered intervention for burnout reduction.

### **Suggestion for Five Components of Combined Intervention**

A study by Sallon and his colleagues (2015) reports an effectiveness of multimodal stress reduction intervention, which applies a combined intervention comprising of five components of the content including the cognitive, somatic, emotive-expressive, dynamic-interactive, and hands on (as described in the earlier section). Such combined interventions have been found to decrease tension at work, improve the quality of work, increase the productivity, and decrease the symptoms of stress along with the emotional exhaustion associated with burnout. The multimodal interventions have been further found to improve mood, and bring a variety of benefits while decreasing the somatic and mental health symptoms (Sallon, et.al. , 2015). Further confirm the complexity of the relationship between job stressors, one's reactions to them and a consequence of their impact on the health and general well-being. Which are in line with the Lazarus and Folkamn's (1984) transactional model, and the importance of the "cognitive appraisal of the stressors and resources" being associated with one's perceived stress and its' further negative impact on one's well-being. To summarize, the current study incorporates aspects of the five components of cognitive, somatic, emotive-expressive, dynamic-interactive, and hands in the three-layered interventions.

### **Need for Multiple Levels of Burnout Intervention**

Another report amongst Italian health care providers emphasizes the importance of multiple levels of burnout intervention (Gnerre, et.al., 2017). Authors examine data from various studies for recommendations on minimizing burnout and improving employee's work conditions. They have included both the organizational/work specific measures along with individual support. Suggesting that the combined intervention needs to cover the following areas:

- improved work planning that would involve employees to pace their work, distributing the most difficult tasks amongst different staff members, creating a balance between rewarding vs not satisfying activities just to name a few.
- including staff continuous growth and development. A few recommendations in this area, suggested by the authors summed reducing demands, providing frequent opportunities, teach strategies to improve structure of working time, as well as encouraging resource sharing.
- increased staff cohesion when working as a group by organizing regular meetings to resolve conflicts, and making explicit goals.
- individual suggestions for interventions, as recommended by Gnerre, et.al. (2017) include providing emotional support and autonomy. This could be achieved by teaching employees effective strategies to reduce stress, plan more time to rest, improve a general quality of life, and teach them a variety of strategies to increase self-motivation (Gnerre et.al., 2017).

In order to support employees in the most effective manner, there is a need for a combination of both an individual as well as organizational interventions to prevent or

treat burnout. This combination of interventions covers a broader spectrum of stressors on an individual level as well as the environment. Which is in line with more complex Work-life model (Leiter & Maslach, 1999) and its workload, control, reward, community, fairness, and values- environmental areas. The interventions related to the increased self-motivation proposed by Gnerre et.al. (2017) may also be supported by the Work-life's model and its proposition of burnout being on a continuum scale with burnout being on one end and engagement on the other. The sense of engagement is linked to high energy levels, high levels of involvement and high levels of effectiveness (feeling personal accomplishments). The individual and organizational interventions related to one's personal growth, development but also sharing responsibilities and having a support from their colleagues and superiors may effectively contribute to that more balanced positive work environment. The above suggestions are acknowledged in the current study and the three-layered burnout intervention.

### **Benefits of Combined Interventions**

Even though, the above suggestions for interventions are mostly focusing on someone's balance at work, it needs to be kept in mind that chronic exposure to work stress may put only some people at risk for burnout development (Kumar, 2016). Not everyone who is regularly exposed to stress at work develops it. Which further confirms that the more complex combination and interaction of factors including one's personality traits, their personal life circumstances and other factors are all a part of an ingredient towards further reinforcement for eventual burnout development. Thus, reducing the work stress alone may not automatically reduce one's burnout. It is for this reason, why for creating burnout interventions there needs to be a complex combination of both work stress reducing strategies along with the evaluation of a variety of individual and life style stressors. Only after

exploration of someone's specific needs, there can be proposal of specific individual intervention supporting the suffering person (Kumar, 2016). The current study uses the Work-life model (Leiter & Maslach, 1999) as it covers the broader spectrum of individual as well as environmental factors that the interventions can be build upon.

### **Critiques of Combined Previous Research Studies**

Bresesti, et.al. (2020) conducted a recent systematic literature review that examines combined interventions for occupational stress and burnout management in healthcare providers. From their initial 139 papers, only six articles fulfill their inclusion and exclusion criteria. None of them include randomized controlled trials, two of them include and describe interventions for stress management, but do not include a detailed report of methods, results, thus making the design definition unclear. Out of these limited data, Bresesti et.al. (2020) finds that both individual and organizational approaches to the interventions can be effective in occupational stress reduction, but effects on burnout reduction appear to be still controversial and inconclusive according to these authors. The authors acknowledge that until recently, there is no clear evidence as to which type of interventions appear to be the most effective for burnout treatment and prevention. Which further confirms dilemmas and critiques of systematic literature research for the need of future studies to have more precise designs, well described interventions, larger sample sizes, broader populations, just to name a few.

### **Combination of a More Holistic, Person-Directed Intervention on Organizational level**

Wiederhold et al. (2018), in their systematic review of studies, suggest that a comprehensive assessment of various underlying causes for the successful implementation of



interventions targeting burnout. Highlighting the importance of understanding the diverse factors contributing to this condition. Along with proposing a utilization of remedies that include a variety of different therapeutic tools. Stress reduction, is only one aspect of the working condition and may not be sufficiently decreasing the burnout rate. The authors note a set of effective techniques that emerge from the studies reviewed in their paper. The most beneficial ones include “training of coping strategies, the training of interpersonal skills to increase social support, the management of negative emotions, the improvement of communication skills, discussion of specific professional high-stress situations, and the use of relaxation techniques” (Wiederhold et.al., 2018). Authors suggest that any therapeutic tools need to be combined into a more holistic, person-directed intervention as well as organizational levels. To create a balance between the service responsibilities and personal training. Such combination of the personal and organizational interventions covers a broader spectrum of factors affecting someone’s susceptibility to burnout. Offers a larger tool box for coping strategies personally and environmentally. As well as offers a possibility to target and adjust the specific individual stressors. Therefore, enhances the effectiveness and success of such prevention or treatment interventions. There is another issue that needs to be raised, when designing the right burnout interventions including cultural differences, specific specialties or age. The following section will briefly outline some of the findings from previous research.

### **Burnout Interventions and Cultural Differences**

Designing the burnout interventions may be even more complex as originally thought as apart from the type and the content of the intervention, one needs to take into account the cultural diversities, work procedures, career opportunities as well as the type of occupation (Kumar, 2016). An evidence of a meta-analysis amongst doctors finds that overall burnout

prevalence, as well as the scores on the three dimensions of burnout may vary between countries (Lee, et.al., 2013). More specifically, the USA doctors experienced lower levels of Emotional Exhaustion, than the European doctors. One explanation provided for this discrepancy are stronger quality, safety culture and career development opportunities in the USA. The American doctors are found to experience elevated levels of emotional exhaustion, when facing conflict at work or having ineffective coping. European doctors who show positive work attitudes also experience lower emotional exhaustion as well as possible lower levels of depersonalization. The authors emphasize that the impact of various work/environment stressors/demands like quality, safety culture or the personal attributes may have either a role of a stressor or a resource (like conflict at work or positive work attributes) may be important pointers for specifically designed intervention. One area of the intervention that requires exploration is individual sense of safety, the quality of support employees receive, and their personal positive attitude towards work. These factors can potentially serve as emotional buffers, effectively reducing the risk of burnout.

### **Professional Specialties, Sense of Autonomy and Burnout Patterns**

Professional Specialties and Burnout Patterns are being explored by a study by Shanafelt, et.al. (2015). Which examines a prevalence of burnout amongst a variety of medical specialists, indicating that some specialties are at higher risk than others. Highlighting that there may be an importance of designing the intervention, based in particular on autonomy of the profession. Meaning that the specialties with higher sense of autonomy may show lower levels on emotional exhaustion, which is a dimension of burnout. When compared to the specialties with a low autonomy. Although, the above study has been closely linked to the assessment of burnout within the population of medical profession and its prevalence of this condition. This study still provides an indication that the six attributes

from the Work-life model (Leiter & Maslach, 1999) are indeed beneficial for assessment of the work environment, the individual stressors and could greatly assist with the design of the current's study three-layered intervention. More specifically, exploring the sense of autonomy and control and if it's not there, supporting the employees to increase that.

### **Combined Interventions and Younger Population**

A recent study (Tang, et.al., 2021) systematically searching and meta-analyzing 44 studies related to burnout interventions and their effects. These studies are picked from 5 245 articles. Authors include studies with 3400 younger individuals, who are either undergraduate students, secondary vocational students, and middle school students. Out of which 1847 students are involved in the intervention group and compared with 1553 controls. The meta-analyses of the 44 studies show that all the interventions reported are significantly positively effective, when compared to the control groups. The interventions in this systematic review include broad individual, organizational, matching interventions, and learning engagement that is based on perspective of positive psychology. Amongst these interventions, the most popular interventions used across studies include exercise as an individual support and group counseling as an organizational support. Their efficacy has been meta-analyzed.

The authors further conduct subgroup analyses based on the type of education, scales, intervention measures, and intervention time. The analyzes find that burnout scores amongst all three groups of students are significantly lower, when compared to the control sample. Showing the interventions as effective in the learning burnout reduction amongst the student population. Out of the interventions examined, the study shows that group counseling, is the most widely used across studies amongst the student populations. The exercise interventions are found to be the most effective when compared with the group counseling, or types of time management trainings. In terms of intervention timing, the study emphasizes that the most

effective intervention should extend for a minimum of eight weeks. The studies included in this search and subsequent meta-analyses are subject to limitations, particularly due to the diversity in methodologies across the studies. To the best of the authors' knowledge, this represents the inaugural meta-analysis focused on student learning burnout. Further research in the future shall be imperative to explore this younger demographic comprehensively.

The current study collects suggestions for interventions from a sample of burnout reduction professionals in both organizational and clinical settings who also work with both age groups supporting populations of adult students as well as general public. Their perspective into the most efficient burnout interventions applied on their mixed aged clients is later implemented for the burnout reduction model, the guidelines of the three-layered interventions.

The above combination intervention studies, suggest that the most effective and strongest support that can be provided to an employee is by offering a combined intervention (e.g. Gregory, 2015; Aryankhesal et.al, 2019, Kumar, 2016). Even though, across most of the studies, there is an application of diversified interventions, the studies still show that a combination of the individual along with organizational approaches appears to be significantly more effective in burnout reduction rather than applied on their own (e.g. Aryankhesalet.al, 2019; Tang, et.al, 2021).

Below is a summary list comprising of a few organizational interventions that have been found to be effective:

- motivational programs such as practice of gratitude, communication training skills, group counseling (Aryankhesalet.al, 2019; Tang, et.al, 2021)
- social support (Pijpker, et.al., 2020)
- creating a balance between rewarding vs not satisfying activities

- increasing the staff cohesion by organizing regular meetings to resolve conflicts, and setting up explicit goals
- distributing the most difficult tasks amongst different staff members (Gnerre, et.al., 2017)

From the individual interventions that have been found to be effective include approaches such as:

- psychological or psychiatric counseling (Aryankhesal et.al, 2019) designed programs
- involvement of employees in decision making
- providing support in enhancing their job control
- eliminating the stressors (Pijpker, et.al., 2020)
- staff continuous personal growth and development by teaching the staff to reduce/manage demands, providing frequent opportunities, teaching strategies to improve structure of working time
- providing emotional support and autonomy by teaching the staff effective strategies to reduce stress, plan more time to rest, improve a general quality of life, and show strategies to increase self-motivation
- improved work planning that would involve employees to pace their work (Gnerre, et.al., 2017)
- exercise (Tang, et.al, 2021)
-

## **Boundaries Between Work and Personal Life**

Combining the above interventions along with teaching the staff to create clear boundaries between their work life and their home life is strongly recommended by previous research (Kinnunen, et.al., 2016). Some employees may have a blurred vision and not addressing a separation from their work and home life. Often sacrificing their designated free time for work instead of recuperating, which further leads to decrease levels of energy, affecting their coping styles, and inducing more stress (Rich, et.al., 2020). This can be done by separating personal and work phones, having rituals when leaving work or anything that divides the two environments. Such boundary control has been measured in a Rich et al.'s study (2020) amongst postgraduate medical trainee's sample. Who participated in a workshop that consisted of two sections.

One section included a general well-being advice on self-care including exercise, eating, sleeping habits, self -compassion and mindfulness.

While, the second section comprised of the digital well-being device that was advising the participants to continuously improve the work life balance by setting out of office messages on the weekends, disabling online status when connected to management notifications. Hence, keeping the boundary between the two environments. As well as this, the workshop included group discussions and reflective exercises for the participants. Rich et al. (2020) find that even this kind of intervention has been significantly effective in burnout indicative levels reduction. One month post-intervention, the participants score significantly lower on burnout reduction on disengagement and exhaustion scales and are able to set clear boundaries controls. The participants well-being scores improve, but are not statistically significant. Their qualitative analyses of the interviews of the participants show that they appreciate the safe group space to discuss how to reduce stressors, and implement the digital well-being strategies along with self-care and mindfulness.

Sixty-seven percent of the participants in the Rich et. al.'s study (2020) indicate that they are “very likely” to continue applying the strategies that they practice in the workshop. Additional, thirty-three percent indicate that they are “somewhat likely” to continue implementing the strategies from the workshop. It would be intriguing to replicate this study and investigate whether an extended duration of the workshop further enhances the participants' long-term retention of the learned materials. Overall, however ninety-four percent of the participants have been interested in further work-life balance training. This study confirms that both individual as well as organizational support in one's work environment is crucial, as the employee is developing sense of self care, a better work-life balance, practices group cooperation and support, thus enhances general well-being.

Utilizing insights from the aforementioned systematic reviews, it becomes evident that the five theories introduced earlier in this chapter lack a specific emphasis on the necessity of boundary setting to distinctly delineate work time from personal life as an additional component of the burnout theoretical framework. The current study puts forth a comprehensive three-layered intervention that aims to offer support to individuals at the individual, team, and organizational levels, with a strong emphasis on establishing clear boundaries.

The following section will address some of the shortcomings and weaknesses noted in the studies examining the effectiveness of combined interventions in relations to burnout reduction.

### **Weakness or Shortcomings of the Combined Interventions**

A number of studies have addressed systematic literature reviews and investigated the occupational stress, burnout management, as well as combined interventions (e.g. Bresesti, et.al., 2020). However, there are a few limitations across all of these studies. One of them is

that the number of studies with combined interventions is still limited (e.g. Gnerre et.al., 2017; Bresesti, et.al., 2020 ). From the studies that are examining the effectiveness of combined interventions of burnout show significant differences among studies due to their diverse populations, intervention types, heterogeneity and scarcity of their quality designs and reporting of the outcomes. There are also not precise guidelines shared of the specific design of the interventions.

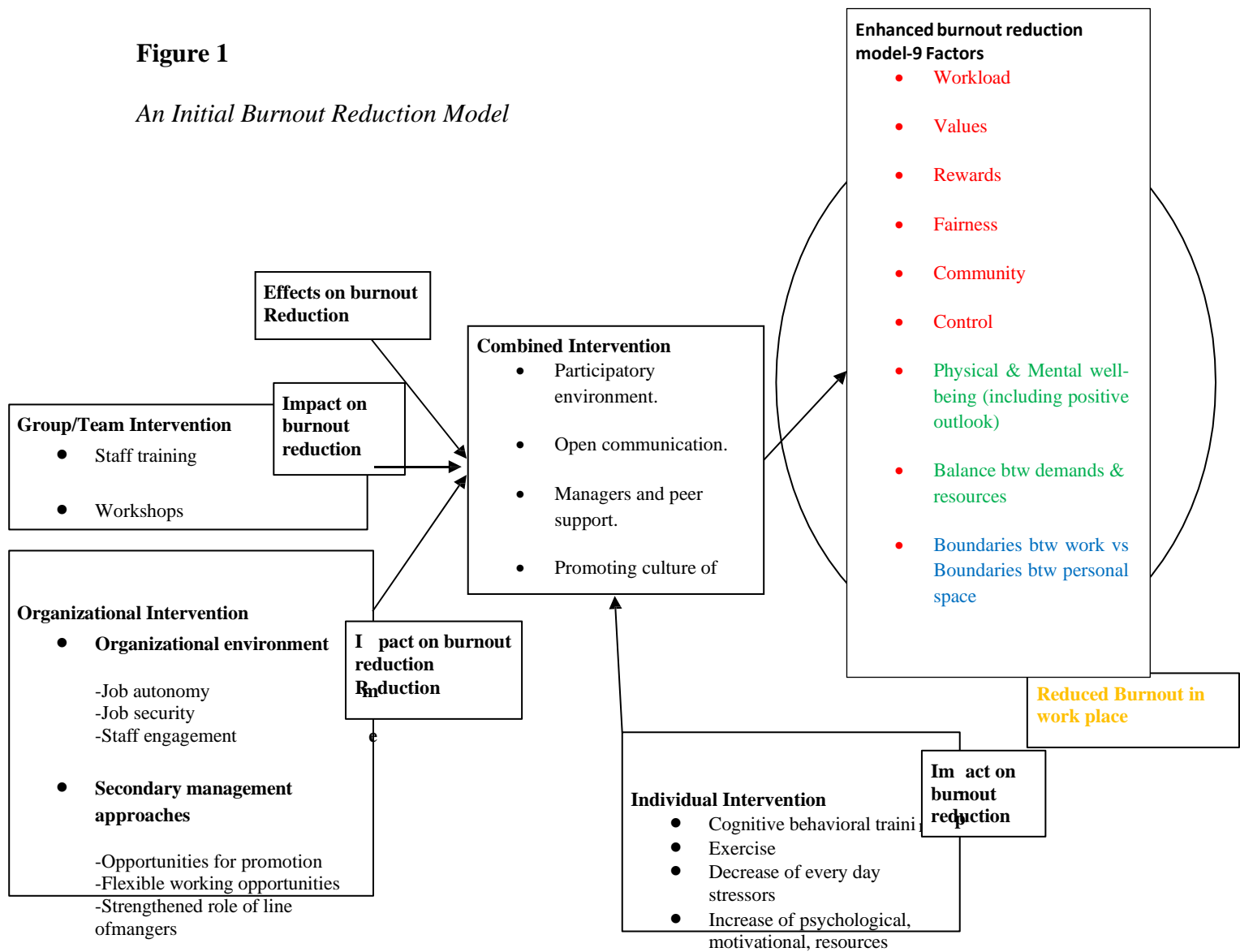
The existing body of research predominantly focuses on participants within the medical field (e.g., Aryankhesal et al., 2019; Bresesti, et.al., 2020; Lee, et.al., 2013). Burnout is not confined solely to the medical profession, but also extends to various other occupations (Wiederhold et al., 2018). Nevertheless, a study by Shanafelt et al. (2015) contends that the prevalence of burnout has been predominantly observed among doctors in comparison to other professional groups or the general population. It is important to note that the limitations mentioned significantly impede conclusive findings. Subsequent evaluations of interventions should also be applicable to broader non-medical communities. Therefore, the three-layered intervention guidelines in this current study are based on recommendations from burnout reduction experts who offer support across a wider spectrum of the general community, with the intention of being potentially tested or replicated in future studies. The following section introduces the initial burnout reduction model that has been based on summaries of the literature review presented in this Chapter of the dissertation.

## **2.15 An Initial Burnout Reduction Model**

The following individual, organizational and combined interventions' building blocks create an initial burnout reduction model (in Fig.1 below), which are based on the theoretical frameworks section and previous research discussed earlier (e.g. Aryankhesal et.al, 2019; Bresesti, et.al., 2020; Lee, et.al 2013). The initial burnout model's suitability is further



demonstrated in the results section of this dissertation, where additional primary data is presented. The primary aim of this research is to introduce a final, refined enhanced contextual burnout reduction model that integrates theoretical foundations, prior research, and current data gathered from burnout reduction experts.

**Figure 1***An Initial Burnout Reduction Model*

*Note.* The 9 factors -partially based on the five theories (e.g. Maslach & Leiter, 1999; Lazarus & Folkman, 1984 etc.)

Building upon a thorough literature review encompassing previous research (e.g., Gregory, 2015; Gascon et al., 2019) and relevant theories (Leiter & Maslach, 1999; Demerouti et al., 2001; Karasek, 1985; Van der Doef & Maes, 1999, etc.). It appears that by combining all this knowledge, the enhanced burnout reduction model shall incorporate these three areas, that have been found to contribute to a reduction of burnout:

- First, related to work, the Worklife model (Leiter and Maslach, 1999) and it's six well-tested domains including workload, values, rewards, fairness, community, and control. As these areas strongly connect an individual and how they relate or function in their department or the whole organization area.
- The second, related to the individual and their ability to control. This area appears to be linked to general personal health and well-being support, which is focusing on overall physical, mental, psychological strategies that are supportive of the individual to reduce stress levels. These supportive strategies include the examination of one's demands as well as resources in order to create a more balanced and resourceful personal-work life. This is predominantly based on the Job Demands Resources theoretical Model (Demerouti, et.al., 2001), the Job Demand-Control Model (Karasek, 1985; Van der Doef, & Maes, 1999) and the Conservation of Resources model (Hobfoll, 1989; Halbesleben, & Buckley, 2004). The Transactional analyses (Lazarus & Folkman, 1984) appears to be strongly linked to the importance of developing one's coping strategies to perception and definition of stress.
- Lastly, the third area of the initial enhanced burnout reduction model includes creating personal boundaries. Specifically, divided into the boundaries between work and personal life. The international labour organization,

indicated that establishing clear boundaries between work and personal life can contribute to greater well-being and reduced burnout. This involves defining specific times and spaces for work-related activities and allowing time for personal activities, hobbies, and relaxation (International Labor office, 2022). Part of this area is leaning on the Transactional analysis model (Lazarus & Folkman, 1984) and how a person perceives and interprets stress. For the three areas of the enhanced burnout reduction model, please refer to the section below.

### **The Initial Enhanced Burnout Reduction Model**

#### **1) Work Area**

- Workload
- Values
- Rewards
- Fairness
- Community
- Control

## 2) Personal Health and Well-being Support

- Physical & Mental well-being (including positive outlook)
- Balance btw demands & resources

## 3) Boundaries

- Boundaries btw work and Boundaries between personal life space

Based on the three dimensions of the initial enhanced burnout reduction model outlined above, and previous research (e.g., Sallon, et.al., 2015; Wigert & Agrawal, 2018), the model emphasizes the significance of interventions that not only enhance intrapersonal factors within employees but also promote effective interactions within various organizational factors. The 9 factors of workload, values, rewards, fairness, community, control, physical and mental well-being (including positive outlook), balance between the demands and resources, boundaries between work and personal life environments, appear to cover both intrapersonal and interpersonal well-being. The following sections will look at the 9 burnout reduction factors and their relevance to the current study in more detail.

## Work Area of the Burnout Reduction Enhanced Model

### **1st Factor Related to Workload in a Work Environment**

The workload is one area of the relationship that a person develops with their work environment. It is also one of the six domains from the Maslach and Leiter's (1999) worklife model. The workload dimension has been consistently positively linked to the burnout development, as it's considered to result in human's exhaustion, especially when job demands exceed human limits (Leiter & Maslach, 2004; Mudallal, et.al., 2017). As suggested by Mundallal et.al, (2017) any work environment shall be mindful of providing more manageable workload through strategies like involving additional staffing in order to decrease one's exhaustion. Improving easier access to information, that could save employees' time, make their work easier and would create clear expectations of one's work tasks. The distribution of resources across staff, would also contribute to offloading some of the workload. For this reason, workload appears to be one of the 9 important factors related to the enhanced burnout reduction model in the current study. Furthermore, the current study focuses on the development of specific guidelines of burnout reduction interventions, in the work environments, the experiences of the professionals from psychology, physiotherapy, general health and HR fields are explored. As it's these professionals who often dictate to ease on workload, and reintegrate after a sick leave.

### **2nd Factor Values**

The values dimension is also an area of the relationship between a person and their work environment, and is another domain from the Maslach and Leiter's (1999) worklife model. This dimension refers to the ideals and various motivations that attract employees towards their chosen jobs (Brom et.al., 2015). If there is a mismatch between a job and a

person in the values dimension due to certain changes in values, an employee may be less engaged at work, or show a counterproductive behavior (e.g. Dylag, et.al., 2003). Thus, increases a chance of burnout development. There was a suggestion to provide regular professional development opportunities, which in turn improve a sense of efficacy, and accomplishment at one's own work. Constant personal growth is an important value of many employees, thus matching that with the organizational opportunities would support employees' well-being (e.g. Mundallal et.al, 2017). For this reason, values appear to be another one of the 9 important factors related to the enhanced burnout reduction model in the current study. Since the current study focuses on the development of specific guidelines of burnout reduction interventions, in the work environments, the experiences of the professionals from psychology, and HR fields are explored. As it's these professionals who often explore with individuals' motivators at work, how to increase own personal growth, and what changes need to be made in case one needs an increase in their work satisfaction.

### **3rd Factor Rewards**

The reward dimension is also an area of the relationship between a person and their work environment, and is another one of the six domains from the Maslach and Leiter's (1999) worklife model. This dimension refers to the reinforcement of shaping one's behavior as well as points towards the extend of rewards whether they are monetary, social, or intrinsic. In order for this dimension to be successfully linked to burnout reduction, an employee needs to feel that rewards are matched or balanced with their own individual expectations. If employees feel neglected by their organizations' material or social rewarding system, they may feel mismatch between the personal expectations and values of this reward system (Brom, et.al., 2015). The matched personal expectations of rewards with the work reward system has been linked to decrease burnout development (e.g. Leiter & Maslach,

2004; Brom et.al., 2015). For this reason, rewards also becomes one of the 9 important factors related to the enhanced burnout reduction model. As the current study, focuses on the development of specific guidelines of burnout reduction interventions, in the work environments, the experiences of the professionals from psychology, and HR fields are explored. It is these professionals who often explore with individuals' what internally and externally rewards them, and what changes need to be created to align their satisfaction and expectations.

#### **4th Factor Fairness**

The fairness dimension focuses on the extent of fairness perception of employees after certain decisions and resources have been allocated within the work environment. More specifically, is this distribution perceived as fair or equitable? (Brom et.al., 2015). Fairness perception is yet another area of the relationship that a person develops with their work as well as, it is another domain from the Maslach and Leter's (1999) worklife model.

Some suggestions for enhancing the sense of fairness at work may include providing a variety of professional development equal opportunities or distributing tasks and resources fairly amongst the staff members (Mundallal et.al, 2017). For this reason, fairness also appear to be one of the 9 important factors related to the enhanced burnout reduction model. As the current study focuses on the development of specific guidelines of burnout reduction interventions, in the work environments, the experiences of the professionals from psychology, GP, physiotherapists and HR fields are explored. It is these professionals who often explore with individuals' whether they feel equally treated, and how their sense of unfairness is affecting their mental and physical well-being. It is also up to these professionals to develop an individual antidote interventions to support affected employees.



### **5th Factor Community**

The good and positive quality of social interaction within the work environment has also been found to reduce an occurrence of burnout (e.g. Leiter & Maslach, 2004; Brom et.al., 2015). Such quality is assessed by the community dimension, which is yet another area of the relationship that a person develops with their work and is another domain from the Maslach and Leiter's (1999) worklife model. Thus, the positive interpersonal relationships, reduced conflicts at work, informal social support, possibility to work as a team, overall closeness between employees are all a part of social context or a sense of positive community within work (e.g. Halbesleben, 2006; cited in Brom et.al., 2015). Which operates as a protective factor of burnout development. For this reason, community and positive relationships also becomes one of the 9 important factors related to the enhanced burnout reduction model. As the current study focuses on the development of specific guidelines of burnout reduction interventions, in the work environments, the experiences of the professionals from psychology, GP, physiotherapy and HR fields are explored. It is specifically these professionals who often explore individuals' coping, their major stressors, changes to their mental and physical health or body tensions, tensed body postures and who need to then teach the stress reduction tools, corrective or pain relief exercises and provide other forms of support.

### **6th Factor Control**

The control is the last work area included in the current's enhanced burnout reduction model. It is one of the six domains from the Maslach and Leiter's (1999) worklife model. Focusing on the relationship of a person with their work environment. This dimension, is related to one's perceived capacity to have certain control and influence on the decisions at work, along with exercising the personal autonomy, gaining access to resources like social

support, rewards in order to be able to complete their work tasks. It is believed that the more control a person has the more it may buffer the high work demands (e.g. de Lange, et.al., 2003). Also, being in line with the Job demands-resources model (Demerouti, et.al., 2001). The control was found to be continuously effective in decreasing burnout (e.g. Mundallal et.al, 2017) by improving an employees' leadership skills such as decision making, and empowerment to provide a sense of control Mundallal et.al, (2017). For this reason, control also becomes one of the 9 important factors related to the enhanced burnout reduction model. As the current study focuses on the development of specific guidelines of burnout reduction interventions, in the work environments, the experiences of the professionals from psychology, and HR fields are being explored. As it's these professionals who often explore with individuals' their sense of control and autonomy. Based on their personal issue, a targeted intervention is often tailored to minimize levels of physical, emotional and mental distress.

The following section is related to other factors of personal area of life for the enhanced burnout reduction model. These are related to the psychological and physical well-being strategies, setting up boundaries, balancing demands and resources, as well as incorporating increased self-awareness of ones' bodily needs and meeting them.

#### Personal Health and Well-being Support of the Enhanced Burnout Reduction Model

#### **7th Factor Related to the Enhancement of Physical and Mental Health/Stress Reduction (including positive outlook)**

Human's subjective psychological as well as physical well-being plays a significant role in burnout (Rehman, et.al., 2021). Even when relating the overall well-being to the Worklife model (Leiter & Maslach, 1999) it has been shown that the psychological states

may be mediating and underlining the importance of values and control while the “context satisfaction” may be reflecting the aspects of reward, social support, and fairness (Brom et.al., 2015). This could also mean that unless a person does not feel well physically and psychologically their active interaction as well as underlying perception of other six work areas are negatively affected. Almost three decades of burnout research shows that job characteristics such as quantitative job demands, role problems, lack of social support, and lack of self-regulatory activity are all possible reasons for job burnout (Schaufeli & Buunk, 2002). All of these are linked to overall psychological and physical well-being of individuals. As if an employee does not have the physical strength, the energy, and he or she experiences physical or emotional pains they are more likely to have an increased perception of stress at work (demands), to withdraw from their social connections and are more likely to have a reduced capacity to regulate their emotions or have a more negative outlook on work or life in general.

Regarding the positive aspect and its’ correlation with reduced burnout, a recent study by Kim et al. (2021) illustrated this connection. The study investigates an intervention focused on fostering an optimistic outlook and finds it to potentially alleviate burnout. The study has been a preliminary investigation designed to assess the feasibility, methodology, and potential effects of a larger-scale study are needed. It is important to note that not only a positive outlook or alignment between an individual and their work domain can positively impact overall well-being, but the reverse can also be true. This means that those who experience a sense of well-being may be more inclined to perceive things positively and consequently feel more aligned with their work areas. For this reason, physical and mental well-being (including positive outlook) also appear to be one of the 9 important factors related to the enhanced burnout reduction model. As the current study focuses on the development of specific guidelines of burnout reduction interventions, in the work

environments, the experiences of the professionals from psychology, physiotherapy, and general medicine fields are explored. As it's these professionals who often explore with individuals' overall physical, emotional, mental well-being. Based on specific complaints, these professionals are equipped to assess, treat, and teach coping to support from further injuries or distress.

### **8th Factor Between the Demands and Resources**

The demands and resources are a part of the 8<sup>th</sup> area included in the current's initial enhanced burnout reduction model. This area leans on the Job Demands Resources theoretical Model (Demerouti, et.al., 2001) with the main assumption that, work burnout and engagement are both negatively associated, and influencing a variety of occupational health outcomes, and employees' general well-being, contributing to life satisfaction or depressive symptoms (Hakanen & Schaufeli, 2012).

According to the Job Demands Resources theoretical model (Demerouti, et.al., 2001); demands can be both personal and work related. Including physical, psychological, social and/or organizational “stressors” such as workload and emotional demands such as intrapersonal conflicts which are contributing to an employee's physical and/or psychological effort or “strain” (Baker & Demerouti, 2007, 2017). Not all job demands are initially negative, only when the effort required or the number of simultaneous demands are way too high (Baker, Demerouti, & Schaufeli, 2003). Regardless, such continuous efforts or strains contribute to the work burnout.

While, resources may consist of a variety of personal and work “buffers” that may include built resilience, self-esteem, sense of efficacy, and optimism. Such buffers increase work engagement (Xanthoupoulou, et.al., 2009). Based on the Job Demands Resources theoretical Model (Demerouti, et.al., 2001), an insufficiency of resources contributes to the

individuals' negative consequences of stress, followed by the inability to cope effectively or to recover from it (Spini, et.al., 2017), thus, further contributes to burnout. One needs to be also mindful, that there are certain age differences in experiencing the prevalence of burnout. This is discussed more in detail in the next section.

### **Age Differences in Burnout**

There are some suggestions that the perception of demands and resources are experienced differently in different stages of life (e.g. Shane & Heckhausen, 2016). More specifically, studies show that younger adults, who are starting their occupations, have often, not yet accumulated reserve of resources such networks, work experience, identities, or income (Upadyaya & Salmela-Aro, 2017). As well as the early and mid-career stages of life, often include many employees entering parenthood. These employees may have young children during these stages and they need to find a way to cope with both caregiving tasks and job demands, all at the same time. Such increased pressure may in turn exacerbate work-family conflict (e.g. Demerouti, et.al., 2012). It has been demonstrated that there is an increased prevalence of burnout amongst younger individuals aged 20-35 and then in the age group of 55 years and over (Marchand, et.al., 2018). Suggesting, that the burnout interventions designs need to take these life stages' differences also into an account and offer individually targeted specific support based on different work and personal demands of different ages or stages of life. For this reason, demands and resources also appear to be one of the 9 important factors related to the initial enhanced burnout reduction model. As the current study focuses on the development of specific guidelines of burnout reduction interventions, in the work environments, the experiences of the professionals from psychology, physiotherapy and HR fields are explored. It is these professionals who often explore with individuals' what are some of the personal resources and demands that either

contribute or protect from distress. In accordance with the evaluations of professionals, targeted protective strategies can be implemented to enhance resources and reduce the levels of demands. The current study additionally includes the professionals who are interviewed about the effective strategies for burnout reduction of employees or clients of different stages of life (young adults-older adults).

The following sections introduce last area of the enhanced burnout reduction model, specifically supporting personal boundaries of employees.

### Personal Boundaries of the Enhanced Burnout Reduction Model

#### **9<sup>th</sup> Factor Boundaries between Work and the Personal Life**

After establishing the importance of general mental and physical well-being (including positive outlook), along with match of a person with the areas of work environment, separating the boundaries between work and personal/home life is another factor included in the initial enhanced burnout reduction model of the current study. Especially, during the Covid-19 outbreak times, while people have been working more often remotely from home, establishing boundaries between personal time and work is becoming inevitable (Giurge&Bohns, 2020; Ashforth, et.al., 2020).

Some of the strategies to separate the two lives include taking time off when dealing with personal health (e.g. visits to healthcare professionals), not sending emails or administration outside of the office hours either to the employees, or employees replying back to work. Otherwise, it may put pressure on employees who may feel more compelled to respond to emails or tasks right away (Giurge&Bohns, 2020). Research also suggests to set boundary crossing activities to mark the transition between work and non-work roles (Ashforth, et.al., 2020). Some of these include different clothes for work and home/personal

space environments/settings, out of office alerts when not working, having supportive leaders as role models with practicing boundary setting for themselves as well as giving the workers autonomy (Giurge & Bohns, 2020). Intrusion of work to personal life increases stress levels and has a significant negative effect on one's family life (e.g. Ohu, et.al. (2019). Having control over these boundaries also reduces stress caused by work life imbalances (Park, et.al., 2020). For this reason, boundaries between work and personal life also becomes one of the 9 important factors related to the enhanced burnout reduction model.

The current study focuses on the development of specific guidelines of burnout reduction interventions, in the work environments, the experiences of the professionals from psychology, physiotherapy, general medicine and HR fields are explored. It is these professionals who frequently engage in discussions with individuals to ascertain if they have established clear boundaries between their personal and professional lives, whether these boundaries are satisfactory, and what cultural expectations may be in play. Based on the identification of what is needed, these professionals then teach the importance of boundaries.

### **Evaluation of Knowledge from Previous Research**

The overarching goal of research on burnout is to enhance our understanding of its symptoms, development, prevalence, and, most importantly, interventions, with the aim of reducing its occurrence and alleviating the burden it places on society (Gregory, 2015; Rupert, et.al., 2015; Aryankhesal, et al., 2019). Existing literature on burnout and its interventions draws upon multiple theories, which have been incorporated into the current study to provide a robust theoretical framework for the three-layered burnout intervention and the initial enhanced burnout reduction model. The Job Demands Resources Model (Demerouti, et.al., 2001) and the Conservation of Resources model (Hobfoll, 1989; Halbesleben, & Buckley, 2004) offer valuable insights into the underlying causes of burnout,

highlighting the role of untreated or unresolved chronic stress and distress in the workplace. These theories emphasize the importance of work and personal resources in preventing and reducing burnout by influencing employee motivation, engagement, and their ability to cope with job demands (Rupert, et.al., 2015). The Transactional model (Lazarus & Folkman, 1984) contributes to understanding of stress and burnout by considering employees' appraisal of demands and resources, and their coping strategies. Additionally, the Job Demand-Control Model (Karasek, 1985; Van der Doef, & Maes, 1999) and the Work-life model (Leiter and Maslach, 1999) highlight the complex and non-linear nature of burnout, emphasizing the interaction between individual factors and organizational factors within the workplace (Pijpker, et al., 2019).

### **All Five Theories Complement Each Other**

The five theories complement each other, providing a more comprehensive understanding of burnout and serving as a solid foundation for the initial enhanced burnout reduction model and the guidelines for the three-layered interventions in the current study. By integrating these theoretical constructs, the study aims to develop a holistic approach to address burnout and provide effective strategies to support individuals in managing and preventing burnout in various organizational contexts.

The current dissertation mentions the symptoms associated with burnout, including difficulties with sleep, concentration, an increased likelihood of substance use, disillusionment with one's job, lack of satisfaction or achievement, low energy levels, irritability towards coworkers or clients, cynicism towards one's job, and various physical complaints (Mayo Clinic, 2021). The assessment of burnout needs to include examination a person on both levels- at an individual level and within the organizational context.



At the organizational level, managers and supervisors need to be attentive to various affective signals indicating burnout, such as low job satisfaction, negative attitudes towards work, and cognitive signals of cynicism and distrust towards management. Behavioral indicators such as reduced performance, decreased productivity, and high turnover rates within the organization also serve as important signs (Korunka, et al., 2020). Recognizing these signals provide immediate support and address the underlying issues.

Research of the individual interventions related to burnout is inconclusive and highly heterogenous, with the only consistency repeatedly highlighting the application of cognitive behavioral therapy (McFarland, et.al., 2019; Jaworska-Burzynska et.al., 2016; Scheepers, et.al., 2019) and in many cases physical exercise (e.g. Bretland & Thorsteinsoon, 2015) as the most effective interventions on reducing burnout. However, highlighting the importance of also applying the organizational intervention Awa, et.al., 2010 ;Westermann , et.al., 2014) for better effectiveness. For several reasons that will be outlined in the next section.

### **What Has Been Learnt about the Interventions So Far?**

Overall, literature suggests that the organizational interventions appear to show a longer lasting positive effect on employee's health, and burnout symptoms reduction when compared to the individual interventions (e.g. Gregory, 2015; Buruck et.al., 2018; Gascon et. al., 2019). Of the six areas of Worklife model (Leiter and Maslach, 1999), unmanageable high levels of workload seems to be repeatedly the most significant risk factor contributing to burnout (Gregory, 2015; Buruck et.al., 2018; Gascon et. al., 2019). Other positive organizational findings highlight interventions related to teaching strategies to improve the communication, and enhance sense of control by decision making (Mudallal, et. al., 2017). Despite of the fact, that organizational interventions appear to be more effective than individual, studies also show that the combination of both individual and organizational

interventions shall support employees the most. Given that it encompasses both personalized support and adaptations in their work settings (Gregory, 2015; Buruck et al., 2018; Gascon et al., 2019). This is, why the current study explores burnout interventions and provide guidelines for both individual and organizational types of support. While the organizational intervention is designed to support employees within their team as well as the whole organization. The following section briefly highlight some of the main conclusions from previous combined research studies.

The combination intervention studies, showed that the most effective and strongest support for any employee comprises of a combined intervention (e.g. Gregory, 2015; Aryankhesal et.al, 2019, Kumar, 2016). Majority of studies, use a large diversification of interventions, yet the combination of the individual along with organizational approaches appear to be significantly most effective in burnout reduction, when compared to control groups (e.g. Aryankhesalet.al, 2019; Tang, et.al, 2021). A few organizational interventions that are found to be effective include motivational programs such as practice of gratitude, communication training skills, group counseling (Aryankhesal et.al, 2019; Tang, et.al, 2021), social support (Pijpker, et.al., 2020), creating a balance between rewarding vs not satisfying activities, increasing the staff cohesion by organizing regular meetings to resolve conflicts, and setting up explicit goals, and distributing the most difficult tasks amongst different staff members (Gnerre, et.al., 2017). While, from the individual interventions that have been effective the recommended tools include psychological counseling (Aryankhesal et.al, 2019), involvement of employees in decision making, supporting employees in enhancing their job control, working on elimination of stressors (Pijpker, et.al., 2020), providing staff with continuous personal growth and development, giving emotional support and autonomy , teaching the staff to plan more time to rest, and improve a general quality of life (Gnerre, et.al., 2017) and exercise (Tang, et.al, 2021). Although, the previous research suggests a few

significantly efficient interventions for burnout reduction, it is still inconclusive as to which one of the above-mentioned interventions is the most effective from them all. This is due to heterogeneity of the studies, their methodology, not reporting the content of the interventions in details and other methodological flows observed (Bagnall et.al., 2016). Therefore, the following section briefly summarizes the major gaps observed in the previous studies and highlight some of the areas that are addressed in the current research in order to seal a part of the gap.

### **Previous Research Shows Several Gaps**

The previous research shows several gaps, including examining separately either person directed or organization directed approaches (e.g. Maricutoiu, et.al., 2016). Majority of the studies do not provide specific guidelines of their interventions (e.g Wiederhold, & Riva, 2018) and no combination of individual, department/team and the whole organization have been combined. Additionally, a majority of published data incorporates studies on healthcare professionals (mostly physicians and nurses) 40.9% when compared to other professions (Jaworska-Burzynska, et.al., 2016). Another challenging issue across studies, includes conceptualizing a workplace as a homogenous placement (Bagnall et.al., 2016), creating a challenge to develop a “one fits all” intervention across different work environments.

The current study can be justified as in its’ novelty it explores all three types of interventions (individual, team, organizational) to gather a broader level of support for anyone that may be affected by burnout. The design of the structured guidelines for a three-layered intervention (individual, department and organization) in the current study is partially based on the suggestions from previous research, theories as well as combined with the suggestions of the burnout reduction professionals who share their clinical practice and

experience across different fields (e.g. a general practitioner, physiotherapist, psychologist as well as HR). In order to fully justify such a complex intervention proposal and the combination of the individual and organizational approaches includes a fact that previous research shows that the individual interventions are only partially effective and for a short (up to 6 months) period of time (Awa, et.al., 2010; Westermann, et.al., 2014), especially when compared to the organizational approaches of interventions. Highlighting that combined interventions appear to be the most effective option to decrease burnout or work-related stress. This notion was further explored in the current study where the professionals are being asked to share their opinion from their experiences on the effectiveness of interventions between all three interventions combined together vs each intervention provided separately).

## **2.16 Summary of Chapter 2**

Chapter 2 provides a comprehensive overview of the existing literature on burnout, highlighting its significance as a well-known occupational syndrome that adversely affects workers' physical and mental health, leading to absenteeism and negative consequences for organizations. The chapter examines literature reviews, burnout occurrence, and different types of interventions utilized in research. However, it is observed that the literature on burnout interventions is limited, particularly in terms of the application of a combined three-layered approach that can provide substantial benefits for individuals at both personal and work levels. Given the continuous rise of burnout cases, the need for more studies focusing on comprehensive interventions becomes increasingly crucial. The chapter also explores burnout theoretical frameworks, establishing their relevance to the three research questions and an exploratory question related to the combined interventions efficacy outlined in Chapter 1. By delving into the types of interventions and previous research findings, it set the foundation for the subsequent chapters, which present the methodology, data analysis, and

further development of the final enhanced burnout reduction model based on the identified gaps and insights from the literature.

## **Chapter 3: Research Methods**

Chapter three of this dissertation is dedicated to elucidating the research methods employed in the study.

### **3.1 Introduction**

The subsections within this chapter include an exploration of the interpretivism philosophy guiding the current research. The justifications of utilizing a Qualitative Phenomenological Research is explained, as it aligns with the objective of investigating the phenomenon of burnout intervention. The chapter further delves into the study design and materials. Specifically, the use of semi-structured interviews with open-ended questions, highlighting the advantage of allowing participants the freedom to express their opinions and experiences in an unrestricted manner. The population under investigation and the purposive non-probability sampling technique is described. The sample for this study is collected through snowballing and convenience sampling. Overall, this study entails a comprehensive data collection process aimed at developing structural guidelines for three-layered burnout reduction interventions based on the insights from burnout reduction experts in clinical and organizational settings within the Netherlands and Slovakia (primary data). As well as the insights from previous systematic literature reviews and meta-analysis (secondary data). Data analysis is explained. Followed by the validity and ethical assurances as well as perceived research limitations are addressed in later parts of this Chapter. The chapter is concluded with a brief summary.

### 3.2 Research Approach

The approach in the current study is using onion framework based on Saunders et. al. (2007). The outermost layer comprises of:

- research philosophy (interpretivism)
- definition of the research approach (inductive)
- research strategy (case studies)
- research choice (qualitative data/multi-method-triangulation)
- time horizon (cross-sectional)
- techniques and procedures:
  - identification of data collection methodology (semi-structured interviews)
  - materials utilized
  - sampling strategy (purposive and snowball sampling)
  - data analysis techniques (thematic analysis)

Additionally, as a part of the research approach, the ethical considerations applied in the current study are discussed.

The approach of the current study can be viewed in Fig. 2 below, based on Saunders et. al. (2007) research onion framework. The study has been designed to explore a three-layered support system (structured guidelines), drawing on the knowledge and expertise of experienced burnout treatment professionals (primary data), and previous systematic research

(secondary archival data). With the aim, to answer the research questions and provide a fresh perspective on the initial enhanced burnout reduction model that can be later elaborated into the final stage of the enhanced burnout reduction model.

**Figure 2**

*The Research Approach Onion in the Current Study*



*Note.* Adapted from Saunders et. al. (2007) research onion framework



### **3.3 Interpretivism (Research Philosophy)**

The foundation of the current qualitative study is based on a set of beliefs that all three layers of burnout interventions are important to support one's function and well-being in the work environment. This research is based on ontological perspective, reflecting "the reality and knowledge, of burnout interventions, examined via the interviews" from the burnout experts (Crossley & Jansen, 2021). Aiming to identify and explore the important tools to develop the interventions and the burnout reduction model. Involving the interpretivism as the main philosophy of this research. The selection of Interpretivism, as the epistemological framework for this study, is substantiated because interpretivism aligns with the overarching objective of comprehending subjective reality. This characteristic distinguishes it from the Positivist paradigm which predominantly emphasizes the investigation of objective reality. Such distinction is pivotal in acknowledging the subjective nature of human experiences and perceptions, particularly in the context of social burnout reduction intervention phenomena. Thus, the qualitative nature of the current study further confirms the appropriateness of an Interpretivist approach, as it permits an exploration of the multifaceted dimensions of burnout reduction interventions phenomenon. The use of qualitative methodologies facilitates a rich, in-depth inquiry into the subjective realities and experiences (McBride, et.al., 2021) of the experts in the current study.

### **3.4 Research Approach: Qualitative Research/Induction**

Additionally, interpretivism, by its' definition focuses on the influence of social-cultural factors affecting an individual in their environment (Crossley & Jansen, 2021). Such social- cultural factors are investigated and via induction later interpreted into the experts'

suggestions for intrapersonal (individual) intervention, interpersonal (within their team), and organizational interventions.

The inductive reasoning generally applies observations from data collection first and later utilizes such observations for broader generalizations. Which is the process in the current study, unlike the deductive reasoning that is applied in quantitative studies and initially starts with a theory that gets later tested (Streefkerk, 2019). Therefore, the inductive approach, in the current research stems from the fact that the literature theories, and previous research did not fully cover the interventions' side of burnout, thus the three-layered interventions data is not used as a start up in the data collection of the research. Such information was later generated from audio-data collection of opinions from the 40 burnout reduction professionals who were sharing their effective interventions' experiences. Only after the findings of the combination of the 3 research resources primary data (from the experts), secondary data (from previous research) and application of theoretical literature triangulation lead to developing, three-layered intervention guidelines and the broader enhanced burnout reduction model. Thus, the model along with a theory is being developed through the induction process of the current research. The following section will further expand on the type of research approach and provide justification for the utilization of the qualitative methodology.

### **3.5 Research Strategy: Qualitative Research (Use of Case Studies)**

The current study applies use of qualitative method. Defined as a method that gains in-depth understanding of individual experts' experiences into burnout reduction interventions. For this reason, the study design provides textual rather than numerical data

(Farnsworth, 2019). Numerical data is generally used in quantitative study methods as it tends to quantify the opinions collected. Such data collection, is not however applied in the current study (Farnsworth, 2019). Partly, due to the nature of exploration of experts' opinions, and the purpose of the study with the main objective to design the three-layered interventions. The current study adopts a qualitative research approach known as phenomenology. Phenomenology is a type of research that delves into an individual's firsthand experiences within their environment (Neubauer, et.al., 2019) and is the most appropriate due to description of a phenomenon defined as “efficient three-layered burnout intervention”.

## **Case studies**

The participants of the current study are sharing their own perspectives, meanings or insights into “their most effective strategies, tools or forms of support related to the individuals suffering from burnout, support at work, and ideas for organizational protocols.

- Sharing their meanings about a specific phenomenon of burnout interventions is conducted in a form of a phenomenological qualitative research, based on earlier definition of Sauro (2015).
- Another objective in the current study is to develop a Final enhanced contextual burnout reduction model. Its' initial stage, detailed description of how this model has been constructed and how the 9 factors in it have been combined is outlined more in detail in Chapter 2. The Initial and Later Final enhanced burnout reduction model are addressing practical remedies for the structural guidelines that can be used to minimize burnout and stress factors.

While, conducting the semi-structured interviews from the experts in the burnout reduction field, who as part of their jobs, are supporting individuals suffering from burnout.

- The guidelines are later developed across three layers of interventions (individual, team, and organization) as defined more in detail in Chapter 2 .

### **3.6 Research Choice: Multi-Method**

Multi-method research approach is applied in the current study. Meaning, that it combines various data collection techniques, including the semi-structured interviews as well as the secondary archival data from previous research (Farrell, 2016). It employs thematic analysis, a type of a qualitative method, to identify and analyze recurring patterns or themes in the data. In order to gain more comprehensive and nuanced understanding of the three-layered burnout reduction interventions. By triangulating insights from different sources (primary data and secondary/archival data/as well as through the theoretical frameworks), enriching the overall research findings.

### **3.7 Triangulation Application to Enhance Reliability and Validity**

The triangulation, as a research strategy is applied in the current study. The word triangulation needs to be defined as a strategy combining more than one method to gather data also aiming to increase the credibility and validity of the research result (Noble & Heale, 2019). In this research, triangulation involves combining viewing and interpreting data through the lens of several theories (thus using theoretical literature triangulation) including the Job Demands Resources Model (Demerouti, et.al., 2001), the Conservation of Resources

model (Hobfoll, 1989; Halbesleben, & Buckley, 2004), the Job Demand-Control Model (Karasek, 1985; Van der Doef, & Maes, 1999), The Transactional model (Lazarus & Folkman, 1984) and the Work-life model (Leiter and Maslach, 1999) along with the findings from previous research found on-line (e.g. Magnano, et.al., 2015; Scott, 2020; Ahola, et.al., 2017, Gregory, 2015; Mudallal, et.al., 2017; Gascon et.al., 2019) and via semi-structured interviews from the 40 burnout reduction -interventions' experts. Next section will briefly describe reliability and validity of data in the current qualitative study and how it has been achieved. The more in-depth description of reliability and validity will be however explained in the next Chapter 4 along with description of findings of the current study.

### **3.8 Reliability and Validity of the Study**

A number of researchers indicate that the terms of reliability and validity are only applicable to quantitative research, and not to qualitative research because of their connection to the positivist view (Rolfe, 2006). However, it is also suggested that finding a way of looking at reliability and validity even in a qualitative research is crucial to ensure its' rigor (which is defined as a concept associated with research and assuring its' quality) (Leininger, 1994). That is why, the terms of reliability and validity in qualitative research are replaced with the concept "trustworthiness" as a main concept assessing the rigor of the study (Lincoln and Guba, 1985). Lincoln and Guba, were the first researchers who indicate that research needs to fulfill four main criteria to establish trustworthiness of a qualitative approach.

These are also taken into account in the design of the current research, including credibility, related to establishing a confidence "in the truth of findings. In particular, the current study uses multiple sources for data collection (primary and secondary as described

earlier). Transferability, that assures that findings of the study have applicability across various contexts. One way, how transferability has been assured, is to combine data from both primary (clinical research) as well as from secondary (empirical research). Along with collecting expertise (for primary data) from burnout support experts across four different fields (physiotherapy, general medicine, physiotherapy and HR). Dependability is another important criterium assuring consistency of such findings if/when repeated. This is reinforced by creating a specific set of guidelines with prescribed individual, team, and the whole organization interventions to assure that the study can be easily replicated in the future and the efficacy of interventions empirically tested. The last criterium for current study's "trustworthiness" is related to confirmability of the study which refers to the stability of responses across multiple data sets. To assure such stability, the responses of data are recorded, coded and common themes included in the guidelines outlining the interventions. Thus, overall the current study attempts to fulfil all four criteria of trustworthiness of the study as recommended by Leininger (1994).

For validation of a qualitative research, several primary and secondary validation criteria are strongly recommended to be met (Whittemore, et.al., 2001). Including credibility which refers to the accurate interpretation of the participants' meaning. Authenticity that relates to a question whether different voices are heard. Criticality, which reinforces the critical appraisals of all areas of research. As well as integrity, that refers to whether the researcher was self-critical.

While the secondary criteria of validation process in qualitative research are connected with explicitness, vividness, creativity, thoroughness, congruence and sensitivity in research led (Whittemore, et.al., 2001). The above validation criteria are at least partially met by utilization of 40 participants in the study to assure that several voices and across four

different fields of expertise in burnout support are heard. Their responses are recorded, repeatedly listened to, transcribed and their common themes grouped. In case some of the participants provide ambiguous or unclear messages, the researcher assures to ask further questions or enquired for clarification to minimize any assumptions or bias data affected by researchers' interpretation. As well as this, the researcher attempts to be objective, without inserting any subjective opinions and remain fully connected to the responses of the participants. Lastly, in order to assure criticality and integrity, the researcher also critically assesses any limitations to data collection and study design (which are discussed more in details in the limitation section at the end of this chapter). The secondary criteria for validation (Whittemore, et.al., 2001) are met by designing a methodology of a study that is new and unexplored to the researcher's knowledge.

Overall, to sum up, the main reason to use all 3 sources in the current study is aimed to increase the credibility and validation of the research result (Noble & Heale, 2019). This is why multiple sources including the knowledge from previously proposed burnout theories including the Job Demands Resources Model (Demerouti, et.al., 2001), the Conservation of Resources model (Hobfoll, 1989; Halbesleben, & Buckley, 2004), the Job Demand-Control Model (Karasek, 1985; Van der Doef, & Maes, 1999), The Transactional model (Lazarus & Folkman, 1984) and the Work-life model (Leiter and Maslach, 1999), are included as part of the literature theory triangulation, thus evaluating and combining the findings from previous research found on-line (secondary data) (e.g. Magnano, et.al., 2015; Scott, 2020; Ahola, et.al., 2017, Gregory, 2015; Mudallal, et.al., 2017; Gascon et.al., 2019) and via semi-structured interviews from the burnout reduction professionals (primary data). The following section will explain time horizon, as another layer of the research approach.

## **Time Horizon**

The current study applies a cross-sectional data collection. Meaning, that data from burnout reduction experts is gathered from at a single point in time. Thus, provides a snapshot of information at that specific moment offering insights into the characteristics of individual, team and organizational burnout reduction interventions, and their attributes applied by the experts in the burnout reduction field being studied (Farnsworth, 2019).

### **3.9 Techniques and Procedures for Data Collection Methods**

In data collection, the individual experts are interviewed about their methods of support of people suffering from burnout. The semi-structured interviews are conducted one on one with each expert and are used because the researcher has only one chance to collect the data (cross sectional data collection). Thus, semi-structured interviews provide flexibility to ask additional questions whenever appropriate and relevant to elaborate on specific burnout reduction interventions (Farrell, 2016). By applying open ended questions, the researcher gives participants the freedom to express their views in their own terms with stories, examples, sentences and free form of personal expertise, insights. These have been found to provide reliable, comparable qualitative data in previous studies (e.g. Bernard, 1988). Rather than giving participants the closed-ended questions that may limit participants' answers (Farrell, 2016).



## **Semi-Structured Interview**

The interview has been developed by the researcher herself, who works in the health care field, as a psychologist supporting people with burnout. The interview questions for burnout reduction experts include a Total of 21 questions.

- Where the first nine questions are gathering general descriptive information about the participants', thus the experts' age, gender, years of expertise working in their field, type of education, as well as their highest level of education and others.
- The questions 10 to 21 are related to the experiences and efficacy of the experts' tools when working with people suffering from burnout. Exploring in what capacity they have been supporting people suffering from burnout. Along with examining specific methods or tools used in their expertise.
- Furthermore, the questions are also examining whether the burnout reduction professionals had been using specific tools that are scientifically evaluated, as they can be checked across literature research and theories.
- Such tools are also divided into the three categories of support related to individual, team and organization support.
- The participants are asked about what specific tools they use in their practice, and whether and if what they teach their clients some of these tools to also apply outside of the sessions or meetings with the expert.

- Lastly, the set of questions also inquire about specific recommendations for the guidelines of the three- layered interventions and an enhanced burnout reduction model proposal.

As the guidelines and the enhanced burnout reduction model are the two objectives for data collection in the current study. The set of questions, is developed by the researcher and can be viewed in the Appendix section 1. Overall, the questions are exploring about the experts' techniques, tools and interventions related to individual support, support of employees in their team as part of their work environment and within the whole organization by creating specific procedures to enhance mental and physical health care and stress reduction.

After data collection, data is coded and content analyzed. Which is further explained in the following section.

### **Primary Data: Semi-Structured Interviews**

The “know how” of the burnout reduction experts have been recorded, and incorporated in a design of the three-layered intervention guidelines for support, prevention or burnout recovery. The same set of questions are repeatedly used across all the participants. Interviews are transcribed. The symbols such as collected perspectives, understandings and feelings related to the supportive methods and their effectiveness on burnout reduction amongst employees are manually coded and later content analyzed according to suggestions of Creswell and Creswell (2018).

The definition of burnout and its' diagnostic criteria have not yet been fully established, and its' assessment is somewhat puzzled across different health care fields (Chirico, 2016). To better understand the assessment an occurrence of burnout symptoms, for example Mayo clinic (2021) published a set of questions that can be used to evaluate whether someone exhibits burnout symptoms (view the Table 1 in Chapter 2). The questions assessing burnout by the experts in their fields are related to someone's physical health, mental health and work environment functioning.

- Most of the burnout diagnosed employees seek a combined treatment where a Gp takes care of someone's physical health.
- Physiotherapists care for someone's physical health, posture, mobility that resulted from this condition.
- Therapists/counselors/psychologists provide or develop interventions to support someone's mental and emotional well-being.
- While HR specialists take care of connecting the employees suffering from burnout to the above discussed health care professionals before and after they have been sent off to sick leave. They also conduct companies' assessments of their culture, the statistical analyses of burnout occurrence and develop a variety of organizational procedures to minimize work injuries and assure employees' safety.

Opinions of these experts who have been practically working in the field are examined and analyzed and combined with the practical theoretical and empirical suggestions from previous research. One may also argue that psychiatrists are another group of experts supporting individuals suffering from burnout. Although, this expert population has also been considered for inclusion in the current study. Upon careful consideration, the exclusion of

this particular expertise in the current study was a deliberate decision based on the specific focus and objectives of the research. While psychiatrists undoubtedly play a crucial role in supporting individuals experiencing burnout, their primary approach often involves medication-based interventions. The decision to focus on professionals who provide support without medication aligns with the research's aim to explore non-pharmacological interventions for managing burnout.

### **Inclusion of 40 Participants**

Based on the combination of above described inclusion of experts, the specific guidelines are then developed. Total number of interviewed participants is 40, as for the purpose of phenomenological qualitative research it has been previously indicated by several researchers that by achieving 40 interviews, data saturation is achieved and more data redundancy may begin to be added (e.g. Wilson, 2015). Another reason for the choice of 40 participants has been that with 40 participants, researcher gathers a diverse range of perspectives and experiences, enriching the data and provides a comprehensive understanding of the phenomenon under this study. Typically, qualitative research involves smaller sample sizes compared to quantitative studies. With 40 participants, researcher balances the need for depth and richness of data along with practical considerations such as time, resources, and access to participants. Thus, choice of number of participants allows for in-depth data collection and analysis within the constraints of the study's resources and timeline. Based on data's findings, the study consequently generates an enhanced burnout reduction model.

## Secondary Data -Archival Research

The current study has also combined findings from previous research (e.g. McFarland, et.al., 2019; Jaworska-Burzynska et.al., 2016; Scheepers, et.al., 2019) that confirms the justification for the need of development of a three- layered intervention in the current study. These are because:

- Burnout has been a complex interaction between both within a person factors such as personality characteristics, individual attitudes to work, maladaptive coping styles, demographics (e.g females have been shown to report a higher prevalence of burnout, compared to men, as well as younger people compared to older ones, unmarried compared to married etc.) (e.g. Ong, et.al., 2020) along with the environmental context. In which a person is placed to, such as the workload, amount of responsibilities, perceived sense of control, social connections, clarity of job expectations and others (e.g. Mayo clinic, 2021; Magnano, et.al., 2015). The environmental context of any employee also consists of two areas-their team or department as well as certain work culture within the whole organization. The whole organisation is dictated by the organizational philosophy, vision and mission, or a variety of protocols and rules. Neither of these three areas of an individual life can be ruled out as potential stressors, and need to be taken into account as potential contributors to burnout. Which is noted as an important suggestion in the current study's guidelines.
- Additionally, previous research shows that an individual intervention has been found to be only partially effective on an individual level and for a short (up to 6 months) period of time (Awa, et.al., 2010; Westermann , et.al., 2014). When compared to the organizational approaches to interventions, they have been found

to be less effective (e.g. McFarland, et.al., 2019). Yet the organizational interventions do not fully count for all the variance for minimizing burnout. Therefore, strengthening the choice, to apply combined interventions as the most effective option to decrease burnout or work-related stress. For this reason, the current study focuses on remedies on all three layers of interventions.

- Additionally, a few types of individual interventions have been studied, but the only consistency in their effectiveness on reducing burnout across different studies is found to be in the application of the cognitive behavioral therapy (McFarland, et.al., 2019; Jaworska-Burzynska et.al., 2016; Scheepers, et.al., 2019). Meaning that, there is a need to search for more types of effective clinical interventions and for more consistency that can be utilized in a clinic setting amongst doctors, psychologists, physiotherapists and other professionals. The current study aims to search for consistency of effective interventions by investigating and collecting experiences related to burnout interventions from experts via the semi- structured interviews. These similarities and consistencies across treatments are gathered into specific guidelines in this research.
- There has been another problematics observed across previous studies, especially within the organizational interventions linked to highly heterogenous study designs/interventions, and limited methodological qualities, as authors do not indicate specific descriptions of type, intensity, lengths, approaches of interventions used in their studies making it harder to replicate, and re-assess their effectiveness of specific interventions across studies (e.g. Bagnall et.al., 2016; Aryankhesal, et.al. , 2019; Buruck, et.al., 2018, Kumar, 2016). Emphasizing a need to set more homogenous, specifically prescribed guidelines of the interventions in the future studies that may make it easier to replicate, compare

and continuously adjust accordingly. This makes it easier to assess their efficacy across different samples, times and in a variety of settings. For this reason, such specific guidelines are created in the current study, with an objective to set a new stepping stone for future research to allow re-assessing and re-adjusting accordingly as well as making it very clear of what is clinically working and what could be enhanced.

- Literature, also suggests to distinguish amongst the non-adaptive strategies that are focused on emotion, and adaptive strategies that are focused on the problem (Korunka et.al., 2020). Application of the interventions addressing both types of these strategies and across all three layers of ones' environment (supporting them individually, within a team, and the whole organization) can provide a more holistic approach to interventions, making one feel more complete. Thus, further strengthening their overall well-being within their work environment. Such holistic approach is also taken into account in guidelines of the current study.

In summary, the current study employs a holistic approach, integrating individual, team, and organizational interventions while also considering everyday stressors. The aim is to enhance individuals' perceptions, thought processes, mood, and mitigate various stressors. This, in turn, is anticipated to bolster performance, foster positive emotions, and promote overall well-being in work environments. This methodology aligns with the findings advocated by McFarland, et.al. (2019).

## **Theoretical Constructs for Triangulation**

Previously proposed literature theoretical models relate to exploring and attempt of understanding burnout including the Job Demands Resources Model (Demerouti, et.al., 2001); the Conservation of Resources model (Hobfoll, 1989; Halbesleben, & Buckley, 2004); the Job Demand-Control Model (Karasek, 1985, Van der Doef, & Maes, 1999); and the Work-life model (Leiter and Maslach, 1999), that have been described in detail in Chapter 2 are utilized in the current study for the theoretical literature triangulation. The above-mentioned theories are used for understanding and in depth exploration in combination with data from burnout reduction professionals (primary data in this research) and with the secondary data of previous empirical research (e.g. McFarland, et.al., 2019) for development of instructive guidelines for burnout reduction interventions.

## **Base for Structured Guidelines and Burnout Reduction Model**

Even though, a number of empirical studies discuss theoretical underpinnings that explain burnout and interventions such as theories including the Job Demands Resources Model (Demerouti et.al., 2001) and the Conservation of Resources model (Hobfoll, 1989; Halbesleben, & Buckley, 2004) featuring an idea that burnout occurs mostly due to untreated or unresolved chronic stress. Also emphasizing that job and personal resources serve as a preventative and reducing burnout factors. Other theoretical models including the Job Demand-Control Model (Karasek, 1985; Van der Doef, & Maes, 1999), and the Work-life model (Leiter and Maslach, 1999) suggest the non-linear nature of burnout development through a complex relationship between intrapersonal factors within employees (e.g., low self-esteem) and their interaction with a variety of organizational factors (e.g. work overload,



community, fairness etc.) (Pijpker et.al., 2019). These theories provide explanations about the root cause of burnout, however there is still a repeated research challenge related to a lack of having structurally defined guidelines for the types of interventions. As well as specifically designed burnout reduction model that is combining the individual, department (team/group) and the whole organization/work environment interventions.

Such interventions, can counteract the many detrimental consequences associated with burnout in a work place, including an increased staff turnover, long-term absenteeism, various injuries, accidents, health issues, conflicts in a work environment as well as a decreased productivity or efficiency of work in general (Elbarazi et.al., 2019). By creating a structure to interventions, focusing on individual, team and the whole organization, employees experiencing burnout at work place can get adequate guidance of applying the combined interventions on all three levels.

The non-diagnosed employees also potentially benefit from such guidelines by being taught how to create a more preventive and balanced work-life environment. Bianchi et al (2018) also argues that an evidence-based burnout reduction model with specific structural guidelines becomes more convincing for organizations to support employees if created in a way that could potentially save more time, energy and resources. The main objective of the current study, is to create the guidelines that can be widely used as part of the personal growth and development, within organizational workshops, or at work or within the companies for mentoring support building system, team building activities or increased work health awareness. Derived from the triangulation and thematic analysis in the current research.

The following section highlights the population and sampling method utilized in the present research.

### **3.10 Population**

The proposed study is conducted in the northern and central European countries due to the work place policies supported by European Foundation for the Improvement of Living and Working Conditions, and high interest in the topic of burnout (Eurofound, 2018). As well as due to accessibility of recruiting experts trained in minimizing burnout interventions in these countries working in the field. The population of interest in the current study includes in Total 40 Slovakian and Dutch burnout adult experts such as general practitioners, therapists, psychologists, physiotherapists and HR specialists who directly work on minimizing burnout symptoms or on the supportive rules and work environment procedures. These 40 experts, of whom 10 are general practitioners, 10 are psychologists, 10 are physiotherapists and 10 are HR specialists, are recruited for their professional roles as depicted in the Table 4 below.

#### **Exclusion criteria (population of psychiatrists)**

It's also important to note that while a portion of psychiatrists do provide support for individuals experiencing burnout, this specific population has not been included in this study. The primary reason for this exclusion is that many psychiatrists primarily offer support through medication. While some may prescribe medications like antidepressants or anti-anxiety medications to alleviate symptoms associated with burnout, the current study specifically focuses on professionals who provide non-pharmacotherapy support. The current data collection centers on professionals who teach clients various skills or techniques.

For this reason, the individual experts are chosen via the convenience sampling via the external network of the researcher. The experts either directly contact the researcher for support of an employee or via the “snowballing sampling” (defined as a chain referral sampling that grew larger and larger) due to referrals from outside network of direct colleagues working with the researcher. They share their most efficient individual, team, and the whole organization’s interventions.

**Table 4**

*Participants-Experts in the Burnout Field due to the Described Roles*

10	10	10	10
<b>General practitioners (Gp’s)</b>	<b>Physiotherapists</b>	<b>Psychologists</b>	<b>HR specialists</b>
Who are the gatekeepers before being referred to a specialists. Their initial role is to assess burnout symptoms /overall physical health.	Assesses and supports people for mobility, posture, and provides strategies to deal with pains.	To assess and support one’s mental well-being, with the main goal to enhance mood, decrease stress, and/or challenge negative thoughts.	Discuss the best strategies or support at work, provide a further referral to health care specialists. Design protocols for benefits and support of employees

The overall population in the current study includes a number of 40 participants due to general recommendation after research conducted by Mason (2010) who investigates sample size and saturation in studies using qualitative interviews. His research that includes an investigation of 560 studies concludes that for a study that applies in-depth interviews a sample size of 20-30 is sufficient. The mean sample size of 31 and above participants demonstrate saturation of data (meaning that research will eventually hear patterns and

themes that emerge from the stories). Therefore, a sample of 40 appears to be well-justified. The following section introduces the type of sampling methods utilized in the current study.

### **3.11 Sampling Strategy: Purposive Sampling**

The non-probability sampling method is used because of the nature of the small sample size, under the assumption that not all members of the population have an equal opportunity to become a part of this sample, and due to the qualitative approach of the current study (Deshmukh, 2013). The purposive sampling is conducted via purposive recruitment of participants with special expertise in burnout support field. The “non-probability” sampling, has “no probability attached to the unit of population and the selection of the participants in the current study rely on the subjective judgment of the researcher” (Deshmukh, 2013). There are several advantages of using a non-probability sampling in this research, especially as it consists of an exploratory nature, where the inferences has been developed analytically and this kind of sampling serves as a protection against small sample size, as indicated in previous research of for example of Schreuder and Gregoire (2001).

The researcher acknowledges potential limitations associated with the use of non-probability sampling and takes proactive measures to address or mitigate any adverse effects arising from it. In particular, it is established that non-probability sampling is more prone to be self-selection biased since the sample is not randomly selected (Sharma, 2017). However, the selection of the individual experts is chosen based on convenience sampling (Deshmukh, 2013). Relying on the professionals’ reputation in the field amongst colleagues, their well-known positive results of the application and effectiveness of their methods/interventions rated by their clients checked on google ratings, and awards/publications or other forms of

professional recognitions. The participants are also approaching the researcher themselves via approaching the practice, rather than the researcher subjectively choosing the experts for the research.

Another disadvantage argued by the researchers (e.g. Sharma, 2017) is that the non-probability sample may not be representing general population mostly due to the fact that in this type of sampling, there are no calculations, the confidence intervals or margins of errors cannot be determined to understand the representation of general population. However, using triangulation (combining the theoretical constructs and previous burnout intervention research (e.g. Rubino et.al. , 2012; Gregory, 2015) along with incorporating the qualitative knowledge of the mixture of various experts across different fields, is deliberately chosen to at least partially correct for the lack of calculations in the current study.

The participants are recruited via researcher who has been working in Private practice in the Hague, Netherlands. Those participants who approached the psychological practice for burnout support of employees working in Dutch and international organizations/companies situated in Southern part of the Netherlands and Western Slovakia through their Welfare coordinators, and through health care centers via GP's. The burnout minimizing interventions create the unit of analysis in the current research (Casteel & Bridier, 2021). The sample size is small, comprising of 40 participants. Because of a small sample size and the study of a specific phenomenon (burnout interventions) and combination of applying the findings from the oral interviews from the experts and from findings from previous burnout research (e.g. Ong et.al., 2020; Magnano, et.al., 2015; Aryankhesal et.al., 2019; Buruck, et.al., 2018), and suggested theoretical constructs (The Job Demand-Control Model, Karasek 1985; Van der Doef, & Maes, 1999; Conservation of resources theory , Hobfoll, 1989; Halbesleben, & Buckley, 2004; The Job- Demands-Resources Model, Demerouti et.al., 2001; The

Transactional model , Lazarus & Folkman, 1984; and The Work-life model, Leiter & Maslach, 1999), that are shedding more light to view the primary and secondary data through certain theoretical base which then creates a phenomenological qualitative research that is using theoretical literature triangulation. Although, for qualitative research, the sample size is well justified, as described earlier in the previous section (Mason, 2010).

The inclusive criteria for the participants in the current study is recruiting adult experts with working experience of at least 10 years in their field of specialization with a condition of supporting people suffering or recovering from burnout, as part of their job description. As well as using the experts in the field working specifically, in South Holland area, and Western part of Slovakia due to the convenience and snow-balling sampling methodology. These participants are conveniently reachable via professional network of the researcher.

### **3.12 Study Procedure and Ethics**

Before the current research can commence, the research design, its' procedure, the recruitment of the participants and assessment of its' ethical integrity are all evaluated by the UREC ethics committee at the UNICAF University. Which assures that all the conducts of this research are ethically and morally sound, sensitive, and thorough protecting both the participants and the researcher of any kind of ethical, moral, physical or psychological harm. Confirming that all five ethical principles are reinforced in the proposed study as recommended by Oxfam's Research ethics guide (2020). Once the ethics application has been approved in November 2021 by the UREC ethics committee of the UNICAF University, the recruitment of the participants commences. See Appendix 1 for copies of all the forms

submitted to the ethics committee including an ethics' application form, the gatekeeper's form and the consent form.

In order to uphold all the ethical principals in the current research and to minimize any risks of harm, all participants are firstly provided relevant information related to the study . They are provided freedom to voluntarily participate in the study, which is emphasized in a written form on the informed consent and the gatekeeper forms (See Appendix 1). The researcher first obtains a signed consent form, from all participants which includes detailed information about the study, its' aim, and benefits. The study only includes participants who work in the field of burnout support, no direct participation of diagnosed population or participants with disabilities are involved. Thus, the level of risk in the study is ethically considered low. Participants' anonymity and confidentiality is strictly protected by data coding during and after the study (e.g. during the publication process or data storage) (Oxfam's Research ethics guide, 2020). Participants are well informed about the full nature of the proposed study and are encouraged to ask any questions or voice any concerns to protect the fourth principle (avoiding deception). The researcher makes sure that, is providing truthful, direct, clear and open communication to participants or anyone involved in the research including the ethical committee. Furthermore, participants are informed about their right to withdraw out of the study at any point (Resnik, 2015).

After obtaining the signed consent forms, the participants are allowed to take a part in the current study. Those participants who agree are then asked to schedule an oral interview conducted on-line via Zoom. That way, the interviews are recorded and audio recordings are securely stored before uploaded to the NVivo software for further coding and analyzing. This is explained more in detail in the following data analysis section.

### **Data Analysis: Thematic Analysis**

After the semi-structured interviews are conducted, recorded, transcribed, the varied and raw text data is condensed into briefer, summary format. For such organization, analysis and insights of the qualitative data, the NVivo software is used and 4 steps for data analysis applied. The role of the researcher is to collect data for primary part of the research, and include the secondary research data, and apply the theoretical literature triangulation. Each step is described more in detail in the below sections.

### **The steps Involved in Data Collection and Application**

Firstly, data is collected from professionals specialized in burnout interventions, as described in Step 1 of the Data Analysis section below. During this stage, the suggestions and responses of individual experts are recorded, transcribed, coded, and subjected to content analysis and interpretation.

Subsequently, the findings from Step 1 are combined with the analysis of secondary data obtained from previous empirical research, as outlined in Step 2 of the Data Analysis section. This integration involves examining relevant studies such as those conducted by Magnano, et.al. (2015), Scott (2020), Ahola, et.al (2017), Gregory (2015), Mudallal, et.al. (2017), and Gascon et al. (2019).

Furthermore, Step 3 introduces literature theory triangulation, whereby the data from Steps 1 and 2 are compared and combined with established theoretical frameworks from previous literature. These frameworks include the Resources Model (Demerouti et.al., 2001), the Conservation of Resources model (Hobfoll, 1989; Halbesleben, & Buckley, 2004), the Job



Demand-Control Model (Karasek, 1985; Van der Doef, & Maes, 1999), the Transactional model (Lazarus & Folkman, 1984), and the Work-life model (Leiter and Maslach, 1999).

Through these rigorous analytical steps, the study aims to synthesize the insights gathered from professionals, empirical research, and existing theoretical models to develop comprehensive and effective guidelines for addressing burnout in a three-layered approach. Looking at data through theoretical lens results in a Final Step 4 of Data analysis. Proposing a three-layered intervention in a form of specific guidelines and resulting in a proposal of a new enhanced burnout reduction model. Both are systematically developed via inductive reasoning, based on the findings. The main starting research question is “What burnout methods are (the most) effective in clinical/organizational settings for Individual support”. “What burnout methods are (the most) effective in clinical/organizational settings for Team support”. “What burnout methods are (the most) effective in clinical/organizational settings for Organizational support”. The words “the most” are in brackets as due to the qualitative nature of the study no conclusions or generalizations of the most effective interventions can be made. Rather, the results reflect beliefs of the participants “of their most effective tools” along with the research and theoretical constructs analysis. Each step is explained in more detail below.

### **Focus on Three-Layered Interventions rather than on Burnout Stages**

The current research questions and objectives are covering the investigation of the effective three-layered intervention in general, rather than investigating the interventions in specific stages of burnout (described in Chapter 2). Which reflects on the Final enhanced burnout reduction model, as well as in the guidelines for the three-layered interventions. Due

to study's scope of understanding the interventions in general, with the main focus on the three-layered support during the burnout stage. Other practical implications and justifications for such decision involve the feasibility of the research, the duration of the study, and resources available. Choosing broader set of research questions and objectives being addressed in the specific time frame prioritizing straightforward approach to data collection and analysis to ensure overall rigor and clarity of the findings. The following section describes four steps involved in data analysis more in depth.

### **3.13 The Steps Involved in Data Analysis**

#### Step 1:

The inductive approach for data analyses of narrative data is applied. By creating a coding frame with several key categories, or themes related to the three types of interventions =individual, team, and the whole organization interventions. The categories are coded by using a label and a description of each category. To view the lists of all themes, codes and categories refer to the Appendix section 3. Where Table 15 contains experts' suggestions for themes of Individual interventions along with their categories and codes. Table 16 contains experts' suggestions for themes of Team interventions, their categories and codes. While, Table 17 contains experts' suggestions for themes of Organizational interventions, with categories and codes. The text/perspectives from the experts from the four fields of general health, psychology, physiotherapy and HR are also included into category (refer to Appendix section 4). Furthermore, the links or noted relationships with other categories are also marked, and a type of model/category that is found within the transcribed texts are noted for the final contextual enhanced burnout reduction model. It needs to be noted, that any categories that have contributed to changes of causes in another category created a casual

network with listed categories for the creation of the final contextual enhanced burnout reduction model. As recommended by Thomas (2003). The use of diagrams was applied to mark the most efficient tools for burnout minimizing remedies, and for the casual network that the experts have reported.

Examples how thematic data are grouped included (e.g. label) individual interventions, (description) designed to support employees on an individual level, (links) specifically to enhance their mood, general well-being, positive thinking and attitude and others. Giving a new opportunity, to the individual experts to shed some light into a specific prescription of the type, method, its' approach, duration or intensity of such intervention. Other theme (label) team/department interventions (definition) with focus on teams' restructuring tasks, (links) increase a supervision support, work control, and to enhance a level of decision-making processes. Lastly thematic data (label)-whole organizations' interventions (definition) related to and creating a family-friendly work conditions, (links) flexible working hours, protection from occupational risks, improving job security, compensation for reduced employment, maternity and fraternity leave collected and grouped to feature the positive work/organizational interventions (Thomas, 2003).

Transcripts are read horizontally, as suggested by Marshall (1999) as such process involves grouping "segments of text by specific themes. Once no new themes are emerging throughout the transcripts, that is the finishing moment of Step 1 as all major themes are already at that point identified.

The following section will explain step 2 more in detail.

## Step 2:

Once the major themes are identified in primary data collection, the multiple readings are also analyzed in a similar manner with identifying the categories/themes for individual, team, and the whole organization effective interventions from secondary data from previous studies. The collected data from the current (primary) research are compared and related to the secondary previous empirical research (of Ong, et.al., 2020; Magnano, et.al., 2015; Aryankhesal, et.al., 2019; Buruck, et.al., 2018; McFarland, et.al., 2019; Jaworska-Burzynska et.al., 2016; Scheepers, et.al., 2019; Kumar 2016). Overall studies found that individual interventions shall include specifically support to increase individual coping, positive outlook, stress reduction by incorporating knowledge from the cognitive behavioral therapy. Through the studies, this therapeutic approach is found to be the only consistency in their effectiveness on reducing burnout (McFarland, et.al., 2019; Jaworska-Burzynska et.al., 2016; Scheepers et.al., 2019). Even though, these studies do not specifically disclose what tools, are applied. Other studies show that an important part of effective team/department/whole organization interventions include support of the employees' work life balance (Kumar, 2016). Studies also find that creating a supportive work environment, an employee gains a greater sense of control in their work (Buruck et.al., 2018).

Thus, part of Step 2 data analyses includes listing of the common intervention themes across previous research and compares it with findings of primary data. Their common themes/categories are then included for the further comparison with the literature theories. Outlined in Step 3.

Step 3:

Both common themes/categories from Step 1 and step 2 are then compared and looked at through the lenses of the theories. As the current study applies the literature theory triangulation. Thus, themes from Step 1 & 2 are compared and related to the burnout theoretical constructs that include the Job Demands Resources Model (Demerouti et.al., 2001), the Conservation of Resources model (Hobfoll, 1989; Halbesleben, & Buckley, 2004), the Job Demand-Control Model (Karasek, 1985; Van der Doef, & Maes, 1999), The Transactional model (Lazarus & Folkman, 1984) and the Work-life model (Leiter and Maslach, 1999). Based on the findings, the final contextual enhanced burnout reduction model is developed from the responses of the experts/burnout reduction professionals, the secondary data and comparisons of the previous theories. The development of the new final contextual enhanced burnout reduction model (is outlined more in depth in part below of step 4) and includes a combination of interventions of efficacious individual interventions with systemic level-organizational interventions such as enhancing workflow, as in line with previous research that suggests the mixture of both the individual and organizational interventions as the most sustainable model for preventing and treating burnout (e.g. McFarland, et.al., 2019). The following section will explain step 4 more in detail.

Step 4:

Part of Step 4 is the final creation of enhanced contextual burnout reduction model as well as the guidelines of the three-layered interventions. That featured a specific step by step and easy to follow instructions.

## **The Enhanced Burnout Reduction Model Guidelines**

The enhanced burnout reduction model is developed through several processes. Firstly, the literature review is conducted in Chapter 2 proposing 9 most efficient factors of burnout reduction. Then, the findings of primary research are looked at and show how they fit within a specific identified context of individual, team and organizational interventions as described in Step 1. They are then compared with the findings of a secondary research as shown in Step 2. The common themes between these two sets of data are then used for a comparison and interpretation with the 5 theoretical frameworks that are described in Step 3. The theories are critiqued and challenged according to the findings from Step 1 and 2 data sets. Then the 5 different theories are combined in a new and unique way to propose the new final contextual enhanced burnout reduction model. Once the model is outlined, the more in-depth interventions are suggested for the specific guidelines. The instructions in the guidelines are written in an easy to replicate way that can be applied in every-day personal and professional life.

The main objective of such guidelines is the benefit of strengthening the user's overall mental and physical health, therefore, the work enjoyment and productivity. Creating specifically designed burnout reduction guidelines in a form of a 43 piece card deck, aimed to bring future benefits in decreasing overall employees' healthcare costs, lower the high turnover for HR, increase employees productivity in general, thus bringing contributions both ways to the employees and their employers (Moss, 2019).

### **Some of the Limitations Observed so far in the Current Study**

The current study is conducted within a limited time-frame, and with limited resources, sample access, and budget, the researcher opts for the cross-sectional time frame study. Future studies are advised to test the efficacy of the three-layered interventions using longitudinal data collection, thus on several occasions and for several years. In addition to examining diverse cultural backgrounds, consider factors like gender and age across a broader range of participants (e.g. Ong et. al., 2020). By incorporating a larger sample size, the future research may enhance the generalizability of such findings.

Additionally, one needs to be mindful that the current final enhanced contextual burnout reduction model is only a proposal. It's validity needs to be yet tested in future research.

### **3.14 Summary of Chapter 3**

To sum up, Chapter 3 discusses Interpretivism as the Philosophy of the current's research, justifications of applying a Qualitative Phenomenological Research Approach, and its' Design and Materials, including the use of semi-structured interviews with open-ended questions. This is followed by the description of Population and Purposive Non-probability Sampling of 40 participants working in the burnout reduction-interventions field. Along with explanations of the four steps of data collection, with main purpose of data thematic analysis via induction method for the development of the structural guidelines for three- layered burnout reduction interventions (combining individual, team and the whole organization interventions) and the final enhanced contextual burnout reduction model. The validity of the research and ethical assurances as well as perceived research limitations are also addressed.

The following Chapter 4 introduces all the findings related to the research questions of the current study.



## Chapter 4: Findings

The fourth chapter of this dissertation discusses the main empirical findings and addresses the aims and objectives to generate insight into the most effective remedies for burnout reduction interventions.

### 4.1 Introduction

The present chapter organizes the contribution to knowledge using the themes of individual, team, and organizational interventions. With the main aim proposing a final enhanced contextual burnout reduction model, as a tool for clinical and HR professionals within organizational settings and create specific guidelines based on that model. This chapter presents in depth the trustworthiness of qualitative data including the four rigour criteria, originally proposed by Lincoln and Guba (1986). Analysis involved coding of primary data by labeling relevant concepts of three-layered remedies. In a form of experience narratives of 40 interviews of burnout reduction professionals highlighting the most efficient types of individual, team and organizational interventions.

Comparing these primary findings with the findings of secondary archival data. First research question examination finds specific tools that belong to the most effective and consistent individual interventions. Second research question's finding shows which types of remedies shall teams promote within a work environment in order to support team members and minimize their risk of burnout or assist with speeding their recovery. The third research question shows what opportunities shall organizations provide in order to create a more healthy supportive environment. Based on these findings, the 43 card deck guidelines for

burnout reduction covering a three- layered interventions, and a final enhanced contextual burnout reduction model is presented. The study also reveals insights into the exploratory question regarding whether it is advisable to provide support across all three levels—individual, team, and organizational—simultaneously, as the most effective form of support. In the Evaluation of Findings section the meanings and applicability of the findings are presented. In the end, the whole Chapter 4 is briefly summarized. Although, firstly, the chapter dives into an explanation of trustworthiness of data.

## **4.2 Trustworthiness of Data**

The present study demonstrates the assurance of qualitative data trustworthiness through the application of Lincoln and Guba's (1986) four rigor criteria: credibility, transferability, dependability, and confirmability.

### **Credibility**

Firstly, for the credibility, the aim is to secure confidence of the results by providing the participants' perspective, in as much possible credible, true and believable form. The current study assures credibility by creating a homogenous strategy for an interviewing process and a strict protocol that is identical for each participant. An on-line Zoom interview lasts approximately 40-60 minutes. The responses are recorded and transcribed to ensure that the researcher can come back to any responses at any time, code them and re-code them accordingly. Twenty-one identical questions are a part of the semi-structured interview, in

order to keep the procedure as prescribed and identical as possible (refer to the Appendix section 1).

Another strategy for the credibility, is checking the credibility and relevance of all participants and ensuring that all 40 interviewees have a specific knowledge and set of skills developed related to their burnout topic expertise. Such as, each participant needs to have a minimum of 10 years of working experience in their field. To ensure even higher level of credibility, the researcher relies not only on primary data collection but also applies a multimethod strategy. For this reason, a triangulation method is applied. The triangulation application is explained in the below paragraphs related to the criteria of confirmability. As by application of the triangulation in the current research, both credibility and confirmability criteria are being fulfilled simultaneously. Lastly, a thick description of data that are coded is carefully established to ensure that through data analysis the true factors influencing burnout reduction shall be reliably identified (Forero, et.al., 2018; Kyngäs et.al., 2020).

### **Dependability**

The second type of rigour criteria to establish the trustworthiness of data is to fulfill the second criterium of dependability. With its' main purpose to ensure repeatable findings if the same kind of data collection shall occur within the same participants, the coder and within the same context. This is assured in the current study by providing as detailed description as possible of the study methods as well as by creating an audit trail procedure with a detailed track record of data collection process (Forero, et.al., 2018; Kyngäs et.al., 2020).

## Confirmability

The third rigour criteria for trustworthiness of the current study includes confirmability. This is particularly important for extending the confidence that the results shall be confirmed by other researchers (Forero, et.al., 2018; Kyngäs et.al., 2020). This criteria has been established by using a triangulation method.

- The current study uses the collection and analysis of primary data and comparing it with the use of the archival research from 14 systematic search databases that are related to burnout topic linked to individual and organizational interventions (e.g. Magnano, et.al., 2015; Scott, 2020; Ahola, et.al., 2017, Gregory, 2015; Mudallal, et.al., 2017; Gascon et.al., 2019).
- To make the confirmability even stronger, the current research also compares the primary and secondary data with five previous literature theories including the Resources Model, (Demerouti et.al., 2001), the Conservation of Resources model (Hobfoll, 1989; Halbesleben, & Buckley, 2004), the Job Demand-Control Model (Karasek, 1985; Van der Doef, & Maes, 1999), the Transactional model (Lazarus & Folkman, 1984) and the Work-life model (Leiter and Maslach, 1999).
- Additional point to strengthen the confirmability is that the researcher utilizes qualitative data analysis software (NVivo) that assists with managing and coding large volumes of data. This software provides tools for organizing, coding, and retrieving data, thus making the process of analysis more efficient.
- As well as peer debriefing is conducted after data analysis which involves discussing the results interpretations and findings with a colleague (HR professional) in the field.

- There is yet another additional way ensuring the confirmability criterium in the current study by admitting what could be researcher's bias believes and assumptions, as well as the study's methodological shortcomings and their potential effects. These are discussed more in depth below in the results section (Forero, et.al., 2018).

The final criterium for trustworthiness of data in the current study includes transferability. Which is defined and explained in the below section.

### **Transferability**

The forth rigour criteria for trustworthiness of data includes so called transferability. Transferability's main role is to broaden the degree to which the results of the current study can be generalized and/or transferred to or provide a possibility for people to compare their situation to the situation that has been explored in the current study (Forero, et.al., 2018).

- This criterium is fulfilled by purposefully collecting the sample from burnout experts with at least 10 years of working experience as well as combining their fields of expertise. Since the current study examines the most efficient ways of support in people suffering from burnout on an individual level, within the team and the whole organization.
- The experts comprise of psychologists, physiotherapists and general practitioners who tend to support patients on an individual level, as well as within their teams along with providing suggestions to the whole organization if there is an increase of burnout occurrence in their work environments. The current study also

includes HR experts as they are the ones often supporting employees within their team, or within the whole organization. They also tend to collect statistics of occurrence of burnout in work environments and refer the employees to other professionals for the individual form of support. Such combination of expertise ensures a stronger degree of generalizing and applicability of the findings for burnout affected population.

- Another way of fulfilling the criterium of transferability is that through the extensive data collection, the researcher eventually achieves the data saturation. Meaning, that enough data has been collected to develop a robust and comprehensive understanding of the subject eventually ceasing new insights or perspectives (Forero, et.al., 2018). Which further strengthens data related to the effective interventions supporting the sufferers within the burnout community.

### **Criticisms & Limitations**

To conclude the trustworthiness of data in the current study is well justified, however there are a few weaknesses to qualitative research that need to be mentioned. One is the fact, that conducting only qualitative research may be insufficient to make generalizations of the findings to the wide population (Morgan, 2016). To come up with conclusions applicable to the broader range of population, future research could combine the qualitative as well as quantitative research methodologies. As both approaches provide different analytical tools to construct the representation of the burnout interventions' phenomena (Borgstede & Scholz, 2021).

Another downside could be that burnout protection policy makers may not understand the interpretative position of the researcher in the current study, which may also be strengthened in future studies by the combination of using both the qualitative and quantitative methods. As far as the researcher's bias of interpreting the results go, some may argue that specific bias is related to the fact that the researcher herself is a psychologist and there may be a tendency of applying psychological concepts to the interpretation. To minimize such biases, the researcher uses an equal amount of experts across psychology (10 participants), physiotherapy (10 participants), general medicine (10 participants) and HR (10 participants) fields to gain perspectives from other professions. To conduct 40 interviews, transcribe, code, recode and analyze data is more time consuming when compared to quantitative data analyzes, thus to avoid any errors due to tiredness, a minimum of 10 week-time is provided for this step of research.

Additional argument or limitation can be the fact, that data in the study has been analysed by a single researcher. Even though, it is justified by some researchers who argue that many qualitative researchers initially analyze data alone (Vasileiou, et.al., 2018). As it provides a deep immersion in the data, facilitates personal insights and interpretations and allows to establish a preliminary understanding of the patterns, themes, and meanings that emerge from the data. One may argue though that a single data analyst may apply their bias interpretations to the findings. In order to correct for this, the researcher attempts to minimize such bias by utilizing qualitative data analysis software (NVivo) that even though did not analyse, or interpret data, it strictly assisted with managing, coding, organizing, and retrieving it, thus making the process of analysis more efficient. Another method applied in analysis and interpretation that minimized such bias was researcher's engagement in peer debriefing that was conducted after data analysis whilst involved in peer discussion and interpretation of the results with a colleague as recommended by Forero, et.al. (2018).

Overall, this qualitative research provides rich data from four different fields of expertise and such angle has been a novelty and offers a different broader textual knowledge in burnout research.

### **4.3 Validity**

Qualitative research is often criticized for lacking a scientific rigour, when compared to the quantitative research, when looking at reliability and validity of the study (Long & Johnson, 2000). Even though, these terms are not applied for a qualitative study, the term validity in qualitative research refers to the integrity and application of the methods used as well as the precision of the findings that reflected the data collected. This can be achieved for example through triangulation of data (Chetty & Thakur, 2020). Also applied in the current study. Reliability in qualitative research refers to the consistency within the analytical procedures applied (Long & Johnson, 2000). To ensure such consistency in the current research, the four rigour criteria including credibility, dependability, confirmability and transferability are established, as already discussed previously (Lincoln & Guba, 1986).

### **Strengths of the Current Research**

A few strengths of the current research include the depth of the burnout experts' perspectives, the adaptability due to the semi-structured interviews where 21 identical questions are asked, to keep the data collection strictly prescribed assuring that the researcher collects data as needed, yet also provides a possibility of collecting richer data beyond those specific questions giving a broader perspective on the topic. Another, strength of the



qualitative methodology is obtaining the subjective perspective of each expert, making it possible to propose the guidelines for burnout reduction, based on the current rationale of the types of support, which allows the companies to mold and modify their policies to better fit their employees. The combination of experts from four different burnout field creates a greater collaboration amongst professionals, thus more effective support or interventions. However, to strengthen certain patterns in responses, or to increase the level of generalization to the larger community, more future research is needed and where qualitative research may be lacking, the quantitative research may provide an additional information. Therefore, in future, the integration of both qualitative and quantitative methodologies simultaneously in burnout research may enhance more comprehensive understanding, and is strongly recommended (Borgstede & Scholz, 2021). Overall, for a qualitative study, the present research fulfils all four rigour criteria of trustworthiness, making it an effective, sound, and innovative study.

#### **4.4 Results of the Findings**

To present the results of the current study the following sections are presented:

- description of the participants,
- primary data (themes) related to the first research question (“What burnout methods are effective in clinical/organizational settings for Individual support?”);
- as well as secondary data (themes) related to the first research, and their comparison,

- primary data (themes) related to the second research question (“What burnout methods are effective in clinical/organizational settings for Team/Department support?”), as well as secondary data (themes) related to the second research question, and their comparison
- followed by primary data (themes) related to the third research question (“What burnout methods are effective in clinical/organizational settings for whole organization support?”), as well as secondary data (themes) related to the third research question, and their comparison
- finally, the results present data examining whether providing support across all three levels (individual, team, and organizational) is the most effective approach to aiding individuals experiencing burnout. Both primary and secondary data is analyzed, and their comparison shall be discussed later in this chapter

Based on the findings the final enhanced burnout reduction model is presented in a form of a new model that was given a name-INVIGORATE related to summing up the combination of the interventions suggested from the 40 burnout reduction experts, the previous research and the theoretical constructs discussed in Chapter 2. Based on the INVIGORATE model, the set of guidelines in a form of a 43 pieces card deck for the three-layered intervention is outlined. Thus, the below section describes the participants.

### **Description of Participants**

The current study includes 40 experts of whom 10 are general practitioners (Gp's), 10 are psychologists, 10 physiotherapists and 10 HR experts. Approximately half of these

experts are practitioners from the Western part of Slovakia and the other half of the practitioners are experts working in the South region in the Netherlands. The selection of this particular region in Europe for data collection is predominantly based on the researcher's professional affiliation in the healthcare field and their residence in both of these countries. This circumstance offered advantageous prospects for participant recruitment from various clinics and organizations situated within these specific regions. The age of the participants ranged from 38 to 83 years. Of these 17 participants are males and 23 females. For more detailed description of each participant, please refer to the Appendix section no. 2 named “Description of the participants”.

Three research questions are related to the most effective methods of burnout reduction. Each of them is presented in the themes below along with the findings.

#### **4.5 Themes of Individual Intervention**

The following section discusses the 1<sup>st</sup> research question related to the most effective burnout individual interventions. Defined as “a support of a person, suffering from burnout on an individual level including their general mental health, energy levels, thought and emotional processes, decreasing life/work stressors and buffers”.

#### **Primary Data, Based on the interviews of Burnout Reduction Experts for 1<sup>st</sup> Research Question**

Application of thematic analysis, identifies the most effective individual burnout interventions that 40 experts recommend. The participants identify 23 themes, as presented in

Table 15 in the Appendix section no.3, which outlines all 23 themes of individual support with their categories and codes. These are helpful for comparison of primary and secondary data in the later sections. Where theme is the main product of analysis, codes are potential subthemes and categories are the explicit descriptors that further refine the essence of the themes for the analysis (Vaismoradi et.al., 2016; Vaismoradi & Snelgrove, 2019).

Table 15, in the Appendix section 3 shows 23 themes of the most efficient individual interventions. These are also outlined below with the numbers in the brackets that refer to number of participants who report that particular intervention as the most effective type of individual support. Including: individual psychotherapy (talk-therapy) (9), self-care (7), involvement in regular sports and physical exertion activities (7), regular healthy life style (6), positive thinking (5), stress reduction and relaxations activities (4), manager's support request (3), mindfulness (3) talking to a family/friend when overwhelmed (2), physiotherapy (2) work/life balance (boundaries between work/personal life) (2), confidence building exercises (2), boundaries between self & others (1), keeping authentic to own values (1), working on supportive network relationships (1), ABC approach (1), appreciation/savouring of rewards in the environment (positive psychology) (1), CBT therapeutic approach for cognitive restructuring (1), building own buffers (1), avoiding working beyond contracted hours (1), building emotional /physical resilience/coping (1), Practicing active stressors minimizing (1), upholding equity for oneself and others (1). All of these are identified as the most efficient 23 ways of individual intervention to reduce burnout.

For the analysis “of the most efficient ways of individual intervention support” only 12 types of those interventions are mentioned by respondents more than once. These include: individual psychotherapy (talk-therapy) (9), self-care (7), involvement in regular sports and physical exertion activities(7), regular healthy life style (6), positive thinking (5), stress

reduction and relaxations activities (4), manager's support request (3), mindfulness (3) talking to a family/friend when overwhelmed (2), physiotherapy (2) work/life balance (boundaries between work/personal life) (2), confidence building exercises (2). Of these 3 are concluded as the most frequently reported and efficient types of individual intervention, based on the frequency of being reported and include: psychotherapy, self-care, and sports and physical exertion. The following section contains the direct quotes from the participants related to these 3 interventions.

#### **4.6 Psychotherapy (Talk therapy)**

This section answers the first research question: "What burnout methods are (the most) effective in clinical/organizational settings for Individual support?"

Based on primary data. Nine out of 40 participants indicate that one of the most effective individual interventions is any form of psychotherapy.

The first most effective theme: *Psychotherapy* is the most recommended type of Individual intervention. Partially, because it helps identify the root cause of an issue.

For example: Participant ID 3 comments that *"the efficiency and urgency to use talk therapy as a most efficient form of support includes the possibility and providing space for understanding factors that may have contributed to burnout via self-reflective process and thinking about the factors that have negative costs in some ones' life. The symptoms and burnout experiences are quite individual so they need to be individually approached"*.  
(participant ID3, psychologist)

Psychotherapy also helps to understand how each individual functions and what they themselves consider as helpful and motivating to be applied as a remedy if they start feeling burnout symptoms.

A participant who is a general practitioner states that *“after a patient comes to me, I do a general assessment of their physical health. Often they open up about various life situations and issues that cause stress at work, in their life or relationships. At that point I refer them for psychotherapy. As it is the most helpful form of individual support to assist individuals with burnout by asking, what helps people, what's their everyday routine like, what motivates them and together with the therapist they could translate how to apply this information and connect them with the individual needs in the workplace”*. (participant ID 38, general practitioner)

For more examples of direct quotes of participants relating to the effective types of individual intervention refer to the Appendix section 4.

#### **4.7 Self-Care**

Seven out of 40 participants indicate that one of the most effective individual interventions is self-care. *Self-care* is the second most prevalently reported theme identified as the most efficient strategy for individual support.

For example, one participant identifies several crucial strategies of how a person can learn different ways of taking care and nurturing their body to deal with burnout symptoms. As she describes *“when working with clients on broadening their awareness of what feels like nurturing their body and sense of well-being, creating a structure to release levels of anxiety*

*and set up an easy to follow up rituals of taking care of themselves as well as creating good sleeping patterns to wake up more rested. Once a client got a grasp of that and applied it regularly it made a whole world of a difference in weakening their symptoms.”*

(participant ID 1, psychologist)

Another participant, who was working for an organization, comments that *self-care* is really crucial to combat burnout and points out how to check for certain red flags “*in my experience I found out that self-care is a must for anyone and for people with burnout even more so. I found out that a good indication how a person takes care of themselves is checking for emotional signals, how they behave if there is something out of their usual standard, whether they are stress resistant, to keep their work responsibility and standards stable. If there is something out of this norm it puts me on alert and I realize that a person self-care may have been neglected and they need to apply some changes. I then try to refer my clients for the psychological support as well*”. (participant ID7, physiotherapist)

For more examples of direct quotes of participants of individual intervention refer to the Appendix section 4.

#### **4.8 Sports and Physical Exertion**

The third most prevalent theme identified as the most effective individual intervention by 7 respondents includes *sports and physical exertion*.

One participant describes that *regular exercise* can lower the occurrence of burnout as well as other negative health issues. “*I myself have observed an indication of, a bigger problem linked to burnout, amongst employees if they start developing physical signals such*

*as a person is more tired, suffers from more illnesses, tensions or bodily pains. Physical exercise, any type of sports or movement can really prevent many of those unhealthy signals. That is why every year we provide our employees as a bonus a discount voucher for the gym and we motivate employees with various challenges such as who ran the fastest in the month, who exercised the most minutes etc. We share these successes in the work app with funny pictures. It's fun, it motivates them, and it improves their health. Then we started noting lower percentage of burnout sick-leave the last 2 years."* (participant ID 35, HR)

Exercise makes a person feel better physically as well as emotionally, as highlighted by another respondent, who says: *"Sports and regular movement assists in physical reduction of accumulated stress, increases overall mental and physical well-being, and if picked up as a habit brings with it long lasting effects and resistance to future stress. It makes people happier, healthier, improves their cognitive abilities, builds strength, and confidence. I have been definitely seeing that less stress equals less burnout."* (participant, ID27 physiotherapist)

More quotes from the participants as well as the rest of the 20 themes, of the individual interventions, suggested by the experts can be found listed in Table 5 in the Appendix section 4.

Based on the interviews of the burnout reduction experts, primary data constitutes a contribution to the 23 themes of individual interventions that are identified as the most effective forms of support in clinical practice but also being applied in home settings amongst the current sample of psychologists, Gp's, physiotherapists and HR professionals. The following section presents findings of the secondary data.



#### **4.9 Individual Interventions Identified in Previous Research**

The following section discusses the most effective individual burnout interventions that are suggested by previous archival research. The secondary data, cross examines 14 previously published meta-analysis and systematic search papers (see Table 6 below) between the years 2010 until the 2020. For the secondary data analysis, only the statistically significant interventions are used for this report for the research question related to the individual interventions.

Table 6 below includes suggestions from previous research of the most efficient types of individual interventions. This is evidenced by its recurrent mention and its consistent effectiveness as demonstrated in prior meta-analyses and systematic review papers.

**Table 6***Previous Research' Findings of Effective Individual Burnout Interventions*

<b>Authors of the published paper</b>	<b>Number of studies included in final analysis for II</b>	<b>Type of the effective individual intervention</b>
Jaworska-Burzynska et. al. (2016)	22	Psychotherapy Somatic sphere e.g. Physical exercise
Ahola et.al. (2017)	14 for II	14 studies-Individual interventions-all different in content/mixed effects. No conclusions but CBT somewhat effective
Aryankhesal et.al. (2019)	18	14 studies-Individual intervention- yoga, meditation, mindfulness
Awa et.al. (2010)	17 for II	17 studies-individual-CBT, psychotherapy,counseling, adaptive coping, communication skills, social support, relaxation, music but the effect eventually wore off
Bagnal et.al. (2016)	Evaluation of 41 papers	CBT, psychoeducation, awareness, mindfulness, meditation.Mind-body interventions
Bresesti et.al. (2020)	55 published papers were evaluated	mindfulness-based stress reduction , educational intervention to improve communication & stress coping skills, positive emotion empowerment but no conclusions can be made
Kumar (2016)	Revision of 43 published papers	Some evidence for mindfulness program but no concrete conclusions
Maricutoiu et.al. (2016)	23 controlled trials	Mindfulness , CBT, interventions based on social support
Sheepers et.al. (2020)	24 studies	-
Murray et.al. (2016)	4 studies	Self care, setting boundaries, thoughts & CBT
Ong et.al. (2020)	11 studies	Communication and mindfulness based activities

Panagioti et.al.(2017)	19 studies for meta-analysis	Mindfulness based stress reduction, educational interventions targeting self confidence, communication, exercise and combination of all small effect
Pijpker et.al. (2019)	10 studies	Uses 9 studies for combined intervention, but workload appeared to decrease burnout
Westermann et.al. (2014)	9 studies for II	2 individual intervention studies were significantly effective, communication training

As can be seen in Table 6, a total of five papers out of 14 on burnout individual interventions (Aryankhesal et.al. ,2019; Bagnal et.al. ,2016; Maricutoiu et.al. ,2016; Ong et.al. ,2020; Panagioti et.al.2017) report mindfulness, as somewhat effective individual intervention. Somewhat means that the results are mixed in effects and significance across different studies.

Another four out of 14 papers on burnout individual interventions (Awa et.al. ,2010; Bagnal et.al. ,2016; Maricutoiu et.al. ,2016; Murray et.al. ,2016) find CBT as an effective method of individual intervention.

Four papers out of 14 on burnout linked to a study of individual interventions (Awa et.al. 2010; Westermann et.al., 2014; Panagioti et.al.,2017; Ong et.al. ,2020) report communication skills training as somewhat effective burnout reduction type of individual intervention. Somewhat means that the results are mixed in effects and significance across different studies.

Another 3 papers out of 14 on burnout individual interventions (Panagioti et.al.2017; Jaworska-Burzynska et. al. ,2016) report physical exercise as important burnout reduction individual intervention.

Table 6, also shows a total of 3 meta-analyses and systematic search papers out of 14 on burnout individual interventions (Awa et.al. 2010; Aryankhesal et.al. , 2019; Bagnal et.al., 2016) find that various relaxation techniques including yoga, meditation, music, mind/body interventions are effective types of individual interventions.

Two out of 14 papers on burnout in dividual interventions (Awa et.al. ,2010; Murray et.al. ,2016) find effective coping (such as resilience building, setting boundaries, adaptive stress coping strategies) as important effective individual interventions.

Two papers out of 14 on burnout that examine individual interventions (Jaworska-Burzynska et. al. , 2016; Awa et.al. 2010) report psychotherapy as effective type of intervention.

Two papers out of 14 on burnout individual interventions (Awa et.al. ,2010; Maricutoiu et.al. ,2016) find social support as a significant burnout reduction individual intervention.

One paper out of 14 on burnout linked to individual interventions (Murray et.al. ,2016) finds self-care as effective burnout reduction type of individual intervention.

One paper out of 14 on burnout individual interventions (Bagnal et.al. ,2016) reports psychoeducation as a significant burnout reduction individual intervention.

One out of 14 papers on burnout individual interventions (Jaworska-Burzynska et. al. , 2016) finds somatic-body sphere as an important burnout reduction individual intervention.

One paper out of 14 on burnout individual interventions (Pijpker et.al. ,2019) reports workload as an important burnout reduction individual intervention.

Lastly, one paper out of 14 on burnout individual interventions (Panagioti et.al., 2017) finds self-confidence training as an important burnout reduction individual intervention.

### **Overall Results of the Secondary Data**

Overall, analysis of the empirical evidence in this study, based on the frequency of studied interventions, shows, various individual interventions for addressing burnout. Firstly, practicing mindfulness is the most frequently reported as effective individual burnout reduction intervention in secondary data. Followed by CBT and the training of communication skills. These are then followed by physical exercise, relaxation techniques, effective coping strategies, psychotherapy, social support, self-care, psycho-education, decreased workload and self-confidence training. The results indicate that there are various approaches and techniques that can be effective in addressing burnout on an individual level, but their effectiveness may vary across different studies. As well as, the results suggest that a combination of interventions may be necessary to effectively address burnout. The following section, undertakes a comparative analysis of both primary and secondary data in order to elucidate the findings pertaining to the first research question.

#### **4.10 Comparison of Primary and Secondary data for Final Burnout Reduction Model for II**

The following section shows the comparison of the most effective individual interventions noted in primary and secondary data. Table 7 below lists the primary and secondary data findings related to the burnout reduction individual interventions.

**Table 7***Comparison of Primary and Secondary Data for Individual Interventions*

Frequency-based ranking of reported interventions	Individual interventions based on primary data	Individual interventions based on archival research
1	Any form of individual psychotherapy (talk therapy)	Mindfulness
2	Self-care	CBT
3	Sport & physical exertion	Communication skills training
4	Regular healthy lifestyle	Physical exercise
5	Positive thinking	Various relaxation practices
6	Stress reduction and relaxation activities	Effective coping/resilience building
7	Manager's support request	Psychotherapy
8	Mindfulness	Social support
9	Talking to family/friend when overwhelmed	Self-care
10	Physiotherapy	Psychoeducation
11	Work/Life balance (boundaries btw work/personal life)	Somatic-body sphere experience
12	Confidence building exercises	Workload
13	Boundaries between self & others	Self-confidence training
14	Keeping authentic to own values	
15	Working on supportive network relationships	
16	ABC approach (problem solving approach)	
17	Appreciation/savouring of rewards in environment (positive psychology)	
18	CBT therapeutic approach for cognitive restructuring	
19	Building own buffers	
20	Avoiding working beyond contracted hours	
21	Building emotional/physical resilience/coping	
22	Practicing active stressors minimizing	
23	Upholding equity for oneself and others	

**Similarities and Differences Between Primary and Secondary Data for II**

As can be seen the 40 participants of primary data identify 23 themes related to the individual burnout reduction intervention. While, secondary data identifies 13 themes across archival secondary research. Both primary and secondary data identify 9 identical themes. The matching interventions from both primary and secondary data, are highlighted in the same color in Table 7. Therefore, both primary and secondary data similarly suggest psychotherapy; self-care; sports and physical exertion; stress reduction techniques; working on social support from family, friends and colleagues; mindfulness; CBT; self-confidence training and building effective coping/resilience as the most efficient burnout reduction individual interventions. This means that the finding confirms these types of individual interventions as effective for burnout reduction in both clinical and research setting.

There are also certain differences reported where primary data also suggests regular healthy life style, positive thinking, manager support request, physiotherapy, work life balance (boundaries between work and personal life), boundaries (between self and others), keeping authentic to own values, ABC approach (problem solving approach), appreciation/savouring of rewards in environment (positive psychology), building own buffers, avoiding working beyond contracted hours, practicing active stressors minimizing and upholding equity for oneself and others. The secondary data additionally suggests communication skills training, psycho-education somatic body-sphere and workload as extra burnout reduction individual interventions.

No specific outstanding patterns or differences are observed in the interviews between professionals working in Slovakia and the Netherlands in their use of techniques or tools for burnout reduction.



#### **4.11 Themes of Team Interventions**

The following theme concept answers the second research question, related to exploring the most effective team burnout interventions. The team support is defined “as a support of an individual within their team at work around their colleagues, peers and/or manager”.

#### **Primary Data, Based on the Interviews of Burnout Reduction Experts for the 2<sup>nd</sup> Research Question**

Below are presented, the most effective team burnout interventions by applying thematic analysis, that 40 burnout reduction professionals recommend. The participants identify 21 themes with categories and codes, shown in Table 16 in the Appendix section 3. These are helpful for comparison of primary and secondary data in the later sections. Where theme is the main product of analysis, codes are potential subthemes and categories are the explicit descriptors that further refine the essence of the themes for the analysis (Vaismoradi et.al., 2016; Vaismoradi & Snelgrove, 2019).

These findings are also presented below with corresponding numbers in brackets indicating the number of participants who identify that specific intervention as the most effective form of team support. Including interventions for strengthening relationships at work (14), psychoeducation in general (6), strategies to promote co-operation as a team (5), burnout awareness campaign (3), workload management (3), well-being promotion at work (2), access or referral to psychotherapy (2), mindfulness workshops (2), maintaining work-life balance (2), training team empathy and compassion (2), training democratic leaders (2), treating all employees fairly (1), massage-dance-fitness possibilities within work (1),

nurturing creativity (1), regular check in with managers (1), letting go of control and perfection (1), thanking employees regularly for work (1), performance optimization (1), minimizing negative, non-constructive criticism (1), more time for regular breaks and relaxation (1), and regular check ins for decreasing stressful situations (1) that were all identified as 21 themes of most efficient ways of team intervention .

Of those only 11 types of interventions are mentioned more than once by respondents including interventions for strengthening relationships at work (14), psychoeducation in general (6), strategies to promote co-operation as a team (5), burnout awareness campaign (3), workload management (3), well-being promotion at work (2), access or referral to psychotherapy (2), mindfulness workshops (2) , maintaining work-life balance (2), training team empathy and compassion (2), training democratic leaders (2). Of these interventions for strengthening relationships at work, psychoeducation in general and strategies to promote co-operation as a team are found to be the most frequently reported as efficient 3 types of team interventions.

The following section contains the direct quotes from the participants related to these 3 most frequently found as efficient team interventions.

#### **4.12 Interventions for Strengthening Relationships at Work**

14 out of 40 participants reported that interventions for strengthening relationships at work are the most efficient types of team support.

For example, one participant notices in his practice that not having positive relationships at work is a contributing factor for burnout, especially if a person feels pressed

to perform above his/hers limits. *“Many burnout patients complain about the relationships at work, either having a colleague whom they do not get along well with, or a supervisor who appears strict and pushes their employees to work beyond their limits. Some patients were very non-conflicting types who tried to please their employers yet had a feeling that they are not doing enough. These kind of tricky, negative relationships are pushing a person over the edge, towards burnout, thus interventions for improving relationships correct for that”.*

(participant ID5, general practitioners)

Similarly, participant ID 4 mentioned *“Last few years I had a few patients who showed symptoms of total physical and mental exhaustion. These symptoms are connected to depression but different as well. Because people are not losing the taste for life. They just don’t have energy. I have learnt that discussions about how it started, where it came from and what is a continuous factor adding to that exhaustion is important. I found out that often it’s related to bad relationships with colleagues or someone’s boss. People spend on average around 8 hours at work each day. It’s a big chunk of their life so socially they need to feel good at that environment, appreciated, like they and their work matters. That is why I am certain that working on positive relationships at work can be either a source of stress or uplift when it comes to burnout.”*

For more direct quotes of participants discussing the most efficient team interventions, refer to the Appendix section 5.

### 4.13 Psychoeducation of Employees in General

*Psychoeducation* within the team is as another subtheme, identified as an efficient way of team intervention to reduce burnout. Six participants out of 40 identify psychoeducation of all employees as an important effective team intervention.

For example, one participant mentions that knowledge of ones' own mind is one of the most valuable assets for treatment and prevention against burnout when describing: *"if one understands how human mind works, the factors that affect it, alter the states of well-being, and strategies how to improve if someone does not feel well is one of the most crucial ways of protection, prevention and treatment against burnout"*. (participant, ID 12, psychologist).

Team psychoeducation can help decrease stigma, or how people view burnout and making sure that this problematic is taken seriously. Just like people are taken care of personal hygiene, they can learn to take care of their psycho-hygiene as highlighted by one of the participants, who reports: *"For the team intervention, I would definitely recommend group psychoeducation. I have been working for my private practice but providing support to a variety of schools. As you can imagine, schools have often a high prevalence of burnout. I have seen that when we were offering psychoeducational workshops on a variety of topics, it decreased stigma related to various psychological challenges. And people learnt how to take care of themselves, and the others. They suddenly understood that burnout is real, they were able to relate to some of the symptoms. They also knew that burnout needs to be addressed and anyone who belongs to a school community can make the work environment a better place also for others. Just like we teach people at a very young age about hygiene or*

*brushing teeth, our psychohygiene also needs to be taken care of.” (participant, ID 28, psychologist).*

For more direct quotes of participants discussing psychoeducation within the team, as one of the most efficient team interventions, refer to the Appendix section 5.

#### **4.14 Strategies to Promote Co-Operation as a Team**

Findings show that 5 out of 40 participants identify *strategies to promote co-operation as a team*. Suggesting that not everyone shall work for themselves, but cooperating as a team makes a person less prone to burnout or recover faster. For example, one participant suggests that *“each working place needs to have good strategies or rules in place reinforcing team cooperation. Things like structure support, mentoring systems making people feel that anyone can get guidance, and is a part of the whole team network, as well as allocating tasks equally have been found efficient to decrease burnout occurrence”*. (participant ID10, HR).

*Strategies to promote co-operation as a team* are about making team members feel included, respected, and creating a helpful network of colleagues that support in need. As was described by one of the participants: *“I usually work with individual patients if they suffer from burnout or are starting developing the first symptoms. Now when you are asking me about the team support I would definitely mention finding a way of synchronizing the colleagues who work together. They need to find a way of balancing their work, lean on each other, find a way how they can function effectively together. I had enough patients who reported that they felt bullied at work or taken advantage of. Those kind of things relate to being excluded and are then contributing to burnout. The team unity can definitely be very effective.”* (participant ID 9, Gp)

More quotes from the participants as well as the rest of the 18 themes, of the individual interventions, suggested by the burnout reduction experts can be found in Table 8 of the Appendix section 5.

Based on the interviews of the burnout reduction experts, primary data constitutes a contribution of total of 21 themes of team interventions that are identified as the most effective forms of support in practice amongst the current sample of psychologists, Gp's, physiotherapists and HR professionals. The following section presents findings of the secondary data exploring the effective significant burnout team interventions.

#### **4.15 Team Interventions Identified in Previous Research**

This section discusses the empirical findings of the 2nd research question that explores the most effective team burnout interventions that have been found in previous research. The secondary archival data, cross examines 14 previously published meta-analysis and systematic search papers (see Table 9 below) between the years 2010 until the 2020. For the secondary data analysis, only the statistically significant interventions are used in this report related to the second research question. It needs to be noted, that the previous studies do not make a distinction between team/organizational interventions. Instead refer to them as group/organizational interventions for both. The current study makes such a distinction for an intervention specifically, within their team at work vs the whole organization. For the definition of team intervention, only the studies that used interventions on members of the team, or within the same department or working place were included in this analysis.

Table 9 below includes suggestions from previous research for the most efficient type of support for team interventions. This is evidenced by its recurrent mention and its consistent effectiveness as demonstrated in prior 14 meta-analyses and systematic review papers.

**Table 9***Previous Research' Findings of Team Interventions*

<b>Authors of the published paper</b>	<b>Number of studies included in final analysis</b>	<b>Type of the effective intervention</b>
Jaworska-Burzynska et. al. (2016)	22	Group support (psychotherapy), mindfulness, CBT
Ahola et.al. (2017)	18	4 studies-Group CBT
Aryankhesal et.al. (2019)	18	4 studies-group-communication skills training 50% improvement, on-line intervention programs, Psychiatric interventions (inc. mindfulness, yoga, meditation)- 75 % improvement, Motivational-gratefulness programs, PD training. Mixed methods better results when compared to individual
Awa et.al. (2010)	25	2 studies for organizational -group-management skill training, social support group ,CBT
Bagnal et.al. (2016)	Evaluation of 41 papers	Group/organizational approaches longer lasting effect than individual inter. Staff training workshops (stress awareness, coping courses), managerial/peer support, communication
Bresesti et.al. (2020)	6 articles for final analysis	Structural changes in management, routine staff meetings, motivational activities, group discussions, routine staff meetings, changes in unit management, group CBT, & mindfulness
Kumar (2016)	Revision of 43 published papers	Decrease work stress-intensive long term stress management
Maricutoiu et.al. (2016)	23 controlled trials	Mindfulness in the group ,CBT, social support,



Sheepers et.al. (2019)	24 studies	Group based mindfulness training
Murray et.al. (2016)	4 studies	CBT & Mindfulness in a group format
Ong et.al. (2020)	11 studies	Increased support from colleagues, support services mindfulness training
Panagioti et.al.(2017)	19 studies for meta-analysis	Organizational interventions more efficient compared to individual. Rescheduling hourly shift programs for communication skills, workload reduction, discussion meetings enhancing team work, mindfulness,
Pijpker et.al. (2019)	10 studies	Use of combined interventions-evolvment of employees in decision making processes and increased control, social support, positive feedback from supervisors, reduced workload
Westermann et.al. (2014)	16 studies	2 organizational intervention studies were significantly effective-exercise, cognitive rehabilitation

The findings in Table 9, show that a total of eight out of 14 reviews and meta-analysis papers on burnout team interventions (Jaworska-Burzynska et. al. ,2016; Aryankhesal et.al. ,2019; Maricutoiu et.al. ,2016; Ong et.al. ,2020; Murray et.al. ,2016; Panagioti et.al., 2017; Bresesti et.al. ,2020; Sheepers et.al. ,2019 ) suggest group mindfulness, yoga and meditation as the most effective burnout reduction method of team intervention.

Findings of secondary data also show that seven out of 14 systematic reviews and meta-analysis papers related to burnout team interventions (Jaworska-Burzynska et. al. ,2016; Aryankhesal et.al. ,2019; Awa et.al. ,2010; Bagnal et.al. , 2016; Maricutoiu et.al. ,2016; Ong

et.al. ,2020; Pijpker et.al. ,2019) find social support from team members or manager as the most prevalent and significantly effective method of team intervention.

Other seven out of 14 papers on burnout team interventions (Jaworska-Burzynska et. al. ,2016; Ahola et.al. ,2017; Awa et.al. ,2010; Bresesti et.al. ,2020; Maricutoiu et.al. ,2016; Murray et.al. ,2016; Westermann et.al. ,2014) show that a group CBT is another most prevalent and significantly effective method of team intervention.

While, three meta-analyses and systematic search papers out of 14 on burnout team interventions (Bagnal et.al. 2016; Kumar ,2016; Pijpker et.al. ,2019) suggest that decrease in work stressors (including increase in control, stressors identification and acknowledgement, stress reduction techniques) are the most effective team interventions.

Another 3 out of 14 papers on burnout team interventions (Panagioti et.al.,2017; Aryankhesal et.al. , 2019; Bagnal et.al. ,2016) report communication skills training as significantly effective method for team intervention.

Three out of 14 papers on burnout team interventions (Pijpker et.al., 2019; Bresesti et.al. , 2020; Panagioti et.al., 2017) find positive feedback from supervisor (including routine staff meeting, group discussion, motivational activities) as another significantly effective method of team intervention.

While, two out of 14 papers on burnout team interventions (Awa et.al., 2010; Bresesti et.al., 2020) report group management training program as another significantly effective method of team intervention.

One out of 14 papers on burnout team interventions (Pijpker et.al., 2019) reports workload reduction as another significantly effective method of team intervention.

One out of 14 papers on burnout team interventions (Westermann et.al., 2014) suggests that exercise as another significantly effective method of team intervention.

One out of 14 papers on burnout team interventions (Aryankhesal et.al., 2019) finds on-line intervention program as another significantly effective method of team intervention.

One out of 14 papers on burnout team interventions (Panagioti et.al.(2017) reports rescheduling hourly shift as another significantly effective method of team intervention.

One out of 14 papers on burnout team interventions (Bresesti et.al. , 2020) finds structural changes to management as another significantly effective method of team intervention.

### **Overall Results of the Secondary Data**

The findings presented in Table 9 highlight various approaches to addressing burnout within teams. Among the 14 reviewed papers and meta-analyses, it is noted that group mindfulness, yoga, and meditation emerge as the most effective methods for reducing burnout, as suggested by eight of the studies. Additionally, seven papers emphasize the importance of social support from team members or managers, identifying it as a prevalent and significantly effective intervention. Group cognitive-behavioral therapy (CBT) is also highlighted by seven papers as a prevalent and highly effective method. Some papers emphasize the reduction of work stressors, including techniques such as stress identification and acknowledgment, as the most impactful intervention. Communication skills training, positive feedback from supervisors, group management training programs, workload reduction, exercise, online intervention programs, rescheduling hourly shifts, and structural

changes to management are also identified as significantly effective strategies in individual papers. These findings provide valuable insights into the diverse range of interventions available to address burnout within teams. The following section, undertakes a comparative analysis of both primary and secondary data in order to elucidate the findings pertaining to the second research question.

#### **4.16 Comparison of Primary and Secondary Data for Final Burnout Reduction Model for TI**

This section compares the primary and secondary data findings in relations to the most effective team burnout interventions. As can be seen in Table 10 below, the primary data identified 21 themes, while the secondary identified 12 themes. The order of effectiveness, as reported in terms of prevalence, varied among the interventions. Refer to Table 10 for a detailed list of primary and secondary data findings concerning team interventions for reducing burnout.

**Table 10***Comparison of Primary and Secondary Data for Team Interventions*

No	Team interventions based on primary data	Team interventions based on archival research
1	Interventions for strengthening relationships at work	Group mindfulness
2	Psychoeducation in general	Social support from team members (Improved team work, ethical & motivational group activities, discussions, regular meetings, appreciation etc.)
3	Strategies promoting co-operation as a team	Group CBT
4	Burnout awareness campaigns	Reduction of work stressors
5	Managing workload	Communication skills training
6	Well-being promotion at work	Positive feedback from supervisors
7	Access or referral to psychotherapy	Group management training programs
8	Mindfulness workshops	Workload (less hours, manageable amount etc.)
9	Maintaining work-life balance	Exercise
10	Training team empathy and compassion	On-line intervention
11	Training democratic leaders	Rescheduling hourly shift
12	Treating all employees fairly	Structural changes to management
13	Massage, dance, fitness possibilities within work	
14	Nurturing creativity	
15	Regular check in with the manager	
16	Letting go of control and perfection	
17	Thank employees regularly for their work	
18	Performance optimization	
19	Minimizing negative, non-constructive criticism	
20	More time for regular breaks & relaxation	
21	Regular check ins for decreasing stressful situations	

**Similarities and Differences Between Primary and Secondary Data for TI**

As can be seen, in Table 10 there are mostly similarities detected in reports between primary and secondary data. Specifically, 9 interventions of the secondary data are overlapping, or the same type of the interventions are reported by the burnout reduction experts in primary data. Both sets of data agree that decrease in work stressors (increase control, stressors identification & acknowledgement); social support from team members; communication skills training (decision making, open conversation etc.); group mindfulness; decrease in workload; recreational art/sports creative therapy; decrease in criticism rather increasing positive feedback; managerial training (including structural changes to management) are effective burnout reduction team interventions. The matching interventions from both primary and secondary data are highlighted in same colors in Table 10.

There are also some differences detected. Specifically, the secondary research suggest as an extra form of efficient team support also group CBT trainings and offer on-line trainings (that can be easier accessed than face to face as well as more opportunities for employees to grow), and rescheduling hourly shift.

The primary data also additionally suggests: interventions for strengthening relationships at work, burnout awareness campaigns; well-being promotion at work; maintaining work-life balance; nurturing creativity; training democratic leaders; regular check in with the manager; letting go of control and perfection; thank employees regularly for their work; performance optimization; more time for regular breaks & relaxation as important effective burnout reduction team interventions.

No specific outstanding patterns or differences are observed in the reports between professionals working in Slovakia and the Netherlands in their use of techniques or tools for burnout reduction.

The following section presents primary research findings related to the third research question.

#### **4.17 Themes of Organizational Interventions**

The following section discusses the third research question, related to the most effective organizational burnout interventions. The organizational interventions are defined “as a support of an individual within their company or work organization by creating an empathic and friendly work culture, providing personal growth/educational opportunities, mentoring support, and setting up optimal mental health/physical health support regulations, sick leave pay etc”.

Application of thematic analysis, identifies the most effective organizational burnout interventions that 40 experts recommend. The participants identify 18 themes, as presented in Table 17 in the Appendix section no.3, which outlines all 18 themes of organizational support with their categories and codes. These are helpful for comparison of primary and secondary data in the later sections. Where theme is the main product of analysis, codes are potential subthemes and categories are the explicit descriptors that further refine the essence of the themes for the analysis (Vaismoradi et.al., 2016; Vaismoradi & Snelgrove, 2019).

Table 17 in the Appendix section 3 shows 18 themes of the most efficient organizational interventions. These are also outlined below with the numbers in the brackets that refer to number of participants who report that particular intervention as the most effective type of organizational support. Including trainings, workshops, psychoeducation on burnout awareness and mental health (11), work with a psychologist, or coach within organization (5), taking interest in employees’ stimulation and motivation (5), teaching

tolerance & compassion as a philosophy of organization (4), communication in workplace between departments (4), flexible contract/working hours (3), supportive day off policies (3), pacing the work (3) , regular relaxation, meditation, mindfulness opportunities (3), growth opportunities (2), fun collective activities (2), training managers and/or hiring qualified and competent managers (2), regular checks on employees' progress (1), higher budget for mental health support (1), stress audit (1), purchase rehabilitation procedures for employees (1), individual approach to all employees (1), and healthy, safe (physically/mentally) working environment (1) that are all identified as 18 themes of most efficient ways of organizational intervention .

Of those 12 types of interventions are mentioned more than once by respondents including trainings, workshops, psychoeducation on burnout awareness and mental health (11), work with a psychologist, or coach within organization (5), taking interest in employees' stimulation and motivation (5), teaching tolerance & compassion (4), communication in workplace between departments (4), flexible contract/working hours (3), supportive day off policies (3), pacing the work (3) , regular relaxation, meditation, mindfulness opportunities (3), growth opportunities (2), fun collective activities (2), training managers and/or hiring qualified and competent managers (2). Of these 3, the most frequently reported as the most efficient organizational interventions include trainings, workshops, psychoeducation on burnout awareness and mental health, work with a psychologist, or coach within organization, and taking interest in employees' stimulation and motivation. The following section contains the direct quotes from the participants related to these 3 most frequently identified interventions.



#### 4.18 Trainings, Workshops, Psychoeducation on Burnout Awareness and Mental Health

The findings of 11 out of 40 participants show that it is of great importance that companies invest into trainings, workshops related to psychoeducation to increase mental health interest and support, and normalize employees' experiences and eliminate judgements. One participant emphasized: *"I would say that trainings and workshops are first of all cost effective, as they can teach a larger number of employees tools that break down into specifics, where people feel individual challenges, discover their needs, and teach new ways of coping, resilience or self-care to prevent or decrease burnout symptoms. It is an investment that pays off. I also think that workshops on mental health, burnout and psychoeducation help organize someone's thoughts. It helps to pinpoint a little bit where it's not going great. Having such discussions in groups normalize other co-workers' feelings, and it's also openly talked about creating a non-judgmental environment where there is no room for stigma."* (participant ID18, HR).

Another participant also highlights how investments into workshops overall save companies and organizations money but also increase motivation and productivity. When mentioning: *"There are a few things that we saw in our company working with offering help to our workers. One of the most significant one was hiring trained psychologists or coaches to run trainings or workshops on burnout topics, or how to deal with stress. At some point we needed to downsize the company and our employees were scared, it increased stress, they felt unappreciated after the years of working for us, there was still a lot of work and we did not know exactly when and whom we will need to let go. Some employees were showing burnout symptoms, lack of motivation and lowered productivity. After bringing the trainers in, the workers stamina, motivation and productivity increased. They learnt how to protect themselves from burnout."* (participant ID 33, HR).

For more direct quotes of participants related to the most efficient organizational interventions, refer to Section 6 of the Appendix.

#### **4.19 Work with a Psychologist, or Coach within the Organization**

Work with a psychologist, or coach within the organization is found by 5 participants out of 40, as an important and effective organizational intervention. To show the employees that the employer cares and provides guidance as reported by a participant who states that :*“bigger organizations, try to set up in house psychologists or coaches, with whom employees could go and talk to, about stress work, or any stress related issues. It provides the opportunity to deal with an issue then and there, shows that the company cares and wants to offer help as well as teaches then employees how to tackle specific problematics. Such guidance positively influences burnout reduction.”* (participant ID3, psychologist)

Work with a psychologist can enhance protective policies in work environments as showed by a participant who mentions: *“The last 10 years we see that companies are more willing to provide investments into mental health awareness and help. One of them is hiring external professional help by a psychologist. I think that’s one of the most effective tools to reduce burnout. They need to be a part of assessing the culture at work, the problems and worries that employees have, and help set up more protective policies. As let’s be honest companies sometimes neglect to care for what’s best for the employees. Their priority used to be financial gains. Now with Covid-19 in the picture, they are realizing that mental health is an absolute necessity to care for employees, and with such care they happily work harder. No care from companies side means more burnout and vice a versa.”* (participant ID 2, psychologist).

For more direct quotes of participants related to the most efficient organizational interventions, refer to Section 6 of the Appendix.

#### **4.20 Taking Interest in Employees' Stimulation and Motivation**

An interest in employees' stimulation or motivation is suggested by 5 participants out of 40, as one of the most efficient organizational interventions to decrease burnout. One participant mentions that she tries to give positions to specific employees based on their skills, trainings, interests. She notes *"throughout the years, I have noted that if people are either overstimulated that the tasks seem too hard, challenging like a struggle or too under stimulated that the tasks are slightly boring, uninteresting or not stimulating, the employees are more at risk of burnout. Ever since we found that out we try to balance the match for the employees giving them the right level of their stimulation"* (participant ID8, HR).

Organizations that show interest in employees' stimulation and motivation are creating meaning and a sense of belonging. Through which burnout can be decreased. As explained by one participant who mentions: *"that work needs to align peoples' passions and interests with specific responsibilities in their positions. That way, the employees feel like they matter, and belong to that community. They are more aware how their work benefits other co-workers. Such stimulation and awareness protect against burnout."* (participant ID 16, physiotherapist)

More quotes from the participants as well as the rest of the 15 themes, of the organizational interventions, suggested by the burnout reduction experts can be found in Table 10 in the Appendix section 6.

Based on the interviews of the burnout reduction experts, primary data constitutes a contribution to the total of 18 themes of organizational interventions that are identified as the most effective forms of support in organizational setting amongst the current sample of

psychologists, Gp's, physiotherapists and HR professionals. The following section presents findings of the secondary data related to the 3<sup>rd</sup> research question.

#### **4.21 Organizational Interventions Identified in Previous Research**

This section discusses empirical archival data (secondary data in the current research). As explored via 14 previously published meta-analysis and systematic search papers. Data includes studies between the years 2010 until the 2020. The organizational interventions identified across previous research is presented in Table 12 below. For the secondary data analysis, only the statistically significant interventions are used for this report. It needs to be noted, that the previous studies do not make a distinction between team/organizational interventions instead refer to them as group/organizational interventions for both. The current study makes such a distinction for an intervention specifically, within the team at work vs the whole organization. Therefore, for the definition of organizational intervention, in this case only the studies that use interventions on whole organization, are included for the analysis.

Table 12 below displays the results of previous research identifying the most effective types of organizational interventions. These findings are based on their consistent reporting and significant efficiency across 14 meta-analyses and systematic review papers.

**Table 12***Previous Research Findings of Organizational Burnout Interventions*

<b>Authors of the published paper</b>	<b>Number of studies included in final analysis</b>	<b>Type of the effective intervention</b>
Jaworska-Burzynska et. al. (2016)	22	Training/workshops
Ahola et.al. (2017)	18	4 studies-Combined Individual + occupational interventions-thus no specific recommendation for organizational interventions
Aryankhesal et.al. (2019)	18	4 studies-group- Psychosocial training, on-line based interventions, workplace appreciation, culture of open ,communication skills
Awa et.al. (2010)	25	2 studies-group-psycho-social support culture, management skill training across organization,
Bagnal et.al. (2016)	Evaluation of 41 papers	Alternation to workload, managerial involvement and support for employees
Bresesti et.al. (2020)	55 published papers were evaluated	Psychosocial, behavioural interventions, mindfulness
Kumar (2016)	Revision of 43 published papers	Mindful communication program, Intense stress management program
Maricutoiu et.al. (2016)	23 controlled trials	Lectures on burnout & mental health in general, development of peer collaboration, group psychoeducation
Sheepers et.al. (2019)	24 studies	Group based mindfulness training,
Murray et.al. (2016)	4 studies	Resilience enhancement, organizations developing psycho-social safety climate, organizational change management, organizational change to prevent stress
Ong et.al. (2020)	11 studies	No suggestions for organization
Panagioti et.al.(2017)	19 studies for meta-analysis	Organizational interventions more efficient compared to individual including

		structural changes to resources, improving communication, creating safe space/ the work environment anything that decreases stress
Pijpker et.al. (2019)	10 studies	Decrease workload (job demands), increase decision making, listening to employees needs
Westermann et.al. (2014)	16 studies	2 organizational intervention -main suggestion that organization shall offer refresher courses . The best effects combined interventions

The empirical evidence, in Table 12, shows a total of 8 meta-analyses and systematic search papers out of 14 on burnout organizational interventions (Jaworska-Burzynska et. al. 2016; Aryankhesal et.al. , 2019; Awa et.al., 2010; Bresesti et.al. ,2020; Maricutoiu et.al., 2016, Panagioti et.al., 2017; Sheepers et.al. ,2019; Kumar, 2016) find training, workshops, and psychoeducation (anything related to mental health including mindfulness and stress reduction techniques) as effective organizational interventions.

A total of four meta-analyses and systematic search papers out of 14 on burnout organizational interventions (Aryankhesal et.al. ,2019; Kumar, 2016; Panagioti et.al., 2017; Pijpker et.al., 2019) mention that culture of open communication and listening are effective organizational interventions for burnout reduction.

A total of 4 meta-analyses and systematic search papers out of 14 on burnout organizational interventions (Maricutoiu et.al. ,2016; Murray et.al. ,2016; Bresesti et.al.

,2020; Awa et.al. ,2010) recommend psycho-social support/ training/or peer support as effective organizational interventions.

While a total of 2 meta-analyses and systematic search papers out of 14 on burnout organizational interventions (Pijpker et.al. ,2019 and Bagnal et.al. ,2016) recommend decrease in workload (job demands) as an effective organizational intervention for burnout reduction.

A total of two papers out of 14 on burnout organizational interventions (Murray et.al. ,2016; Panagioti et.al., 2017) find stress reduction policies (including restructuring organization, enhancing organizational resilience, making changes to decrease stress and increasing resources) as effective organizational interventions.

One paper out of 14 on burnout organizational interventions (Aryankhesal et.al. ,2019) finds that on-line training is an effective organizational intervention.

Additional, one paper out of 14 on burnout organizational interventions (Westermann et.al. (2014) reports that organization shall provide a refresher of intervention that is run within organization in order to increase effectiveness of organizational interventions.

One paper out of 14 on burnout organizational interventions (Aryankhesal et.al., 2019) finds positive psychology strategies (such as appreciation in the workplace) as effective organizational intervention for burnout reduction.

Another one paper out of 14 on burnout organizational interventions (Bagnal et.al., 2016) reports managerial involvement and support as effective organizational intervention for burnout reduction.

A total of one paper out of 14 on burnout organizational interventions (Pijpker et.al., 2019) finds opportunity or space for decision making as effective organizational intervention.

A total of one paper out of 14 on burnout organizational interventions (Panagioti et.al., 2017) finds creating safe space/ the work environment as effective organizational intervention for burnout reduction.

### **Overall Results of the Secondary Data Related to the Organizational Interventions**

The analysis reveals a multifaceted approach to addressing burnout, with various interventions targeting different aspects of the work environment and employee support systems. The analysis of the provided pattern reveals a diverse range of effective organizational interventions for addressing burnout among the 14 studies reviewed. Distinct patterns emerge in terms of recommended strategies. Such as a significant emphasis is placed on the effectiveness of training, workshops, and psychoeducation, along with fostering a culture of open communication and attentive listening. Then the implementation of psychosocial support, training, or peer support programs, along with reduction in workload are recommended. Followed by implementing stress reduction policies, online training, providing a refresher for interventions conducted within the organization, application of positive psychology strategies, managerial involvement and support, and providing opportunities or space for decision-making, with emphases on the creation of a safe and supportive work environment, as organizational burnout reduction strategies. The following section, undertakes a comparative analysis of both primary and secondary data in order to elucidate the findings pertaining to the third research question related to the most effective organizational interventions.



#### **4.22 Comparison of Primary and Secondary Data for Final Burnout Reduction Model for OI**

Table 13 shows comparisons of primary and secondary data. Empirical evidence suggests that primary data identifies 18 themes related to the organizational interventions for burnout, while the secondary data identifies 11 themes. The order is determined by the frequency with which organizational interventions are reported.

**Table 13***Comparison of Primary and Secondary Data for Organizational Interventions*

No	Organisational interventions based on primary data	Organizational interventions based on archival research
1	Trainings, workshops, psychoeducation on burnout awareness and mental health	Training, workshops , and psychoeducation (anything related to mental health including mindfulness and stress reduction techniques)
2	Work with a psychologist, or coach within the organization	Culture of open communication and listening
3	Taking interest in employees' stimulation and motivation	Psycho-social support/ training/or peer support
4	Teaching tolerance and compassion as a philosophy of organization	Decrease in workload (job demands)
5	Communication in workplace between departments	Stress reduction policies (including restructuring organization, enhancing organizational resilience, making changes to decrease stress and increasing resources)
6	Flexible contracts/working hours	On-line training
7	Supportive day offs policies	A refresher of intervention that is run within organization
8	Pacing employees work	Positive psychology strategies (such as appreciation in the workplace)
9	Regular relaxation, meditation, mindfulness opportunities	Managerial involvement and support
10	Growth opportunities	Opportunity or space for decision making
11	Fun collective activities	Creating safe space/ the work environment
12	Training managers and/or hiring qualified and competent managers	
13	Regular checks on employee's progress	
14	Higher budget for mental health	
15	Stress audit	
16	Purchase rehabilitation procedures for employees	
17	Individual approach to all employee	
18	Healthy, safe (physically/mentally)working environment	

### **Similarities and Differences Between Primary and Secondary Data for OI**

As can be seen, in Table 13, data shows that there are some similarities detected in reports between primary and secondary data. Specifically, 6 interventions of the secondary data are overlapping, or the same type of the interventions as are reported by the burnout reduction experts in primary data. Both sets of data agree that training, workshops , and psychoeducation (anything related to mental health including mindfulness and stress reduction techniques); culture of open communication and listening ; decrease in workload (job demands); stress reduction policies (including restructuring organization, enhancing organizational resilience, making changes to decrease stress and increasing resources); managerial involvement and support ; and creating safe space/ the work environment belong to the effective burnout reduction organizational interventions. The matching interventions (interventions that have similar content) from both primary and secondary data are highlighted in same color (see Table 13).

There are also some differences detected. Specifically, the secondary data suggests psycho-social support/ training/or peer support; on-line training; a refresher of intervention that is run within organization; positive psychology strategies (such as appreciation in the workplace); and an opportunity or space for decision making as other additional effective organizational interventions for burnout reduction.

While, the primary data also additionally suggest: work with psychologist/coach at work; teaching tolerance and compassion as a philosophy of organization; flexible contracts/working hours; growth opportunities; fun collective activities; training managers and/or hiring qualified and competent managers; higher budget for mental health; stress audit; purchase rehabilitation procedures for employees; individual approach to all employee as other important effective burnout reduction organizational interventions.

No specific outstanding patterns or differences are observed in the reports between professionals working in Slovakia and the Netherlands in their use of techniques or tools for burnout reduction.

#### **4.23 Consensus on Multi-Layered Support Interventions (Primary Data)**

The current study explores a question whether the most effective support of people suffering from burnout includes a support on all three layers including the individual, team and organizational levels simultaneously. Rather than individual, team or organizational support being provided on their own. The following themes and subthemes emerged from the analysis.

##### **Theme 1: Multi-Layered Intervention Effectiveness**

From this theme a subtheme emerged: Belief in the efficiency of individual, team, and organizational support combined.

After interviewing 40 burnout reduction experts, the findings show that 29 out of the 40 experts believe that the intervention on all three layers including individual, team and organizational support are the most efficient if applied in combination. Based on their professional experiences.

## **Theme 2: Individual and Team Intervention Effectiveness**

From this theme a subtheme emerged: Belief in the highest efficiency of individual and team interventions. From the interviewed 40 burnout reduction experts, 3 participants believe that individual and team interventions are the most efficient forms of burnout treatment if provided together.

## **Theme 3: Organizational Intervention Effectiveness**

From the organizational theme a subtheme emerged: Belief in the highest efficiency of organizational support. The analysis show that 3 out of 40 burnout reduction expert participants believe that organizational intervention is the most efficient support for burnout reduction.

## **Theme 4: Team Intervention Effectiveness**

From team theme a subtheme emerged: Belief in the highest efficiency of team-based support. From the interviewed 40 burnout reduction experts, 3 participants believe that team intervention is the most efficient form of support of burnout.

## **Theme 5: Individual Intervention Effectiveness**

From organizational theme a subtheme emerged: Belief in the highest efficiency of individual-focused support. The analysis show that 2 out of 40 burnout reduction expert

participants believe that the individual support is the most efficient form of intervention for burnout reduction.

Overall, the finding of the current study show that the combination of individual, team and organizational interventions together appear to be the most recommended as the most efficient form of support. The following section presents archival research findings related to the combination of all three types of burnout interventions and their effectiveness.

#### **4.24 Consensus on Multi-Layered Intervention Support (Secondary Data)**

Table 14 below provides supporting evidence from prior systematic searches regarding interventions aimed at reducing burnout. It also includes a report on the effectiveness of interventions, whether they are individual, organizational, or a combination of both.

**Table 14**

*The Efficacy According to the Type of Intervention Used in Secondary Data*

<b>Authors of the published paper</b>	<b>Number of studies included in final analysis</b>	<b>Type of the most effective intervention found</b>
Jaworska-Burzynska et. al. (2016)	22	Combined
Ahola et.al. (2017)	18	Combined
Aryankhesal et.al. (2019)	18	Combined
Awa et.al. (2010)	25	Combined
Bagnal et.al. (2016)	Evaluation of 41 papers	Combined
Bresesti et.al. (2020)	55 published papers were evaluated	Both effective Individual & organizational
Kumar (2016)	Revision of 43 published papers	Prevention better than intervention
Maricutoiu et.al. (2016)	23 controlled trials	Organizational
Sheepers et.al. (2019)	24 studies	Organizational but not compared with individual or combined
Murray et.al. (2016)	4 studies	Organizational
Ong et.al. (2020)	11 studies	No conclusions due to high heterogeneity of the studies
Panagioti et.al.(2017)	19 studies for meta-analysis	Organizational
Pijpker et.al. (2019)	10 studies	Combined
Westermann et.al. (2014)	16 studies	Combined

Empirical evidence, in Table 14 shows that out of 14 systematic review studies listed above, 7 (Jaworska-Burzynska et. al. ,2016; Ahola et.al. ,2017; Aryankhesal et.al. , 2019; Awa et.al. ,2010; Bagnal et.al. ,2016; Pijpker et.al. ,2019; Westermann et.al. ,2014) indicate that the combination of both individual and organizational interventions are the most effective.

One study does not have a conclusion (Ong et.al., 2020), due to high heterogeneity of the studies.

One study (Bresesti et.al., 2020) indicates that both individual & organizational interventions are equally effective. However, this study does not have a combined control group, therefore cannot comment on the combination of all of them together.

Four studies (Panagioti et.al.2017; Murray et.al. ,2016; Sheepers et.al.,2019; Maricutoiu et.al. 2016; indicate that organizational approach is highly effective.

One study (Kumar, 2016) concludes that prevention is more beneficial than treatment, and as a prevention suggests organizational approach.

Based on these results, at least 50% of studies claim with certainty that, the combination of the individual, and organizational interventions seems to be more effective than using only one layer of intervention on its' own.

The following section contains the current study's enhanced burnout reduction model, as suggested by the findings of the primary and secondary data analysis.

#### **4.25 Development of a Final Enhanced Contextual Burnout Reduction Model**

Based on the empirical findings from experts' interviews it was aimed to develop specific burnout reduction guidelines for a three- layered interventions (these can be found in Appendix section 7 of this dissertation). As well, as the researcher's proposal of the enhanced burnout reduction model. The final model combined literature review and theoretical constructs from Chapter 2, suggestions from primary data, and archival data in the current



study. The updated and enhanced contextual burnout reduction model, which incorporates new modifications, is illustrated in Figure 3 below. This version differs from the model presented in Chapter 2.

Based on the combined findings of both primary and secondary data analysis, presented above, the following final enhanced contextual burnout reduction model is developed including individual/team/organizational interventions. One needs to be mindful that this model is only a proposal and needs to be yet tested as part of the future research. This model can be seen in Figure 3 below, containing the most efficient interventions identified in the present study. Highlighting that for the most effective result, a combined support on individual, team and organizational layers shall be applied. As well as based on the 5 theoretical constructs presented in Chapter 2 and the additional suggestions from the participants of the primary data related to the boundary identification is further enhanced into boundaries between work and personal life space as well as setting boundaries between self and others is proposed. These follows a discussion more in detail in the below section of the evaluation of the current research ‘ findings.

**Figure 3***Final Enhanced Contextual Burnout Reduction Model*

Individual Factors ↔ Personality ↔ Past Traumas ↔ Coping/Boundaries ↔ Health ↔ Work/Life  
 Balance ↔ Environmental Factors ↔ Social Factors

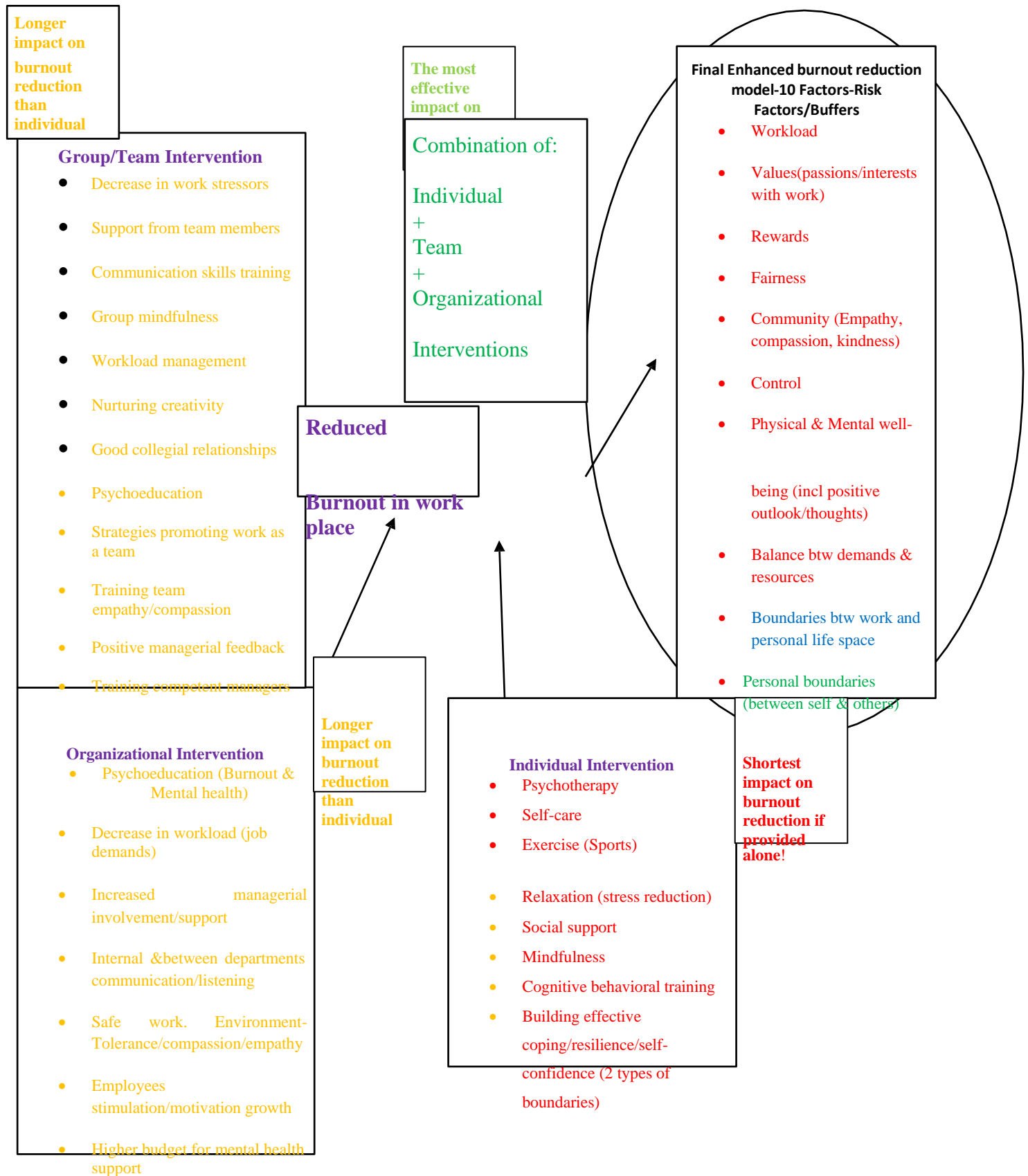


Figure 3, derives from an extensive literature review, incorporates the five theoretical constructs discussed in Chapter 2, alongside the analysis of primary and archival data from the current study. Notably, significant disparities exist between the initial model depicted in Figure 1 and the final iteration in Figure 3, particularly in each category of interventions. The final model presents a notable expansion, offering additional recommendations for individual, team, and organizational interventions. Furthermore, it advances the understanding by proposing intricate interplays between Individual characteristics such as personality traits, past traumas, coping mechanisms (inclusive of boundary-setting), overall health, work-life balance as well as environmental factors (including work demands and resources), social relationships,. These factors can act as either risk factors or protective elements in the manifestation of burnout. This nuanced perspective is delineated in detail, with ten specific factors outlined on the right side of the final model. These divergences between the initial and final models are as follows:

### **Individual Intervention:**

Figure 1 model emphasizes individual-focused interventions, such as CBT, exercise, cognitive behavioral training, and reducing everyday stressors.

Figure 3 model focuses on psychotherapy, self-care, exercise, relaxation techniques, mindfulness, and building effective coping and resilience skills as suggested by combination of primary and secondary data.

### **Team Intervention:**

Figure 1 centers on team training and workshops to enhance skills, knowledge, collaboration, and problem-solving.

Figure 3 emphasizes reducing work stressors, fostering team support, improving communication skills, practicing group mindfulness, workload management, good collegial relationships, psychoeducation, training team empathy and compassion, positive managerial feedback, and training competency in managers as suggested by combination of primary and secondary data.

### **Organizational Intervention:**

Figure 1 focuses on enhancing job autonomy, job security, staff engagement, secondary management approaches, and providing flexible working hours.

Figure 3 emphasizes flexibility of working hours, psychosocial training workshops, health promotions, internal communication, safe work environments, fostering tolerance, compassion, empathy, and stimulating employees' growth as suggested by combination of primary and secondary data.

In summary, Figure 1 in each category emphasizes individual and team-focused interventions, with an emphasis on individual well-being, skill development, and job-related factors. On the other hand, Figure 3 incorporates a broader range of interventions that focus on individual and team well-being, organizational culture, communication, and creating a supportive work environment. Figure 3 also shows in green that a combination of all three layers of interventions (individual, team, organizational) appear the most efficient. It needs to

be also noted that the final enhanced contextual burnout reduction model has 10 factors (stressors /protective buffers) instead of 9. This fundamental difference is explained more in detail in the following section.

### **10 factors as Part of the Final Contextual Model**

As can be seen both Figure 1 (9 factors) and Figure 3 (10 factors) include major factors (also named risk factors/buffers) for consideration of the interventions design. The 10 factors are recommended by 40 burnout reduction experts in the primary data, and suggest that all of them form an important part of the three-layered interventions and are described more in detail below.

**Workload:** Workload refers to the amount and intensity of tasks and responsibilities an individual has within their work environment. It can be measured in terms of the quantity and complexity of tasks, as well as the time and effort required to complete them. A balanced workload is important for maintaining productivity and preventing burnout.

**Values (passions/interests with work):** Values, passions, and interests are an individual's personal beliefs, desires, and areas of enthusiasm within their work. When a person's values align with their work, they tend to feel more motivated, satisfied, and engaged. It is crucial to find meaning and purpose in one's work to experience a sense of fulfillment.

**Rewards:** Rewards in the workplace can take various forms, including financial compensation, recognition, career advancement opportunities, and intrinsic satisfaction.

Rewards play a significant role in motivating individuals to perform well, fostering job satisfaction, and enhancing their overall work experience.

**Fairness:** Fairness refers to the perception of just treatment and equitable distribution of resources, opportunities, and rewards within the workplace. Fairness is important for building trust, fostering positive relationships, and promoting a sense of justice among employees.

**Community (Empathy, compassion, kindness):** Community within the workplace encompasses the social connections, support systems, and relationships among colleagues. Empathy, compassion, and kindness contribute to a positive work environment, fostering teamwork, collaboration, and overall well-being. Building a strong sense of community promotes a healthy and supportive work culture.

**Control:** Control refers to the level of autonomy and decision-making authority an individual has in their work. Having a certain degree of control over one's tasks and work processes can enhance job satisfaction and promote a sense of ownership and responsibility.

**Physical and Mental Well-being:** Physical well-being refers to the state of a person's physical health, including factors such as exercise, nutrition, and ergonomics in the workplace. Mental well-being encompasses psychological factors such as stress levels, work-life balance, job satisfaction, and emotional resilience. Promoting both physical and mental well-being is essential for maintaining overall health and performance.

**Balance between demands and resources:** Balancing demands and resources involves ensuring that the workload, time constraints, and available support and resources are in alignment. When demands outweigh resources, individuals may experience stress and

burnout. Achieving a balance between demands and resources is crucial for maintaining productivity, job satisfaction, and well-being.

Boundaries between work and personal life space: Setting boundaries between work and personal life is important to maintain a healthy work-life balance. Establishing clear boundaries helps prevent work-related stress from encroaching on personal life and vice versa. This may involve delineating specific working hours, avoiding work-related communication outside of those hours, and creating dedicated personal time.

Personal boundaries (between self and others): Personal boundaries refer to the limits individuals set for themselves in terms of their personal space, time, emotions, and relationships with others. Establishing personal boundaries helps maintain self-respect, autonomy, and well-being. It involves knowing one's limits and communicating them effectively to others to maintain healthy relationships and prevent feelings of being overwhelmed or violated.

### **Additional Inclusion and Distinction in Boundaries Between Self and Others in the Final Model**

One major difference and further enhancement between models in Figure 1 and Figure 3 was additional inclusion and distinction in boundaries between self and others. Which was highlighted for example, in an interview with a physiotherapist participant (ID 17) who mentions: *“not to ignore the importance of employees being aware of their own personal physical, emotional, mental boundaries. Physical understanding own body, the pains and tensions as they signify how much can be bared, assessing what is ok and what feels too much and being able to let others know if they are crossed. Emotional boundaries*

*are better explained by psychologists but usually if someone crosses them you are left feeling empty, sad, anxious, stressed or not feeling well. And mental boundaries include taking responsibility for own actions and emotions. Stating no without guilt by being in control of own mental processes. Honoring own boundaries protect against burnout.”*

This new layer of boundaries is added to the enhanced model in Figure 3 and can be justified more in detail in the following Chapter.

Figure 3 above contains a final enhanced contextual burnout reduction model that is also used for the specific burnout reduction guidelines (see Appendix section no.7) of the three-layered interventions to be used either individually or within the organizations and work places. It needs to be noted that this model partially derives from and enhances the model from Chapter 2, in Figure 1. Where figure 1 model derives from literature review and five theories explained in Chapter 2.

The following sections briefly presents evaluation of the findings.

#### **4.26 The Evaluations of the Findings**

The analysis of the findings and of the final enhanced contextual burnout reduction model from Figure 3, has further inspired specific guidelines, in a form of a 43-piece card deck (refer to the Appendix section 7). Designed to be easily used by employees in working environments.



#### **4.27 Development of the Enhanced Burnout Reduction INVIGORATE Model**

Figure 4 below, also contains a simplified (more every day user friendly) version of the final enhanced contextual burnout reduction model that has been called “INVIGORATE” which also creates a base for the card deck guidelines. It’s an acronym with easy to follow steps that individuals can implement on all three layers (Individual, Team and Organizational).

#### **Inspiration from Neuro-Imaging Studies**

The INVIGORATE model has been also inspired by previous burnout and brain research (e.g. Golkar et.al., 2014). Studies show that workplace burnout can cause changes to the brains, particularly affecting neural circuits. More specifically, people suffering from burnout have showed throughout R-f-MRI studies, developing more enlarged amygdala. Amygdala region, a part of the limbic system in the brain is associated with processing of emotional reactions. Another interesting finding from Golkar’s study (2014) highlights weaker connections between amygdala and the anterior cingulate cortex. Which is a brain region linked to emotional distress. As well as this, weaker correlations between activity in amygdala and the medial prefrontal cortex are discovered. The prefrontal cortex is associated with higher executive functioning (e.g. planning, organizations, memory etc.). These findings provide explanations, how burnout may cause difficulties in controlling negative emotions, have an adverse impact on cognitive functioning such as ability to pay attention, retain memories, learn new things, and increase overall risk for making mistakes and negative perceptions of work stress (e.g. Golkar et.al., 2014). These are often seen amongst individuals suffering from burnout. Any of the above experiences as well as the neurological changes to

the brain can be, however reversed with the right care such as an increased self-care (e.g. Sallon et.al., 2015), improving life style, regular rest (e.g. Scheepers et.al., 2019), increased exercise (e.g. Bretland & Thorsteinsoon, 2015), eliminating as many stressors (Kumar, 2016), activating positive relationships (e.g. Golkar et.al., 2014), and positive thoughts (e.g. Buruck, et.al., 2018). Based on the knowledge from above studies, the experts' opinions, the theoretical constructs and literature review from Chapter 2 as well as Golkar et.al. (2014; LaMotte, 2022) study of reversing burnout effects on the brain, the INVIGORATE model is developed (refer to Figure 4 below). With an aim to be used as a structural guideline in an interactive and user-friendly way to regularly practice individual self-care, enhance interaction in the team, and self-preservation within the organization or a place of employment.

### **Invigorate Model for Both Prevention and Intervention**

Note that the Invigorate model can be applied for both prevention and also for treatment. However, one needs to be mindful that the intensity and frequency of burnout intervention and prevention strategies vary based on a few factors, depending on the stage of burnout, individual requirements, and available resources.

Intensity:

- Intervention: Strategies for burnout involve more intensive methods to address immediate symptoms and offer support to individuals already experiencing burnout.
- Prevention: Strategies, employ less intense measures aimed at reducing burnout risk before it arises.

Frequency:

- **Intervention:** Depends on symptom severity and individual response to treatment. In acute cases, interventions may be more frequent initially, then being reduced as symptoms improve. Follow-up sessions may occur periodically for progress monitoring and ongoing support.
- **Prevention:** Generally involving more frequent but less intensive interventions.

The simplified Invigorate model is suitable for prevention purposes. However, for those already experiencing burnout, it's also strongly recommended to follow each step of the Invigorate model with guidance from healthcare specialists like psychologists, physiotherapists, and alternative therapists. This personalized approach targets individual needs, treatment intensity, and type effectively. As an example, while exercise is effective for prevention, its intensity, frequency, and type of exercise needs to be specifically tailored for each individual suffering from burnout.

## **2-step strategy approach to use INVIGORATE model**

The first step of using INVIGORATE MODEL involves a comprehensive assessment recommended to be conducted by a health care specialist in burnout field. The INVIGORATE model lists individual risk and protective factors that are recommended to be checked for along with other types of burnout assessments.

The second step, of INVIGORATE model application shall be targeting interventions tailored to specifically address earlier identified risk factors. The Invigorate guidelines contain a list of questions that are a part of the assessment on one side of the card (See

Appendix section 7). Followed by recommendations on the back side of each card of the INVIGORATE card deck.

The following Figure 4 contains a simplified version of final burnout reduction model-INVIGORATE MODEL.

**Figure 4**

*A Basic INVIGORATE ACRONYM MODEL for the Three-Layered Guidelines*

<b>I</b>	<b>Invest daily in overall mental and physical well-being</b>
<b>N</b>	<b>Notify if needing help</b>
<b>V</b>	<b>Values aligned with the authentic self</b>
<b>I</b>	<b>Inform others of boundaries/keep a strong line</b>
<b>G</b>	<b>Grow, learn things that feel rewarding</b>
<b>O</b>	<b>Only workload that you manage</b>
<b>R</b>	<b>Reduce any stressors</b>
<b>A</b>	<b>Activate and nurture positive relationships</b>
<b>T</b>	<b>Take time to rest regularly, balance work vs rest</b>
<b>E</b>	<b>Exercise 4 times a week for 30 min</b>

Figure 5 below also provides definitions of the INVIGORATE acronym with its' explanations.

**Figure 5**

*A Basic INVIGORATE ACRONYM MODEL with Definitions*

Side b

---

**Invest daily in overall mental and physical well-being**  
 =healthy diet, regular sleep time between 10pm-11pm,  
 drink around 3l of water per day, have a wide spectrum  
 of vitamins, cut alcohol or any substances etc.

---

**Notify if needing help**=ask for help if things are  
 overwhelming, what are your needs? wants?

---

**Values aligned with the authentic self**=speak opinions  
 honestly, decide according to your values, trust your  
 intuition (it's more scientific than it sounds)

---

**Inform others of boundaries/keep a strong line**=walk  
 away from toxic situations or people, you will recognize  
 that by feeling unhappy, angry, frustrated etc.

---

**Grow, learn things that feel rewarding**=spend time on  
 things that you feel passionate about, improve just a  
 tiny bit each day, try something challenging

---

**Only workload that you manage**=use to do lists, notice  
 resources, plan ahead, practice saying no at times,  
 prioritize, break big tasks into sub tasks

---

**Reduce any stressors**=identify what causes stress,  
 remove or minimize the stressors, search/ask for  
 resources, discuss different solutions with someone

---

**Activate and nurture positive relationships**=build  
 network of encouraging people

---

**Take time to rest regularly, balance work vs rest**= work  
 90 min, then 20 min break, learn relaxation techniques

---

**Exercise 4 times a week for 30 min**=increase serotonin  
 naturally= less stress, anxiety, low mood, more  
 resilience

---

As can be seen, the Invigorate model is a simplified version of the Final enhanced contextual burnout reduction model. The invigorate model has been further incorporated into a design of an invigorate card deck. The following section firstly describes how each section (individual, team and organizational) of the card deck emerged. Followed by introduction of the Invigorate 43-piece card deck.

## Individual Interventions Included in the Invigorate Model

The Invigorate model (Figure 4) comprises distinct sections dedicated to individual support, team support, and organizational support. These sections are designed to promote an individual's holistic mental and physical health, to enhance their contribution as a team member, and foster their well-being within the work environment or organization. Therefore, the acronyms of INVIGORATE are interconnected, as they collectively address the person's needs across all three layers of interventions.

## Current Results of II Incorporated Within Invigorate Model

Based on the study's findings, *several themes* emerged as effective and consistent interventions for reducing individual burnout. These include *psychotherapy, habitual self-care, healthy life-style, regular engagement in sports and exercise, practicing stress reduction techniques like breathing exercises, hypnosis, muscle tension relaxation, mindfulness practices, and cultivating a positive or neutral mindset with the support of cognitive-behavioral therapy (CBT)*.

In light of these findings, the INVIGORATE model incorporates specific components to encompass the effective aspects of individual support for burnout reduction. The elements include:

I: Invest daily in overall mental and physical well-being.

N: Notify others if needing help.

I: Inform others of personal boundaries.

R: Reduce stressors in one's life.

T: Take time to rest and achieve a work-life balance.

E: Engage in regular exercise.

These components collectively contribute to the development of mental and physical resilience, addressing the comprehensive needs of individuals experiencing burnout.

### **Team Interventions Included in the Invigorate Model**

The Invigorate model (Figure 4) comprises distinct sections dedicated to individual support, team support, and organizational support. These sections are designed to promote an individual's *holistic mental and physical health*, enhance their contribution as a team member, and foster their well-being within the work environment or organization. Therefore, the acronyms of INVIGORATE are interconnected, as they collectively address the person's needs across all three layers of interventions.

### **Current Results of TI Incorporated Within Invigorate Model**

Based on the study's findings, *several themes* emerged as effective and consistent interventions for reducing team burnout. These include *work stressors (increase control, stressors identification & acknowledgement); psychoeducation; support from team members; communication skills training (decision making, open conversation etc.); group mindfulness reduced workload; recreational art/sports creative therapy; decrease in criticism rather*

*increasing positive feedback; managerial training (including structural changes to management)* as effective burnout reduction team interventions.

In light of these findings, the INVIGORATE model incorporates specific components to encompass the effective aspects of team support for burnout reduction. The elements include:

N: Notify others if needing help.

I: Inform others of personal boundaries.

G: Grow, learn things that feel rewarding.

O: Only workload that you manage.

R: Reduce stressors in one's life.

A: Activate and nurture positive relationships.

These components collectively contribute to the development of team skills, and resilience, addressing the comprehensive needs of individuals within their work teams experiencing burnout.

### **Organizational Interventions Included in the Invigorate Model**

As previously mentioned, the Invigorate model (Figure 4) comprises distinct sections dedicated to all three layers of support. The three sections are designed to promote an individual's holistic mental and physical health, enhance their contribution as a team member, and foster their well-being within the work environment or organization. Therefore, the



acronyms of INVIGORATE are interconnected, as they collectively address the person's needs across all three layers of interventions.

### **Current Results of OI Incorporated Within Invigorate Model**

Based on the study's findings, *several themes* emerged as effective and consistent interventions for reducing organizational burnout. These include *flexibility of working hours, psycho-social trainings, overall health promotion such as information in a form of workshops, effective internal communication between and within departments and amongst colleagues, safe working environment also meaning having empathic kind compassionate, non-judgmental culture, and having professional opportunities to grow and learn.*

In the light of these findings, the INVIGORATE model incorporates specific components to encompass the effective aspects of organizational support for burnout reduction. The elements include:

I: Invest daily in overall mental and physical well-being.

N: Notify others if needing help.

V: Values aligned with the authentic self.

I: Inform others of personal boundaries.

G: Grow, learn things that feel rewarding.

O: Only workload that you manage.

A: Activate and nurture positive relationships.

T: Take time to rest regularly, balance work vs rest.

These components collectively contribute to the development of organizational support of the employees, providing time, space, and resources to lead more balanced work vs personal life and build resilience. Thus, addressing the comprehensive needs of individuals within the whole organization setting when experiencing burnout. The following section introduces how the Invigorate model (and its' themes) merged into specific guidelines in a form of a 43-piece interactive card deck. Designed to be used as a regular support for individual team, and organizational layer.

#### **4.28 Development of the INVIGORATE CARD DECK**

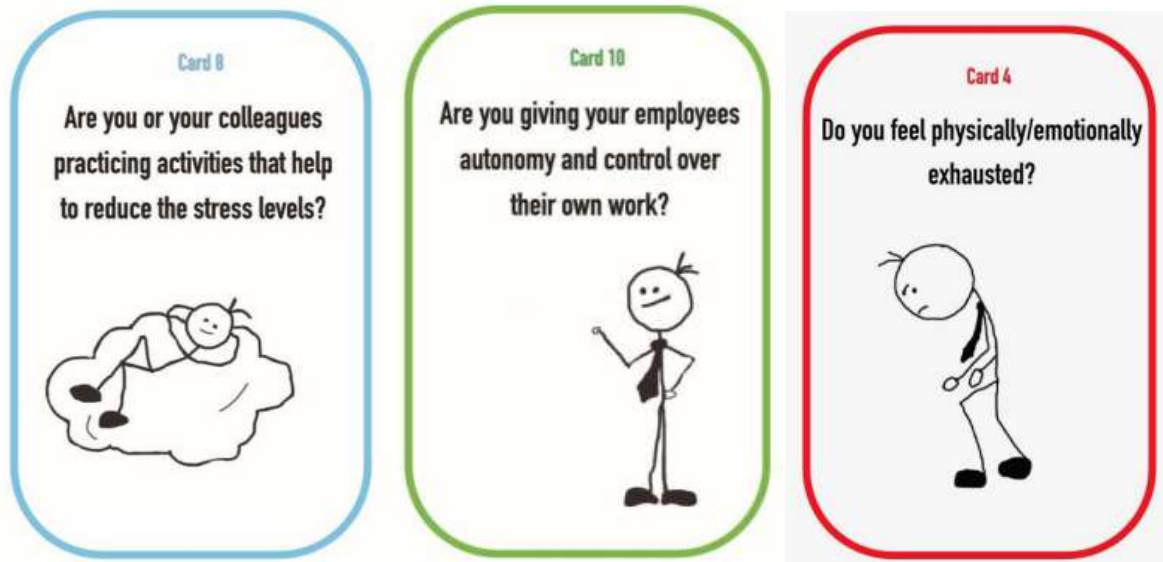
The Invigorate model, explained above was used to form specific guidelines. Which are created into a 43 -piece card deck. Of which 10 cards are designed, as a support for the whole organization (an employer), 15 cards are created as a support for the whole team (individuals within the team), and 18 cards are created as a self-help support for individuals who would like to prevent or heal burnout symptoms. The card deck has been created based on five burnout theories including the Resources Model, (Demerouti et.al., 2001), the Conservation of Resources model (Hobfoll, 1989; Halbesleben, & Buckley, 2004), the Job Demand-Control Model (Karasek, 1985; Van der Doef, & Maes, 1999), the Transactional model (Lazarus & Folkman, 1984) and the Work-life model (Leiter and Maslach, 1999) and their confirmation in the current research.

The current research shows that each theory covers an important aspect of burnout development, prevention and intervention. By taking into account work resources, demands, motivation, perception of stressors and coping mechanisms or experiences of work-life

balance. Alone these theories have certain limits that are discussed above, but together they complement each other and cannot be ignored as important puzzle pieces to burnout topic. Additionally, adding extra awareness, setting up and voicing personal emotional, physical and mental boundaries for protection, expressed as another crucial factor related to burnout, by the 40 burnout experts in the current study. This knowledge combined with suggestions for individual, team and organizational interventions based on proposal of the 40 experts along with archival research (Jaworska Awa et.al. ,2010; Burzynska et. al. ,2016; Ahola et.al. ,2017; Aryankhesal et.al. ,2019; Bagnal et.al. ,2016; Bresesti et.al. ,2020; Kumar ,2016; Maricutoiu et.al. ,2016; Sheepers et.al. ,2019; Murray et.al. ,2016; Ong et.al. ,2020; Panagioti et.al.,2017; Pijpker et.al. ,2019; Westermann et.al. ,2014). The entire 43-piece card deck can be found in the Appendix section 7, and shows that one side of the card asks a question to check whether that specific burnout contributing factor is present. Prompting the reader self-reflect. While the other side of the card provides remedies how to correct for that. In case that the individual has determined certain problematics. An example of 3 cards from the INIGORATE card deck are provided below in Figure 6.

**Figure 6**

*Examples of Cards from the Invigorate Card Deck*



*Note.* Blue card-is an example from a team section of the card deck; Green card -is an example from an organizational section of the card deck; Red card -is an example from an individual section of the card deck

With this, the overall research results section has been concluded. The following section discusses evaluations of the findings.

#### **4.29 Discussion of Findings and their Relevance to the INVIGORATE MODEL**

This section addresses the evaluation of the findings related to all three research questions.

### **The Evaluations of the 1<sup>st</sup> layer- Individual Intervention Support**

The first research question has been related to the - most effective burnout individual interventions. The empirical findings show that themes-psychotherapy, habitual self-care, practicing regular sports and exercise, regular practices of stress reduction techniques such as breathing, hypnosis, muscle tension relaxation, practicing mindfulness, applying a positive or neutral attitude and thoughts which can be enhanced via CBT (cognitive behavioral therapy), and so practicing a variety of effective coping mechanisms /resilience and self-confidence trainings have been found the most effective and consistent individual burnout reduction interventions. These are the findings reported by the primary as well as the secondary archival data.

There are some differences noted as well, where primary data revealed more in depth suggestions including regular healthy life style, positive thinking, manager support request, physiotherapy, work life balance (boundaries between work and personal life), boundaries (between self and others), keeping authentic to own values, ABC approach (problem solving approach), appreciation/savouring of rewards in environment (positive psychology), building own buffers, avoiding working beyond contracted hours, building emotional/physical resilience coping, practicing active stressors minimizing and upholding equity for oneself and others for individual interventions.

While, the secondary data analysis reveals additional themes such as communication skills training, psycho-education somatic body-sphere and workload as extra burnout reduction individual interventions. This type of individual support includes training someone psycho-somatic knowledge on how an individual reacts to stress, where in the body a person feels it and how to relieve such stresses, tensions and traumas, as an important remedy. It

incorporates mind, body and spirit into therapeutic healing work in a form of dance, breath work, mind-body exercises (Resnick, 2021).

From these empirical results, it becomes apparent how complex a treatment of burnout is and that there is no “one intervention fits all” answer. Rather through a talk therapy (psychotherapy) which has been reported as the most efficient intervention by the burnout professionals in the primary data. Such empirical evidence suggests that a person can explore areas in life where individuals feel stresses, their root causes, the initial time of symptoms occurrence. Psychotherapy offers understanding bodily responses, the perception and outlook of the individual stressors, individuals’ coping mechanisms and only then the treatment can be specifically chosen. Combining and applying the right mixture of all of the above suggested remedies. The following section discusses the current results of individual interventions themes in relation to the Invigorate model.

## **II through the Lens of the Transactional Model Analysis and the Job Demand-Control Model**

The empirical findings of both primary and secondary archival data show that psychotherapy, habitual self-care, practicing regular sports and exercise, regular practices of stress reduction techniques such as breathing, hypnosis, muscle tension relaxation, practicing mindfulness, applying a positive or neutral attitude and thoughts which can be enhanced via CBT (cognitive behavioral therapy), as the most effective and consistent individual burnout reduction interventions.

### **Psychotherapy, Habitual Self-Care, Practicing Regular Exercise, Positive Outlook...**

These findings are partially in line with the two theories that are included for the contextual framework in the current study: Transactional model analysis (Lazarus & Folkman, 1984) and The Job Demand-Control Model (Karasek 1985) and their link to burnout experiences, and especially to the first layer -individual support intervention. In particular, the transactional model analysis (Lazarus & Folkman, 1984) relates to an individual's perception of stress, with a notion that imbalances in job stressors, individual strains, and defensive coping may increase a risk of burnout. According to this model the stress is mediated by primary appraisal, influenced by individual factors (such as self-efficacy, coping success), that shapes the perception of identification of the stressor. While the secondary appraisal, identifies the ability to cope with the stressors (appraised as threatening vs challenging). Relating this theory to the current findings, it is apparent that if an individual perceives many stressors in life, in particular related to their work environment, and if that individual perceives that their ability to cope with the stressors is threatened in any way, there is an increased risk for burnout.

This is confirmed by the Transactional model (Lazarus & Folkman, 1984) which proposes that outcome of individuals' appraisals results either in burnout vs engagement. If an individual constantly appraises the stressors as threatening, and having maladaptive coping strategies, he or she may end up with a chronic mental or physical strain such as burnout (Folkman, et.al., 1986). This explains why psychotherapy, self-care, the regulation of negative thought patterns, practice of relaxation techniques, regular physical exercise, mindfulness as a philosophy of life, to name just a few are mentioned as the most important and effective remedies for an individual support and burnout reduction intervention. All of the mentioned techniques get a person in touch with their own resilience, improve their

perception and positive outlook, stimulate and calm one's nervous system and strengthen one's coping. That is the most crucial aspect of the first layer of individual support-intervention.

Holberg (2019), further finds that there are three major determinants in the stress response and whether an individual becomes at higher risk to develop burnout. She emphasizes that physiological differences in individuals' as well as their stress reactivity, along with differences in appraisal and coping are determinants for such risk. Highlighting that the individual's interpretation of what is at stake, their bio-psycho-social resources (e.g., good health, problem-solving skills, emotional intelligence, self-esteem, social support) and how well such resources are applied in a sustainable manner over time can either be a risk or protective factor. Further confirming why psychotherapy, self-care, and cognitive processing may be the right individual intervention.

It also, needs to be mentioned however, that although, the transactional model analysis (Lazarus & Folkman, 1984) explains one's perception of the stressors as well as their coping, this theory does not explain other areas of psychological resilience (such as overall physical and mental health and well-being of an individual, one's personality, sense of autonomy etc.). For this reason, the current study also uses the Job Demand-Control Model (Karasek 1985; Karasek & Theorell, 1990), as a base for the individual intervention tools which additionally covers the aspect of building one's autonomy and control as a contributor to an increased well-being to overcome certain stressors at work.



## **Job demands and Negative Impact on Health**

The findings of the current study are also partially in line with the Job Demand-Control Model (Karasek 1985; Karasek & Theorell, 1990). According to this theory, job characteristics influence individuals' psychological well-being. In particular, various job demands such as heavy workload, role ambiguity, and job-related strains cause stress for employees. This theory is later expanded by Van der Doef and Maes (1999) by inclusion of a couple of hypotheses to the model including the "strain hypothesis", proposing that high strain jobs are contributing to mental or physical illnesses and decreased overall well-being and "buffer hypothesis" focusing on the interactive effects between demands and control in which control reduces the negative effects of job demands on one's well-being. Therefore, stressors can be managed through application of various buffers such as job skills that allow individuals to obtain control and autonomy over their work (Karasek & Theorell, 1990).

The current results show that one of the most efficient ways of support of individuals is a support that grows one's psychological well-being by strengthening their physical and psychological health, levels of optimism and self-efficacy. Both primary and secondary data agree that this can be achieved by psychotherapy, increased self-care, practicing various relaxation techniques, mindfulness, physical exercise and learning to have a more positive outlook or at least neutralizing negative thoughts through cognitive behavioral methods. Even previous research shows that individuals do well in managing their stress levels, if they believe that they have capability to cope with work stressors and are more optimistic, (Zimmerman, 2000). Although, Jaworska-Burzynska, et. al. (2016) who examines in depth what content or type of therapy/intervention is the most efficient to reduce burnout, authors note that for example mindfulness techniques bring unpredictable results.

The current study, provides as one of the effective interventions also mindfulness. Confirming that through psychotherapy and the other proposed types of individual support any individual can learn the right set of tools that fit their own personal experience and cope better at work. As also shown in previous studies (Resnick, 2021). Such tools improve one's sense of well-being and decrease burnout, as reported by the experts, in the present study. Previous research, also states that burnout is a result from a prolonged work stress (Maslach et.al, 2001). Psychotherapy, or any increased self-care, and increased physical exercises contribute to serotonin production stimulation and decrease stress. These interventions provide the means to tackle any stressors at the initial stages and prevent them from becoming chronic (Ahola et.al., 2017). However, as the authors (Ahola et al., 2017) as well as the majority of 40 participants point out, the individual intervention appears to be effective for a short period of time, suggesting the need to apply additional layers of support also related to work and the whole organization in order to prolong the efficacy of burnout interventions.

Even a majority of 14 systemic search and meta-analysis used for the secondary analysis show a clear indication that the individual interventions on their own are not the most effective form of burnout support (e.g. Jaworska-Burzynska et. al. ,2016; Ahola et.al. ,2017; Aryankhesal et.al. , 2019; Awa et.al. ,2010; Bagnal et.al. ,2016; Pijpker et.al. ,2019; Westermann et.al. ,2014). Thus, the following sections address the team and organizational support.

## **The Evaluations of the 2<sup>nd</sup> layer- Team Interventions Support**

The second research question has been related to the examination of what are the most effective burnout interventions/remedies as part of the (work) team interventions. Both sets of primary and secondary data show that work stressors (increase control, stressors identification & acknowledgement), social support from team members; communication skills training (decision making, open conversation etc.) group mindfulness; decrease in workload; recreational art/sports creative therapy; decrease in criticism rather increasing positive feedback; and managerial training (including structural changes to management) are all effective burnout reduction team interventions.

The differences detected by primary data also include interventions for strengthening relationships at work; burnout awareness campaigns; well-being promotion at work; maintaining work-life balance; nurturing creativity; training democratic leaders; regular check in with the manager; letting go of control and perfection; thanking employees regularly for their work; performance optimization; more time for regular breaks & relaxation as important as efficient team burnout reduction interventions. As suggested by the 40 professionals.

While, secondary data suggest as an extra form of efficient team support also group CBT trainings and offer on-line trainings (that can be easier accessed than face to face as well as more opportunities for employees to grow), and rescheduling hourly shift.

## **Work Stressors Reduction, Social Support from Team and Manager, Trainings....**

Such findings are in line with Heinz (2021) who emphasize that the most common causes of burnout include a lack of manager's support, unattainable or unclear goals, working in a way that a person feels isolated, disconnected from team mates or managers. Even a lack

of recognition and excessive job demands are other causes of burnout that are noted in the previous research (Heinz, 2021). Thus, having regular talks or check ins with the manager and colleagues about the goals, processes, and achievements feels more motivating, gives employees a meaning and is rewarding.

The secondary research additionally suggest as an extra form of efficient team support also group CBT trainings and offer an on-line option for mental health trainings which can be accessed easier than face to face interventions. Especially now as through the pandemic the world is moving more towards the remote way of working. This is also in line with previous research that emphasizes that only in the U.S. burnout costs roughly 125-190 billion dollars in health care each year, and the more people work remotely and digitally, the harder it is to maintain the work-life balance because the home life and office overlap. Pointing out that the employers need to prioritize employees' wellness and mental health, make check ins and feedback a priority, offer mental breaks through the day (e.g. team meditation), setting clear and realistic expectations (Heinz, 2021).

From these results, it became apparent how important the team support and interventions for strengthening relationships in work environment are on top of one's built individual coping mechanisms when it comes to burnout reduction. Numerous studies show that positive social ties can reduce deaths (Brummett et.al., 2001), have an effect on stress and inflammation reduction, and overall well-being including sense of meaning and purpose in one's life (Brody, 2017), as well as they can increase self-esteem, and empathy towards others (Sepala, 2017) just to name a few. Such findings are in line with the notion that treatment of burnout, needs to include an attention and support of not only an individual but on an extra layer, include a support from their colleagues or team members. This can only be achieved, if a work environment provides the means and resources for the trainings of the team members who would then understand how this cooperative interaction influences

everyone's well-being and creates a more positive working culture for all. As well as prolong the efficacy of burnout reduction intervention and create a preventative healthy work environment (Ahola et.al., 2017). The following section discusses the current results of team interventions' themes in relation to the Invigorate model.

### **Team Interventions Through the Conservation of Resources Theory**

The current study's findings of team interventions are partially in line with the Conservation of resources theory (Hobfoll, 1989), also known as a theory of motivation. It suggests that human beings are highly motivated to protect their current resources (conservation-e.g. personal bonds, strength) and continuously acquire new ones (acquisition). Resources may be objects, states, conditions, and other aspects that humans put values to. Values of resources differ, depending on the individual experiences and situations (e.g. spending time with a colleague may be valuable for some and a threat for others based on the relationship between the two individuals). This theory includes four principles that are described in Chapter 2. However, for the purpose of explaining the link between findings of the second research question and a part of the Conservation of resources theory (Hobfoll, 1989), the focus is brought specifically to the fourth principle. Called "Desperation principle".

It proposes that when resources are close to or exhausted, human beings enter a defensive mode (by being more aggressive, irrational) to preserve the self (Hobfoll et.al., 2018; Vinokur & Schul, 2002). In general, the various principles collectively influence an individual's motivation, either by prompting them to avoid certain situations due to potential losses or by encouraging them to approach those situations for potential gains. This theory is

related to burnout in a way that certain work places may reinforce chronic stress by creating limited opportunities for renewal of resources (finances, social bonds etc.), or complete losses of them which in turn affects one's well-being (Halbesleben et. al. 2014; Buchwald & Hobfoll, 2004) and relationships between colleagues.

### **Interventions for Better Work Relationships, Collegial Support, Better Managing Workload Trainings...**

This theory explains the motivation behind someone's approaching or avoiding tendencies at work and its' connection with consequences, as well as the impact on someone's behavior or relatedness to others. Such impact has been confirmed by both primary and secondary data. Both sets of data emphasize that in order to make a person feel better in their work environments and to treat burnout, it is worth to invest into team interventions. Such investment into team's interventions has been found to be effective also in Otto et.al's study (2021), affirming that employees have the capacity to prevent burnout proactively through resource investment. However, taking proactive measures for prevention before escalating to burnout-related issues through employees' self-initiated efforts can significantly mitigate burnout levels.

The current study finds that specifically, effective team interventions are the ones promoting better work relationships, collegial support, better managing workload as a team, provide trainings for certain skills like improved communication, CBT (to regulate negative thought patterns), mindfulness. One explanation could be that such skills make one more aware of how their behavior impacts others, and increase empathy and compassion towards

their colleagues. These kind of team interventions promote the whole team's coping, preservation or fair share of resources/ acquisition as well as growth of the new ones.

It needs to be noted that this theoretical construct has been widely used, but also brings with it some criticisms due to the diverse loose definitions of resources, their fluctuations in dynamics and measurements across studies (e.g. Halbesleben et. al, 2014). The processes how the individuals determine a value of resources is the biggest limitation of the Conservation of resources theory and may be even more skewed due to cultural/societal/personal differences (Halbesleben et. al, 2014). For this reason, the current study also includes additional two theoretical constructs that are looked at in relation to the third research question – covering the whole organization intervention. As it is on the organizational levels of work environments, where specific culture, or set of values gets promoted. Thus, the following section will address the third research question, related to the the organizational interventions.

### **The Evaluations of the 3<sup>rd</sup> layer- Organizational Interventions Support**

The third research question related to the theme most effective burnout interventions as part of the organizational interventions. The combined primary and secondary data results find that the most effective organizational interventions include these 6 types (themes) of interventions: training, workshops , and psychoeducation (anything related to mental health including mindfulness and stress reduction techniques); culture of open communication and listening ; decrease in workload (job demands); stress reduction policies (including restructuring organization, enhancing organizational resilience, making changes to decrease stress and increasing resources); managerial involvement and support ; and creating safe

space/ the work environment belong to the effective burnout reduction organizational interventions.

There are also certain differences detected between primary and secondary data. Where primary data include extra suggestions for organizational intervention as indicated by the 40 burnout professionals who emphasize that work with psychologist/coach at work; teaching tolerance and compassion as a philosophy of organization; flexible contracts/working hours; growth opportunities; fun collective activities; training managers and/or hiring qualified and competent managers; higher budget for mental health; stress audit; purchase rehabilitation procedures for employees; individual approach to all employee are other important effective burnout reduction organizational interventions.

The secondary data, additionally and mostly emphasized that psycho-social support/ training/or peer support; on-line training; a refreshener of intervention that is run within organization; positive psychology strategies (such as appreciation in the workplace); and an opportunity or space for decision making are all too effective organizational interventions for burnout reduction. All of these have been incorporated into the invigorate model and card-deck guidelines. The following section discussed how these organizational interventions connect with the Invigorate model.

### **Organizational Intervention Through the Lens of the Job-Demands-Resources Model**

The current results show that any organization would benefit from creating a budget for trainings of managers and promotion and support of overall health/well-being amongst all employees including one on one sessions with coaches or psychologists to motivate and support employees. But also setting in place certain policies that could for example promote a



healthy balance between family/personal life and work including having paid sick days, covering costs for child-care, having policies of not contacting employees outside of working hours unless somehow compensated afterwards etc. Which would need to be prioritized by higher management.

### **Training/Psychoeducation, Open Communication, and Stress Reduction Policies ...**

These kind of findings and proposals for the third layer-organizational intervention are in line with the Job-Demands-Resources Model (Demerouti et.al., 2001), an occupational stress model. Consisting of specific risk factors linked to the job stress including physical, psychological, organizational and social demands or costs. That cause personal work life misbalance. An example of a demand includes time pressure and/or workload negatively affecting health and energy for a period of time, thus decreasing job performance (Demerouti & Baker, 2011).

Resources on the other hand, may involve physical, psychological, social, and/or organizational characteristics of the job, that include positive factors stimulating personal growth, learning and development (e.g. receiving a support from the higher management, gaining a positive feedback for a work, or having a sense of autonomy etc.; Shahnawaz et.al., 2018). This model also incorporates a distinction between workplace resources (e.g. social support) and personal resources (e.g. a specific personality trait like self-efficacy) (Jie, et.al., 2016). It is an alternative model of the demand-control model, explained above, and enhanced by working conditions along with both positive and negative outcomes in the current study's sense: someone's energy levels and a sense of well-being. When job demands and resources are high, one may expect high strain and motivation. While in low demands

and low resources, the expectations include absence of strain and motivation. In cases of high demands and low resources, there is a prediction of high job strains and low motivation. Oppositely, in cases of low demands and high resources, there is an expectation of no strain and high motivation (Shahnawaz et.al., 2018).

This particular model has been included to support the third research question in the current research, as often organizations in their higher up levels are responsible for arrangement of specific job demands/objectives, the resources that would be provided along with the building a specific culture and values that have the power either promote or dismiss physical and psychological well-being of their employees. That is also demonstrated through the primary and secondary data that conclude that specific trainings, investments, health promotion, more lenient free policies promote better overall health and satisfaction, thus in return higher productivity, longevity and less burnout at work. That was perhaps also a reason why the primary data finds as one of the three most efficient organizational interventions increase in employees' level of interest and motivation as through any talks the managers can detect each employees' demands and resources and reinforce the motivation through the increase of resources as indicated by the Job-Demands-Resources Model (Demerouti et.al., 2001; Shahnawaz et.al.,2018).

The current study's finding support previous research which also names several crucial features of positive work/organizational environment including creating a family-friendly work conditions, flexible working hours, protection from occupational risks, improving job security, possibility of child care opportunities, compensation for reduced employment, maternity and fraternity leave as effective organizational support for employees' work life balance (Kumar, 2016). Only if each employee's support at work is addressed uniquely and with different form of support based on their needs, they are able to

stay healthy and a company's overall culture boosts mental and physical health opportunities (Heinz, 2021).

It needs to be noted though, that the Job -demand-resources model has also its' own limit in its' non-clear interaction of demands and resources (Baker & Demerouti, 2017). As demands may have both a positive influence if they are provided as a challenge or negative influence if provided as an obstacle. Both demands and resources have a cumulative effect and cause spirals of gains and losses, which are the main part of the Job-Demand-Resources framework along with the workplace aggression. Therefore, the organizational environment is not only about resources, demands, but also about any other factors that can contribute to the overall better work/life balance. Similarly, Naji et. al. (2021), notes that the organizations that invest in social policies supporting employees through more involved unions, or offering longer paid vacations, thus providing resources not only decreased the prevalence of burnout but also create a space for better work-life balance.

### **Organizational Intervention Through the Lens of the Work-life Model**

For this crucial factor of work-life balance, the current study also includes the Work-life model (Leiter & Maslach, 1999) as it complements the other four theories mentioned above. Its' relevance to the burnout field cannot be ignored for its' comprehensive three individual dimensions (individual characteristics including energy, involvement and effectiveness) and six domains (including workload, control, reward, community, fairness, and values) related to the work environment. As well as, it explains the largest proportion of variables (individual and working environment) of burnout. The Work-life model (Leiter & Maslach, 1999) postulates a theory of burnout on a continuum scale. With burnout,

characterized as low energy levels (or exhaustion due to depletion from one's work), low levels of involvement (depersonalization or cynicism causing withdrawal from personal interactions), and low levels of effectiveness (feeling minimal accomplishments) (Gregory, 2015) on one end. Engagement on the opposite end. Burnout, can be viewed as a match vs mismatch, between a person (the three individual characteristics) and six specific work environment domains. This is also a reason, why it has been selected as the main "strongest" theoretical base, relevant for all three layers of support, as it covers the individual support as well as team and organizational support in the current study.

However, for the third research question the focus is being brought to the organizational support which if related to the Work life model would be linked to the workload, control, reward, community, fairness, and values amongst employees. It can be seen how the findings of the primary and secondary research suggest that if an organization invests in trainings and hiring kind supportive managers, they are more likely to promote an organizational culture of fairness, community, equal spread of workload and rewards as well as efficient communication and support of the employees if they feel that things are getting "out of hand, or too stressful". Further, supported by previous research (Naji et.al, 2021).

The findings suggest that communication, kindness and compassion amongst employees makes one feel more included and a part of community, therefore a protective factor related to burnout. Providing workshops related to awareness of burnout, improved overall health, or giving opportunities of flexible contracts and working hours, makes one feel more autonomous and in control as they can manage their own tasks accordingly. Such findings are supported by Naji et.al. (2021). Who propose that these kind of flexibilities, positive and safe working environment are promoting values that are often in line and close to human nature and healthily thriving in social working environments. All six worklife areas

have been previously found to be significant predictors of health-related outcomes (Brom et.al., 2015). It needs to be noted, that based on the 40 burnout experts in the current study, having a sense of community, manageable workload, feeling rewarded, experiencing aligned personal and work values, having a sense of being treated fairly and in control have been confirmed as important burnout reduction factors. Thus, being in line with Work-life model (Leiter & Maslach, 1999).

The above described theoretical models including the Resources Model, (Demerouti et.al., 2001), the Conservation of Resources model (Hobfoll, 1989; Halbesleben, & Buckley, 2004), the Job Demand-Control Model (Karasek, 1985; Van der Doef, & Maes, 1999), the Transactional model (Lazarus & Folkman, 1984) and the Work-life model (Leiter and Maslach, 1999) are all an important contributor to the burnout research field and its' knowledge related to prevention and intervention. Which has been also demonstrated in the current study. One area that was however, missing in the theories and came to the surface via the interviews of 40 experts is also an importance of being aware of own physical, emotional and mental boundaries, being able to identify them and let the surrounding know if individuals felt that they have been crossed. These boundaries include boundaries between self and others as well as boundaries in personal life vs work. For this reason, the boundary awareness, setting and their communication was also an additional inclusion in the final enhanced contextual burnout reduction model and for the structured guidelines card deck (See appendix section 7). The following section will address the consensus on multilayered support.

### Consensus on (Multilayered) Combined Interventions

Previous quantitative research (West et.al, 2016; Leiter & Maslach, 2016; Ahola et.al., 2017) literature proposes that the most effective support of people suffering from burnout includes a support on all three layers including the individual, team/ organizational levels. When compared to the individual, team or organizational interventions as the most efficient form of support if provided alone. Based on the primary and secondary data analysis, the current research supports such findings. Concluding that any burnout treatment or prevention needs to take into consideration all of these layers of support simultaneously. Previous research (e.g. Smith, 2016) and systematic research and meta-analysis (e.g Jaworska-Burzynska et. al., 2016; Ahola et.al. ,2017; Aryankhesal et.al. ,2019; Awa et.al. ,2010; & Bagnal et.al., 2016) are in line with the findings of the current study.

As Dr Justin Varney, who is an interim deputy director for Health and Wellbeing, Public Health England highlighted, workplaces are “a key setting for improving people’s mental and physical health, as well as their overall wellbeing” as it reduces sickness absence, lower the staff turnover and enhances productivity. He states that “employers can’t afford to wait until staff burnout happens” but rather taking care of employees in a preventative supportive manner (2013-2014; 2024). Such opinion is also shared by majority of experts included in the current study. Where for example, a participant ID 6 a GP states that *“I would definitely recommend support on all three levels-Individually, within the team and in the whole organization. On all three points. Because, individually a person can learn to relax as its not a given easy task for everybody and some of us need to be thought how. In a team, maybe learning to work as a part of the team, learning that sometimes we cannot individually control everything, and team can back us up at work. An individual within the whole team, and organization can learn to take critic with a distance. Not taking things personally. While*

*organizations also need to learn to value their employees, show them how much they value them by actively supporting their mental and physical health.”*

”Dr Justin Varney (2024) further mentions that interventions need to be individually fitted as *“Interventions in this space are a bit like chemotherapy, in the sense that you’ve got to try multiple variations to get the magic one that works for you... Emphasizing an individual factor but also the interaction of team and work place.*

Based on the above findings, the three-layered structured guidelines a 43-card deck for burnout reduction is designed and can be viewed in the Appendix section no. 7.

Overall, this chapter addresses the main objective of development of specific guidelines for effective three-layered intervention, for burnout reduction, consisting of an individual, within the team, and the whole organization support.

### **What has Been Learnt from the Current Research? Answers to the 3 Research Questions...**

The current study concludes that psychotherapy, any type of self-care, relaxation practices, sports and exercise, regulation of negative thought patterns belong to a few most effective individual interventions. There are noted many similarities amongst the report of the 40 burnout experts in the primary data and the secondary archival data. This has provided an answer to the first research question related to individual intervention.

The results of the current study also find that promoting good supportive relationships within the team, applying tools to reduce work stressors by providing team with psychoeducation, stressors acknowledgement, providing various team trainings about

burnout, well-being, group CBT, mindfulness, are all shown as the most effective tools for team burnout reduction and the team intervention. This provides an answer to the second research question related to team intervention.

Additional findings in the current study show that the most effective organizational interventions include providing opportunities for psycho-social trainings, and social support within the whole organization. These include trainings, workshops, psychoeducation, professional development days related to overall health promotion and burnout awareness. Along with flexible contracts related to working hours, promoting kindness and compassion, setting up effective and regular internal communication, creating space for relaxation and mindfulness practices, growth and learning opportunities, fun collective activities and trainings for competent and qualified “people managers”. This is an answer to the third research question related to organizational intervention.

Another finding is that there is no one treatment fitting to all, thus individual assessment of stressors and support need to be implemented by application of the three-layered intervention (individual, team and organizational). The intensity, frequency of burnout intervention and prevention strategies need to be based on the stage of burnout, individual requirements, and available resources.

Another major contribution of the current research includes the final burnout enhanced reduction model and it’s simplified INVIGORATE MODEL, that can be used by anyone seeking help or providing support for burnout on an individual, team and organizational levels.



### **Creation of Specific Guidelines -the Invigorate Model**

The current study develops specific burnout reduction guidelines for a three- layered interventions, and the burnout reduction model, while it also shows based on primary data, a consensus amongst majority of burnout reduction experts as well as more than half of the studies across the secondary data that all three layers (individual, team, organizational) of support is the most efficient when it comes to burnout prevention, recovery and treatment.

The present study introduces an enhanced burnout reduction model, as detailed in the preceding section, along with a simplified version termed the INVIGORATE model. This model incorporates stressors, buffers, and remedies designed to address burnout among individuals, presenting a practical application for clinical and organizational settings.

### **Brain Neuroplasticity and at least 30 days and Above Intervention Application**

It is recommended for inclusion in future research, proposed as a 31-day program for burnout reduction, with assessments conducted before and after implementation to evaluate its effectiveness. The duration of more than 30 days is suggested, aligning with the concept of brain neuroplasticity, as outlined by Goodwin (2023). Neuroplasticity refers to the brain's ability to establish new neural connections through the strengthening or weakening of existing pathways and the creation of new synapses. In the context of this study, consistent use of the INVIGORATE card deck and adherence to its recommendations for a minimum of 30 days may instigate the development of new habits and improved lifestyle patterns, consequently enhancing overall well-being and contribute to burnout reduction.

## Attempt to Seal a Gap of Previous Studies

One pitfall of previous studies, is the lack of definition of burnout, its' assessment, and in detail described intervention which creates heterogeneity of studies and difficulty in replications or even assessing what, when and how precisely is the most efficient part of intervention and its' longevity (e.g. Ahola et. al., 2017). The INVIGORATE model is a result of reviewing the theories including the Resources Model, (Demerouti et.al., 2001), the Conservation of Resources Model (Hobfoll, 1989; Halbesleben, & Buckley, 2004), the Job Demand-Control Model (Karasek, 1985; Van der Doef, & Maes, 1999), the Transactional model (Lazarus & Folkman, 1984) and the Work-life Model (Leiter and Maslach, 1999). The previous research on burnout reduction interventions (Jaworska Awa et.al. ,2010; Burzynska et. al. ,2016; Ahola et.al. ,2017; Aryankhesal et.al. ,2019; Bagnal et.al. ,2016; Bresesti et.al. ,2020; Kumar ,2016; Maricutoiu et.al. ,2016; Sheepers et.al. ,2019; Murray et.al. ,2016; Ong et.al. ,2020; Panagioti et.al.,2017; Pijpker et.al. ,2019; Westermann et.al. ,2014) and sharing expertise of 40 burnout field experts. Where:

- I stands for Investing daily in overall mental and physical well-being,
- N stands for notifying if needing help,
- V is associated with values being aligned with the authentic self,
- I is associated with informing others of boundaries,
- G is linked to growing, learning, anything that feels rewarding,
- O is linked to only taking on a workload that can be managed,
- R- is associated with reducing stressors.
- A stands for activating and nurturing positive relationships,
- T is associated with taking time to rest and

- E is linked to exercising regularly.

Overall, this model is linked to taking care of one self physically, mentally, emotionally, and having social connection, manageable workload and being able to set up boundaries. With the main aim to neurologically reverse the changes to the neural structures of the brain as demonstrated by Golkar et.al., (2014). The INVIGORATE model and the card deck can be applied individually, within the team, and the whole organization to support overall-better well-being and social work support. With a need, due to a continuous significant increase of burnout and its' detrimental consequences of staff turnover, long-term absenteeism from work, various injuries, accidents, mental and physical health issues amongst employees, more conflicts at work, decreased motivation, productivity and large sick leave costs (Elbarazi et.al., 2019).

#### **4.30 Summary of Chapter 4**

To summarize Chapter 4, the results' meanings and applicability show that burnout treatment is a very complex and deserves not "one treatment fits all" approach. Rather an individual assessment, understanding and specific targeting of individual stressors to counteract the effects or fully protect against burnout. These research findings also show that burnout shall not be treated as an issue of an individual, but rather as a part of a team, organization or the whole society. Thus, the most effective treatment needs to support an individual within their closest team, and as part of the whole organizational system. The end result of this research includes also the creation of the INVIGORATE card deck product as a present to the individuals, teams and companies with the hope of lowering the burnout occurrence, if followed as prescribed. It is strongly recommended that the future research

tests the efficacy of this card deck, as well as the IVIGORATE model after being used for at least 30-31 days on a daily basis within a work environment. In order to contribute to the neuroplastic change in the brain and thus improve one's sense of well-being (Goodwin, 2023).

## **Chapter 5: Implications, Recommendations and Conclusion**

This fifth and final chapter of the dissertation explores implications of burnout reduction interventions, and provides recommendations for future research with main focus on the efficacy of the three-layered support including the individual, team, and organizational interventions.

### **5.1 Introduction**

The current chapter discusses the research findings' contribution to burnout theoretical knowledge. The chapter addresses how to reduce burnout as it has been an increasing problem causing absence from work, illness, work dissatisfaction and likelihood of giving up on work (West et. al., 2016; Boritz et, al., 2006). For that reason, understanding burnout's effective intervention is needed. Along with an enhanced burnout reduction model and guidelines for the most effective three-layered intervention that includes and results in the individual, team and organizational support. Aiming to contribute to a better health of employees on individual level, within their team of colleagues and the whole organization. In order to promote a more balanced work-life environment, as well as save organizations' time, energy and resources.

### **The Combination of all Three Interventions has a Greater Protective Impact**

The current research identifies a few gaps including supporting employees only on a single level either on an individual level (e.g. Alarcon et.al. , 2009; Abedi & Schaufeli, 2012; Scott 2020), or organizational level (e.g Maslach and Leiter, 2016; Wiederhold, & Riva, 2018). The researched organizational interventions have not previously been specifically subdivided into team support, or the whole organization protective procedures. Which is applied in the current research. Such subdivision can make it clearer to better address the employees' needs separately in their team or department as well as within their organization as a whole, or for setting up precautionary steps to prevent or treat burnout. For this reason, this conclusive chapter discusses a finding that even though, the interaction of individual, team and organizational factors is complex, their combination on all three levels has a greater protective impact against burnout.

Furthermore, this qualitative study explores in-depth understanding of burnout reduction experts' experiences into their most effective burnout reduction interventions. Before the current research could have been conducted, the research design, its' procedure, the recruitment of the participants and assessment of its' ethical integrity have been evaluated by the UREC ethics committee at the UNICAF University (Refer to the Appendix section 1). That assure the ethical conducts of the research during which all five ethical principles are reinforced as recommended by Oxfam research ethics' guidelines (2020), and are discussed more in depth in Chapter 3 of this dissertation.

## **The INVIGORATE Model/ Card Deck Designed to Provide Support**

The qualitative method of the study gathers textual rather than numerical data (Farnsworth, 2019). Which generates the findings of the current research, that serves as a base of knowledge on which the INVIGORATE model has been developed. Along with the specific burnout reduction three-layered guidelines. Which were created into a form of a 43 burnout reduction card deck. As a contribution to clinical treatment and *support of people suffering from burnout, or for organizational mental health practices* and policy makers as the guidelines providing insight into how to support suffering individuals personally, within their team as well as within their company or organization. The final section of this chapter delves deeper into the limitations encountered throughout the study and presents thought-provoking recommendations for prospective research endeavors. Particularly noteworthy, is the suggestion of interventions, that is drawn from insights from non burnout sufferers but, from invaluable expertise of burnout reduction specialists. By embracing this alternative approach, future researchers can potentially unravel novel and innovative strategies aimed at ameliorating burnout and contributing to well-being in those who grapple with its debilitating effects. Such a methodology holds the promise of a deeper understanding of the intricate dynamics of burnout and opening new avenues for effective interventions and support mechanisms.

Moreover, the current study's multifaceted approach acknowledges the importance of incorporating diverse perspectives and expertise to comprehensively address the complex challenges posed by burnout, paving the way for a more holistic and informed course of action in the pursuit of individual, team and organizational well-being. With an additional recommendation that the future research shall test the efficacy of the developed burnout reduction guidelines and the final enhanced contextual burnout reduction model by using

quantitative method. In addition, future studies can assess the effectiveness of the three-layered interventions by conducting a comparative analysis both before their implementation and after their delivery.

The evaluation can encompass multiple time points, including three, six, nine, or more months following the interventions, *enabling a longitudinal investigation* of their impact. Such comprehensive approach can facilitate future understanding of how these interventions evolve over time and how they contribute to the overall well-being of the participants. Which is discussed more in depth in the later sections of this chapter. The current study marks a few limitations. Some of which include:

- the study being conducted in a limited time-frame, using a sample of a few case studies. Therefore, no generalizations to the whole broad wide population can be made
- as well as the fact, that the Invigorate model including the final enhanced contextual burnout reduction model along with the guidelines (in a form of a card deck) shall yet to be tested in the future research
- future studies are advised to test the efficacy of the three-layered interventions using longitudinal data collection, thus on several occasions and for several years. As well as across different populations of various cultural backgrounds, compare genders, ages, larger sample size to allow generalizability of study results

Overall, the current study still provides a valuable rich insight into a broader three-layered support when it comes to burnout reduction. For this reason, the ensuing section, starts with the explanation of some of the primary contributions made by the present research.



## 5.2 An Overview of the Main Contributions

One of the main contributions of the current research lies in achieving the primary objective which has been developing a burnout reduction model, named *INVIGORATE model* and creating an easy to use -supportive tool that includes *the three-layered guidelines in a form of a deck of 43 burnout reduction cards* (see Appendix, section 7). Along with a *final enhanced contextual burnout reduction model*. Therefore, primary and noteworthy contribution of this research lies in the integration of the card deck as an innovative and supplementary tool, working in tandem with existing treatments, to foster prevention and support for individuals experiencing burnout. It introduces a novel approach, that empowers individuals to not only address their burnout but also to cultivate a stronger sense of support and resilience within their work teams and, by extension, to the entire organization.

## 5.3 INVIGORATE Card Deck as Part of the Intervention Strategy

The incorporation of the INVIGORATE card deck as part of the intervention strategy opens up new horizons for tackling burnout from a multi-dimensional perspective. Via its' implementation, individuals are provided with an accessible and interactive resource that complements traditional treatments, offering a holistic and comprehensive approach to combat burnout's debilitating effects. The INVIGORATE card deck encourages open and constructive communication among team members, allowing them to assess the situation within team, share members' experiences, concerns, and coping mechanisms. With a potential result, in creating a culture of empathy, understanding, and mutual assistance, which are vital in reducing burnout's impact and promoting overall well-being. By effectively integrating the INVIGORATE card deck into the treatment, this research paves the way for a

more enriched and inclusive approach to burnout prevention and support. It not only addresses the individual's well-being but also recognizes the significance of a collaborative and supportive work environment in reducing burnout risks and promoting long-term resilience. Thus, the implications of this contribution extend beyond the scope of individual interventions, as it fosters a transformative shift in how organizations approach employees' well-being. By cultivating a more sustainable and thriving work culture.

#### **5.4 Methodology Contribution**

Another valuable contribution of the current research lies its adoption of a qualitative approach, which involves conducting in-depth interviews with burnout reduction professionals hailing from four distinct fields. These fields encompassed participants from the Human Resources (HR) sector, general practitioners, psychologists, and physiotherapists. The current study applies a multi-faceted qualitative methodology which offers a deeper understanding of the complexities associated with burnout. The data collected through these interviews provide rich and nuanced information, shedding light on the diverse approaches employed by professionals in different fields to combat burnout effectively.

#### **The Inclusion of Professionals from Various Backgrounds**

The inclusion of professionals from various backgrounds, further strengthens the study's contribution. It allows for a holistic exploration of burnout reduction strategies, drawing from a wealth of knowledge and experiences that can lead to more robust and well-rounded conclusions. To further, strengthen the conclusions, triangulation for data analyzes is

applied. Specifically using both primary and secondary data, which is compared. The expansiveness of secondary archival data also lies in inclusion of 14 meta-analyses and systematic searches (e.g. Ahola et.al. ,2017; Aryankhesal et.al. ,2019; Bagnal et.al. ,2016; Bresesti et.al. ,2020; Ong et.al. ,2020). Where a comparison of primary and secondary data is then further viewed through the five different theories including the Job Demands Resources Model (Demerouti et.al., 2001); the Conservation of Resources model (Hobfoll, 1989; Halbesleben, & Buckley, 2004); the Job Demand-Control Model (Karasek, 1985, Van der Doef, & Maes, 1999); Transactional model (Lazarus and Folkman, 1984) and the Work-life model (Leiter and Maslach, 1999).

There have been more contributions, which are discussed more in depth within the implication sections of this dissertation. Thus, the following section now starts with, and zooms into a more comprehensive analysis of the implications stemming from the current research related to the individual interventions.

## **5.5 Implications Related to the Individual Interventions**

The findings of the current study present promising prospects for the field of burnout reduction and management. The incorporation of specifically tailored interventions are aimed at addressing burnout on an individual level and carry benefits for both clinical practice as well as benefiting organizational contexts. As part of the study examines the most effective burnout individual interventions. The findings of primary and secondary archival data of the following 14 systematic researches and meta-analyses (Jaworska Awa et.al. ,2010; Burzynska et. al. ,2016; Ahola et.al. ,2017; Aryankhesal et.al. ,2019; Bagnal et.al. ,2016; Bresesti et.al. ,2020; Kumar ,2016; Maricutoiu et.al. ,2016; Sheepers et.al. ,2019; Murray et.al. ,2016; Ong

et.al. ,2020; Panagioti et.al.,2017; Pijpker et.al. ,2019; Westermann et.al. ,2014) propose several types of the most efficient individual support. More specifically, psychotherapy; habitual self-care; self-confidence training; working on social support from family, friends and colleagues; practicing regular sports and exercise; having habits of practicing various relaxation techniques, like breathing, hypnosis, muscle tension relaxation, mindfulness; and other effective coping and resilience building techniques, as well as applying a positive or neutral attitude and thoughts that are enhanced through the CBT (cognitive behavioral therapy), all belong to the most effective and consistent individual interventions.

There have also been other additional suggestions with a few differences proposed between primary and secondary data for the individual interventions. Where the main difference in suggestion between the two was, that the secondary data analysis also includes communication skills training, psycho-education, somatic body-sphere and workload decrease an additional important types of individual support. Suggested through a previous systematic search evaluation (e.g. Jaworska-Burzynska et. al., 2016).

Other differences being reported by primary data also suggest regular healthy life style, positive thinking, manager support request, physiotherapy, work life balance (boundaries between work and personal life), boundaries (between self and others), keeping authentic to own values, ABC approach (problem solving approach), appreciation/savouring of rewards in environment (positive psychology), building own buffers, avoiding working beyond contracted hours, practicing active stressors minimizing and upholding equity for oneself and others. Noting, how interviews from burnout reduction professionals enrich and suggest many more effective interventions in clinical and organizational settings.

As can be seen the primary data, gathered from interviews with burnout reduction professionals, reveals a comprehensive range of individual interventions that go beyond the

conventional strategies. These include elements like boundary-setting, authenticity, and value alignment, indicating a nuanced and holistic approach to addressing burnout. The secondary data, drawn from a previous systematic search evaluation (e.g. Jaworska-Burzynska et. al., 2016) emphasizes additional individual interventions, such as communication skills training, psycho-education, somatic body-sphere techniques, and workload reduction. These suggestions complement the primary data by offering specific techniques and approaches to support individuals in managing and reducing burnout. The primary data underscores the significance of a comprehensive, individualized approach to burnout prevention and reduction, while the secondary data provides evidence-based techniques that can be integrated into intervention strategies. The combined insights from both sources, however contribute to a more robust understanding of effective interventions for addressing burnout in clinical and organizational settings. These suggestions are incorporated into developing of the Invigorate model and Invigorate card deck.

### **There is No “One Intervention Fits All” Remedy**

Summing up, the results related to the individual interventions however, the findings show the complexity of burnout treatment. Mainly due to the finding that there is no “one intervention fits all” remedy. As primary data of forty burnout reduction professionals shows, a talk therapy (psychotherapy) appears to be the most frequently reported as “the most effective” type of burnout reduction support for individual intervention. Similarly, psychotherapy has also been suggested even by the secondary data as one of the most effective types of individual interventions. A plausible rationale behind this finding may lie in the nature of psychotherapy, which affords individuals the space and opportunity to delve into the intricacies of their lived experiences, pinpointing sources of stress, discerning their

fundamental origins, and comprehending how these stressors initially manifest (Van Dam, 2021). The interventions for prevention and treatment appear to be similar in nature. Meaning covering cognitive aspect, emotional aspect, physical aspect etc. Although as discussed in the fourth Chapter related to the current study's results, the frequency and intensity of interventions shall differ, depending on nature of individual needs', and the stage of burnout that a person is in. Thus, recommending the two-step strategy for each individual to firstly obtain an in-depth assessment to determine in which stage of burnout a person may be. Where, as a second step of the strategy, a specific treatment plan is decided by a health care professional (a therapist, Gp, physiotherapist and others). The results clearly show that discussions with a therapist are a crucial step of individual support as a therapist appears to be able to apply the two-steps strategy and support an individual throughout. The following section dives into deeper justifications.

### **Psychotherapy as One of the Most Effective Individual Support**

Moreover, psychotherapy facilitates a deeper awareness of one's bodily responses to stress, granting insight into the unique perspectives on the encountered stressors. By unraveling these facets, individuals gain a clearer understanding of their coping mechanisms and, subsequently, enable the formulation of treatment strategies tailored precisely to address the triggers that are distinctive to each individual. Through such personalized approach, psychotherapy can be a potent tool in empowering individuals to confront and manage their stressors more effectively, fostering holistic and enduring well-being (Van Dam, 2021). This could also explain why so many varied types of strategies and techniques have been suggested between both primary and secondary data. Within the context of psychotherapy, individuals have the opportunity to explore and engage with those specific tools and coping

strategies in collaboration with their therapist, who can adeptly guide and instruct them. Through this therapeutic alliance, individuals receive tailored support and guidance, allowing them to acquire the necessary skills to implement these strategies effectively in their daily lives (Van Dam, 2021).

Results also show that the types of individual interventions suggested by 40 burnout reduction professionals in primary data have been predominantly in line with findings of the archival data (Jaworska Awa et.al. ,2010; Burzynska et. al. ,2016; Ahola et.al. ,2017; Aryankhesal et.al. ,2019; Bagnal et.al. ,2016; Bresesti et.al. ,2020; Kumar ,2016; Maricutoiu et.al. ,2016; Sheepers et.al. ,2019; Murray et.al. ,2016; Ong et.al. ,2020; Panagioti et.al.,2017; Pijpker et.al. ,2019; Westermann et.al. ,2014). Confirming that what is suggested by research, appears to also work in clinical fields of psychotherapy, physiotherapy, and offices of general practitioners and in HR departments when supporting individuals with burnout.

There has however been, a limitation in determining what was the absolute most effective or significant type of intervention as secondary archival research (e.g. Ahola et.al. ,2017; Aryankhesal et.al. ,2019; Bagnal et.al. ,2016) used a variety of heterogenous studies, when it comes to the type of interventions, their precise application, the timing and their combinations. Even though, for exploring the effective burnout interventions only the significant findings have been included for the analysis. These results cannot be generalized or conclusive. Similarly, the frequency of report in primary data may have given some insight into the efficacy of the types of interventions, the fact that the results are based on only 40 participants, more research is still needed. To at least partially correct for this, in an attempt to collect the most efficient tools for the types of interventions, the participants are asked to report in their interviews only the methods that they have been having the best results with

over the years throughout their career. It is through these interviews, that psychotherapy is indicated as one of the most efficient interventions.

### **The Challenges of Exploring the Efficacy of Burnout Interventions**

The main challenges of exploring the efficacy of burnout interventions can be also linked to the fact that until today burnout does not have an official diagnosis, since it's not a medical condition (Chirico, 2016; WHO, 2019), thus a manifestation of certain symptoms may vary from person to person. As expected, an implication of the current study is that talk therapy, CBT, strategies to enhance coping mechanisms are found as the most frequently reported effective individual interventions. Even the previous studies have indicated that individual personality characteristics such as emotional instability like ineffective coping, not controlling emotions or impulses, having low self-efficacy, pessimism, perfectionism and low levels of a tolerance for new ideas may be acting as moderators of burnout (e.g. Magnano, et.al., 2015, Scott, 2020). Confirmed by other studies (e.g. Scheepers et.al., 2019; Buruck, et.al., 2018; Murray, et.al., 2016) and highlight how changing or supporting one's perception, thinking patterns, by applying to individuals the cognitive-behavioral therapy, cognitive restructuring, didactic stress management, relaxations, mindfulness can decrease or prevent burnout. Suggesting potential benefit to support mental and emotional well-being to counteract such moderators.



### **The Findings are Partially in Line With the Theories**

The findings of individual interventions counteracting the above stressors are partially in line with the Transactional model analysis (Lazarus & Folkman, 1984) and The Job Demand-Control Model (Karasek 1985) and their link to burnout experiences, and especially to the first layer -individual support intervention. These two theories have been included for the contextual framework in the current study. Specifically, because the transactional model analysis (Lazarus & Folkman, 1984) relates to an individual's perception of stress. There is a notion that imbalances in job stressors, individual strains, and defensive coping may increase a risk of burnout. This model postulates that the stress is mediated by primary appraisal, influenced by individual factors (such as self-efficacy, coping success), that shapes the perception of identification of the stressor. While the secondary appraisal, identifies the ability to cope with the stressors (appraised as threatening vs challenging). Transactional model analysis (Lazarus & Folkman, 1984) can be related to the current findings as it is apparent from the interviews that the burnout reduction professionals in the current study target support of individuals who perceive many stressors in life, especially in their work environment, and that their ability to cope is threatened. Which results in their increased risk for burnout and that is the area that the burnout reduction professionals attempt to provide interventions for.

### **In line With the Transactional Model**

The Transactional model (Lazarus & Folkman, 1984), furthermore as a theory confirms that outcome of individuals' appraisals results either in burnout or engagement. If an individual constantly appraises the stressors as threatening, and has maladaptive coping

strategies, he or she may end up with a chronic mental or physical strain such as burnout (Folkman et.al., 1986). This notion of the theory may explain why psychotherapy, self-care, regular physical exercise, the regulation of negative thought patterns, practice of relaxation techniques, mindfulness as a philosophy of life are mentioned, as the most consistent and effective remedies for an individual support and burnout reduction intervention. These types of interventions get a person in touch with their own resilience, improve their perception and positive outlook, stimulate and calm one's nervous system that were shown to strengthen one's coping (Van Dam, 2021).

### **In Line with the Job Demand-Control Model**

Another theoretical concept applied in the current study has been the Job Demand-Control Model (Karasek 1985; Karasek & Theorell, 1990), serving as a base for the individual intervention tools which additionally covers the aspect of building one's autonomy and control as a main contributor to an increased well-being to overcome certain stressors at work. The findings of the current study are also partially in line with the Job Demand-Control Model (Karasek 1985; Karasek & Theorell, 1990). As the model's theory, postulates that the job characteristics influence individuals' psychological well-being. Especially, job demands such as heavy workload, role ambiguity, and job-related strains that cause stress for employees. This theory further includes a couple of hypotheses such as "strain hypothesis" suggesting that high strain jobs are contributing to mental or physical illnesses and decrease overall well-being. The model's second hypothesis, so called "buffer hypothesis" postulates the interactive effects between demands and control in which control reduces the negative effects of job demands on one's well-being (Van der Doef & Maes, 1999).

## **Relating the Job Demand-Control Model to the Current Findings**

Relating this theory to the current findings it can be seen that this model is relevant to all three layers of the interventions (Individual, Team and Organizational). However, when specifically focusing on the individual interventions, the results have shown that the burnout reduction experts report the most effective way of individual support by growing one's psychological well-being. Specifically, by strengthening the physical and psychological health through self-care and exercise, via recommending to burnout sufferers practicing relaxation techniques, positive thinking, strengthening coping and resilience. These are reported as the most effective types of individual support and agreed by both primary and secondary data. As findings suggest psychotherapy, increased self-care, practicing various relaxation techniques, mindfulness, physical exercise and learning to have a more positive outlook, coping, building self-confidence or at least neutralizing negative thoughts through cognitive behavioral methods are all offering that individual support.

These current research results are in line with Van Dam (2021) who discusses clinical perspective on burnout, its' diagnosis classification and treatment. Van Dam proposes that support or treatment of people suffering from burnout shall include three phases (initial treatment, stress reduction, prevention). Starting with the initial treatment phase involving a crisis characterized by severe fatigue and distress. During this phase people who suffer from burnout still attempt to fulfill work and personal obligations but face challenges like making mistakes, experience a lack of concentration, emotional instability, and increased conflicts.

Such challenges being faced at the beginning of treatment is also apparent throughout the interviews with burnout reduction experts, in the current study. Who report how some of their clients/patients may feel overwhelmed or unable to do anything, and how that further leads to the feeling of despair. It is this moment when a patient and therapist alliance can help

to regain the ability to handle their responsibilities again. Psychotherapy is very valuable as the role of a therapist is to also discuss the slow recovery process. Mostly, because burnout results from prolonged stress, for which there is no quick fix and restoring balance and allowing the body to recover takes time. Providing enough time for an individual suffering from burnout during treatment is also recommended by Van Dam, who emphasizes that therapist shall enable time for recovery and create time for self-reflection by reducing responsibilities for a few weeks. As burnout condition causes cognitive impairments contributing to indecisiveness, as executive functioning is negatively affected (Van Dam, 2021).

### **Relaxation Techniques and Healthy Life Style as a Part of Intervention**

The current study also finds that relaxation techniques are prevalently used by the burnout reduction experts. Its' main goal is to restore the stress system to normal levels. The experts, in the study recommend to start with low-stress non-work activities for short durations, followed by rest or relaxation, promoting a healthy lifestyle, including proper nutrition, moderate exercise, and healthy sleep patterns. Thus, all of these suggestions are also incorporated in the INVIGORATE card deck, as reminders for individuals to regularly participate in such self-care activities and lead healthy life styles. This finding, is also confirmed by Van Dam (2021). Who additionally proposes a second phase of burnout treatment in his article. Postulating that in his second phase recommendation for burnout treatment, the stress reduction is the most essential part for individuals suffering from burnout.

## **Prevention as Important as Treatment**

The experts on reducing burnout stress the importance of interventions that go beyond general self-care and stress reduction. This includes maintaining a healthy lifestyle, appreciating positive aspects of the environment (positive psychology), establishing personal boundaries, avoiding overworking, and actively minimizing stressors. Additionally, practices like fostering positive thinking, seeking physiotherapy for posture and pain prevention, and creating a balance between work and personal life, along with using the ABC approach, can be effective problem-solving strategies. The ABC approach involves understanding and challenging irrational or unhelpful beliefs (B) that may be contributing to negative emotional reactions (C) in response to specific situations or events (A). This method is particularly useful for identifying contributing factors to problems and finding ways to prevent them in the future.

These findings align well with the third phase of burnout treatment outlined by Van Dam (2021), who emphasizes the value of prevention and learning from past experiences as integral parts of individual intervention. Understanding the individual factors that contributed to burnout and taking steps to prevent its recurrence are crucial. Van Dam discusses how factors such as a sense of control, social support, effective time management, and addressing dysfunctional thought patterns are essential for providing individual support.

Overall, the current research also further confirms previous research that shows that individuals do well in managing their stress levels, if they believe that they have capability to cope with work stressors and are more optimistic, (Zimmerman, 2000) or learn the right set of tools that fit their own personal experience and cope better at work (Resnick, 2021). As is demonstrated by the fact that psychotherapy, CBT methods (for restructuring irrational thoughts) or any increased self-care interventions are all listed to provide the means to tackle

stressors at the initial stages and can prevent them from becoming chronic as found by Ahola et.al. (2017).

### **Individual Support is not Enough**

Based on the findings of the current research the individual support is an important layer of healing for people suffering from burnout. Even though, some systematic review and meta-analysis on physicians find that the individually based interventions have very small significant reductions in burnout (Panagioti, et.al 2017). These authors argue that, there is no evidence that the interventions' content, including mindfulness, communicational, or educational components, or their intensity increase benefits on individual levels when it comes to burnout reduction. Some studies also suggest that the individual intervention on its own is only effective for a short period of time (e.g. Ahola et al. , 2017, Alarcon, 2009). Emphasizing that additional layers of support also related to team and the whole organization may prolong the efficacy of the treatment. Even though, the current research does not study the length of the efficacy of the interventions, the study does find the importance of including an additional support of an individual beyond the individual intervention but also within their team, and the whole organization. Thus, the following section will look at the implications of the current study specifically related to the team interventions.

### **5.6 Implications Related to the Team Interventions**

The implications of the current study additionally present promising prospects for the field of burnout reduction and its' management of specifically tailored interventions at a team

level with potential benefits for organizational environments. While exploring the most effective team burnout interventions, the findings of the current study show that decrease in work stressors (increase control, stressors identification & acknowledgement); social support from team members; communication skills training (decision making, open conversation etc.); group mindfulness; decrease in workload; recreational art/sports creative therapy; decrease in criticism rather increasing positive feedback; and managerial training (including structural changes to management) are all shown as consistent effective tools for team burnout reduction specifically for a team intervention.

With additional suggestions indicated by primary data of the 40 burnout experts where interventions for strengthening relationships at work; burnout awareness campaigns; well-being promotion at work; maintaining work-life balance; nurturing creativity; training democratic leaders; regular check in with the manager; letting go of control and perfection; thank employees regularly for their work; performance optimization; more time for regular breaks & relaxation as important effective burnout reduction team interventions.

The secondary data, includes as an extra form of efficient team support also group CBT trainings; rescheduling hourly shift; offer on-line trainings (as they can be accessed easier than face to face) and offer opportunities for employees to grow as suggestions for effective team interventions.

Overall, many interventions were similar between primary and secondary data. The main differences are that secondary data provides suggestions for effective team interventions that are evidence-based practices or strategies shown effective in studies (e.g. Aryankhesal et.al. ,2019). While, burnout experts provide more suggestions in the interviews that are shown effective in their every-day clinical/organizational settings. These additional suggestions from the experts may be as an inspiration for deeper investigation in future

studies. However, what is apparent that together both primary and secondary data provide more robust understanding and support for team interventions.

### **Challenges in Determining the Most Effective Type of Team Support**

Similarly, as indicated in the section for the implications of the individual interventions, even for the team intervention, there has been a limitation in determining what is the most effective type of team support within the secondary archival research (e.g. Ahola et.al. ,2017; Aryankhesal et.al. ,2019; Bagnal et.al. ,2016). Due to the fact, that previous research uses a variety of heterogenous methods throughout the studies related to the type of interventions, the duration and their combinations (Van Dam, 2021). The interventions in previous research do not subdivide the type of support into team and organizational throughout the literature rather refers to them as organizational interventions (e.g. Moss, 2019).

### **Interventions for Strengthening Relationships at Work as Team Intervention**

For this reason, the researcher in the current study makes such a separation according to whether the intervention had an implication for the team within the work place or the whole organization. It is important to acknowledge, however, that a potential limitation of the present study could be the potential for researcher bias in categorizing interventions as either team or organizational in nature. As well as the comparisons of effectiveness between interventions in secondary data includes only significant findings for the analysis ((Jaworska Awa et.al. ,2010; Burzynska et. al. ,2016; Ahola et.al. ,2017; Aryankhesal et.al. ,2019;



Bagnal et.al. ,2016; Bresesti et.al. ,2020; Kumar ,2016; Maricutoiu et.al. ,2016; Sheepers et.al. ,2019; Murray et.al. ,2016; Ong et.al. ,2020; Panagioti et.al.,2017; Pijpker et.al. ,2019; Westermann et.al. ,2014). However, the repeated frequency reported throughout primary data collection gives more detailed insight into the efficacy of the types of interventions applied by burnout reduction experts. As burnout reduction experts in the current study, apply different methods throughout their career and are specifically asked to report only the tools with the best results that they have noticed over the years. The interviews indicate that working on good relationships within work environment and around colleagues is one of the most efficient team interventions reported by primary data.

### **Team Cooperation and Communication**

Findings of the current study highlight not only the importance of interventions for strengthening relationships at work but also having employees cooperating as a team, or enhancing positive communication between them. These team characteristics are further confirmed by numerous studies which too show that positive social ties can reduce stress and contribute to inflammation reduction, and overall well-being. Including giving a higher sense of meaning, direction and purpose in one's life (Brody, 2017). The close connections between employees also contribute to an increased self-esteem, and empathy towards others (Sepala, 2016). One explanation can also be that such positive interactions make employees a part of a team community where individuals may feel more open to address or share any issues and being understood. The important interactions within a work environment have been also shown in a survey targeting 7500 full time employees by Gallup. Which lists top five reasons contributing to burnout that have been specifically organization related (Wigert & Agrawal, 2018). Some of these factors that have been negatively impacting on burnout

including unfair treatment at work, unmanageable workload, lack of a role clarity, lack of communication and a support from the manager. These are marked as risk factors directly increasing the prevalence of burnout.

Another additional risk factor for burnout that has not only been related to the interaction of the team members, but to work itself is holding a monotonous job position (e.g., Mayo Clinic, 2021). For this purpose, providing regular trainings and increasing personal growth within companies or organizations and/or upgrading various skills are seen as beneficial strategy keeping employees interested and to prevent burnout. As the current study finds. Therefore, emphasizing that treatment of burnout, can not only rely on individual support but needs to also include support from the colleagues and/or the team managers. These findings support previous research that suggests that restructuring tasks, increasing a supervision support, having a sense of work control, enhancing employees' decision-making processes, creating a family-friendly work conditions, providing flexible working hours, offering protection from occupational risks, and improving job security are all crucial features of positive work/organizational environment. As together they all support better work life balance of employees (Kumar, 2016). Establishing a nurturing work environment has been found to empower employees and offer a heightened sense of control over their tasks (Buruck et.al., 2018).

The experts in the current research suggest that such nurturing working environment can only be achieved, if a work environment provides the means and resources for the trainings of the team members (to improve communication, managerial skills etc.). Who would then understand how this cooperative interaction influences everyone's well-being and creates a more positive working culture for all, even by applying group mindfulness which trains people to be more present in the moment, slow down but also be

mindful of an impact of each individual on others in their surrounding. This is in line with Ahola et.al. (2017), who also find that team cooperative interaction can prolong the efficacy of burnout reduction intervention as well as create a preventative healthy work environment.

### **In Line with the Conservation of Resources Theory**

Findings of the current study that restructuring hourly shift, work control, enhancing employees' decision-making processes, creating social support from team members, decreasing criticism, increasing positive feedback, opportunities to grow and learn are crucial features of positive work/organizational environment are together in line with the Conservation of resources theory (Hobfoll, 1989), also known as a theory of motivation. Suggesting that human beings are highly motivated to protect their current resources (conservation-e.g. personal bonds, strength) and continuously acquire new ones (acquisition). One of the theory's principle: "Desperation principle" is that when resources are close to or exhausted, human beings enter a defensive mode by becoming or behaving more aggressively, irrational to preserve the self (Hobfoll et.al., 2018; Vinokur & Schul, 2002). It contributes to ones' motivation to either avoid certain situations due to losses or to approach them due to gains. Relating to burnout in a way that certain work places may reinforce chronic stress by creating limited opportunities for renewal of resources such as finances, social bonds, growth opportunities and others, or complete losses of them which in turn affects negatively one's well-being (Halbesleben et. al. 2014; Buchwald & Hobfoll, 2004) and/or the relationships between colleagues. This theory further explains that the motivation behind someone's approaching or avoiding tendencies at work and its' connection with consequences, may influence someone's behavior or relatedness to others.

### **Team Interventions Promote the Team's Coping, Preservation/ Fair Share of Resources**

Such impact was confirmed by primary and secondary data, which both emphasized that in order to make a person feel better in their work environments and to treat burnout, it is worth to invest into team interventions that promote better work relationships, collegial support, training managers, provide trainings for communication skills, CBT (cognitive behavioral therapy to regulate negative thought patterns), mindfulness that one can become more aware of how each of their behavior and action has an impact on others, and increases empathy and compassion towards one's colleagues. These kinds of interventions promote the whole team's coping, preservation or fair share of resources and acquisition and growth of the new ones.

The importance of enhancing the coping of the whole team, decreasing stressors, improving communication and so creating a more supportive and resilient work environment is further in line with recently published journal review of Gabriel's and Aguinis (2022). Which offers various strategies, addressing burnout and promoting employee's well-being. Gabriel and Aguinis emphasizes that in order to tackle burnout and offer more long-term solutions, proactive measures need to be invested into burnout prevention rather than only treating the symptoms. One strength of this article lies in its emphasis on the role of leadership in shaping a healthier workplace culture.

Authors highlight that fostering into open communication, providing support, and offering flexible working arrangements, managers can significantly impact their employees' well-being. Thus, there is a growing need towards a shift of a more empathetic and understanding leadership style, which resonates with the current demands of the workforce. Gabriel's and Aguinis (2022) advocate for the need of organizations to reassess their workload distribution and establish realistic expectations for employees. Their practical tips

and evidence-based interventions outlined in the article include suggestions for providing stress management interventions such as CBT or mindfulness trainings. Allowing employees to be active crafters of their work including allowing employees autonomy and flexibility to negotiate job content, to choose tasks that play to their strengths but are also challenging, providing skill and task variety as well as offering opportunities for development.

The authors also emphasize the importance of cultivating social support, engaging employees in decision making, and implementing high quality performance management who shall provide strength-based feedback to their employees, set right developmental objectives and goals, offer financial and non-financial rewards, and shall be fair in management. All these suggestions in their review offer immense value to the discussion of burnout topic. Mostly because of their encouragement from regular breaks to fostering a culture of work-life balance, and presenting actionable recommendations that can be readily adopted by organizations of various sizes and industries. Moreover, their emphasis on encouraging employees' autonomy and involvement in decision-making processes can contribute to a more motivated and engaged workforce. As can be seen, Gabriel's and Aguinis's (2022) article successfully addresses the issue of employee burnout and its prevention. It confirms the findings of the current research. Although, it needs to also be mentioned that the review could have also benefited from exploring the role of technology and remote work. As the article is discussing the burnout prevention specifically after the initiation of Covid-19 crises. Given the increasing prevalence of remote work arrangements, after the Covid-19 outbreak, it may have been valuable to understand how organizations can apply technology to support employee's well-being as well as maintaining a sense of community.

Nevertheless, Gabriel's and Aguinis's (2022) article is in line with the findings of current research and its' inclusion of CBT, mindfulness, providing team members with

opportunities to grow as important and effective team intervention. Both the current research findings and Gabriel's and Aguinis's article also support the Conservation of resources theory (Hobfoll, 1989) of motivation. Emphasizing how individuals need to protect their resources (conservation- for example personal strength) and continuously acquire new ones (acquisition-for example acquiring new knowledge and trainings, supportive relationships etc.).

When discussing the Conservation of resources theory (Hobfoll, 1989), it needs to be noted that even though this theoretical construct has been widely used, it has its' limits due to the diverse loose definitions of resources, their fluctuations in dynamics and measurements across studies (e.g. Halbesleben et. al, 2014). The processes how the individuals determine a value of resources is the biggest limitation of the Conservation of resources theory and may be even more skewed due to cultural/societal/personal differences (Halbesleben et. al, 2014). This means that what one individual considers as a valuable resource might hold a different level of importance for another. An example could be that, someone from a collectivist culture may place greater emphasis on social support and interconnectedness within the whole group or collective. While an individual from an individualistic culture might more prioritize personal achievement and self-reliance. The personal experiences, may also differ amongst individuals, where upbringing, and societal norms can further influence how they perceive and prioritize resources. Such variation in resource value can consequently result in different stressors or coping strategies. Therefore, the conservation of resources theory's (Hobfoll, 1989) applicability and generalizability is limited when considering cultural, societal, and personal differences. For this reason, the current study also includes other two theoretical constructs that are looked at in relation to the third research question –associated with the implication of the current study related to the organizational interventions. In work

environments, the organizational level plays a pivotal role, as it sets the tone or atmosphere through specific cultures or sets of values.

### **5.7 Implications Related to the Organizational Interventions**

The implications of the current study hold encouraging potential for the field of burnout reduction. The study highlights the implementation of customized interventions on all three interventional layers including the individual, team as well as organizational. In order to effectively manage burnout reduction. The examination of the most effective organizational burnout interventions through primary and secondary data finds that the most effective organizational interventions include training, workshops , and psychoeducation (anything related to mental health including mindfulness and stress reduction techniques); culture of open communication and listening ; decrease in workload (job demands); stress reduction policies (including restructuring organization, enhancing organizational resilience, making changes to decrease stress and increasing resources); managerial involvement and support ; and creating safe space/ the work environment belong to the effective burnout reduction organizational interventions.

The 40 experts also additionally suggest that work with psychologist/coach at work; teaching tolerance and compassion as a philosophy of organization; having flexible contracts/working hours; growth opportunities; do fun collective activities; training managers and/or hiring qualified and competent managers; higher budget for mental health; stress audit; purchase rehabilitation procedures for employees; individual approach to all employee as other important effective burnout reduction organizational interventions are effective organizational interventions.

While, the secondary data (e.g. Bresesti et.al. ,2020) also additionally suggests psycho-social support/ training/or peer support; on-line training; a refresher of intervention that is run within organization; positive psychology strategies (such as appreciation in the workplace); and an opportunity or space for decision making as other evidence-based effective organizational interventions for burnout reduction.

While both sources of data emphasize the importance of organizational-level interventions, they also offer distinct and complementary strategies. The 40 experts highlight the value of practices like teaching tolerance, providing growth opportunities, and allocating budgets for mental health. While the secondary data places emphasis on psycho-social support, online training, and positive psychology strategies. Both sets of recommendations contribute valuable insights for combating burnout at the organizational level.

### **Suggestions for Organizational Policy Makers: Trainings, creating Budgets for Well-Being Support...**

These interventions provide valuable suggestions for organizational policies in order to protect employees mental/physical health and protect from burnout occurrence. Such policies may include providing a variety of trainings, creating budgets for well-being support, or even creating policies along the lines of refraining from contacting employees outside of working hours unless they are compensated accordingly. Moreover, promoting a culture of support, kindness, empathy, and understanding further is also found to enhance the well-being of employees, according to the current study. These findings are in line with previous research that suggest that unfair treatment at work that is also connected to a lack of empathy, minimal tolerance, low clarity of a role at work, unmanageable workloads, absence of communication and support from higher management are all found as direct contributors to burnout (Moss, 2019).



### **In Line with the Job Demands-Resources Model**

The negative contributors to burnout and reducing overall well-being, can be also viewed as high demands within the workplace. These are becoming significant concerns of employees for organizations globally (Shahnawaz et.al., 2018). Where Shahnawaz et.al. examines the impact of the Job Demands-Resources (JD-R) model on burnout and overall well-being among employees within the pharmaceutical sector of Karachi through literature review. Gathering empirical studies and research articles related to the JD-R model, burnout, and well-being. The selected papers in their review include various aspects of job demands and resources and their impact on employee stress levels and overall well-being. Shahnawaz et.al. (2018) reveal a strong correlation between the JD-R model and employee burnout in Karachi's pharmaceutical organizations through their analysis. Specifically, high job demands, such as workload, time pressures, and role ambiguity, are found to be significant contributors to burnout. While on the other hand, the adequate job resources, including social support, autonomy, and skill variety, are identified as potential buffers against burnout and enhancers of overall employees' well-being.

### **Work with Psychologist/Coach**

Some of these high demands have been also mentioned by the experts in the current research, as major contributors to burnout. It is for this reason, why the experts in the current study emphasize that organizations shall provide an on-site or as an opportunity outside of work for employees to work with psychologist/coach at work that an individual can discuss major stressors and find specifically tailored remedies. If organizations provide such opportunities, the service is more accessible whether financially or time -wise, and an

individual is more likely seeking help. The burnout reduction experts also suggest teaching tolerance and compassion as a philosophy of organization; flexible contracts/working hours; growth opportunities; training managers higher budget for mental health; stress audit; purchase rehabilitation procedures for employees as effective organizational interventions, that are in line with Shahnawaz et.al. (2018) study. As these authors highlight that implementing specific policies that mitigate excessive job demands and increase available resources can effectively reduce burnout and promote better health of employees. Fostering a supportive and empathetic organizational culture emerges from their literature review as a critical factor in nurturing a healthy work environment.

These conclusions further support the findings of the current research related to the third layer-organizational intervention which too are in line with the Job-Demands-Resources Model (Demerouti et.al., 2001). This specific model has been also referred to as an occupational stress model. Used in organizational psychology and occupational health to understand the relationship between job characteristics, employee well-being, and work-related outcomes. Consisting of specific risk factors linked to the job stress including physical, psychological, organizational and social. Thus, characterized as demands that cause personal work life misbalance. Such as time pressure and/or workload that may be negatively affecting health and energy for a period of time, consequently decreasing job performance (Demerouti & Baker, 2011).

According to the Job-Demand-Resources theoretical framework, every job also consists of resources that may involve physical, psychological, social, and/or organizational characteristics of the job, that include positive factors that are stimulating personal growth, learning and development. Such as receiving a support from the higher management, gaining positive feedback for work, or having a sense of autonomy (Shahnawaz et.al., 2018).

According to this theoretical framework, when job demands and resources are high, one may

expect high strain and motivation. While in low demands and low resources, the expectations include absence of strain and motivation. In cases of high demands and low resources, there is a prediction of high job strains and low motivation. Opposingly in cases of low demands and high resources, there is an expectation of no strain and high motivation (Shahnawaz et.al., 2018).

### **Well-Being within Company Promotes Higher Productivity and Less Burnout**

This specific model is relevant in addressing the third research question in the current study. Often, at higher organizational levels, companies hold the responsibility of setting job demands and objectives while also providing necessary resources. Additionally, they play a crucial role in establishing a company culture and values that can significantly impact the physical and psychological well-being of their employees, either positively or negatively.

### **Trainings, Investments, Health Promotion, more Lenient free Policies**

That has also been demonstrated through the primary and secondary data that imply that specific trainings, investments, health promotion, more lenient free policies promote better overall health and satisfaction. Such emphasis on improved well-being within one's company or organization in return promotes higher productivity, longevity and less burnout at work (Shahnawaz Adil, & Braig, 2018).

However, just like any theoretical framework discussed in this thesis, it is essential to acknowledge that even the Job-Demand-Resources model has its limitations, particularly in the non-clear interaction between demands and resources (Bakker & Demerouti, 2017). Demands can have both positive effects when presented as challenges and negative effects when perceived as obstacles. Both demands and resources have a cumulative effect and cause spirals of gains and losses, which are the main part of the Job-Demand-Resources framework

along with the workplace aggression. Therefore, the organizational environment is not only about resources, demands, but also about any other factors that can contribute to the overall better work/life balance. Such as, reported by Naji et. al. (2021), who notes that the organizations that invest in social policies supporting employees through more involved unions, or offering longer paid vacations, thus providing resources not only decrease the prevalence of burnout but also create a space for better work-life balance. Similarly, another limitation of the JD-R model, as mentioned earlier, pertains to the determination of the most effective intervention type in secondary archival research (e.g., Ahola et al., 2017; Aryankhesal et al., 2019; Bagnal et al., 2016).

The lack of conclusive findings can be attributed to the fact that, previous research utilizes a variety of heterogeneous studies with differing intervention types, durations, and combinations. The organizational interventions do not separate the interventions into team and organizational. Thus, the researcher in the current study attempts to make such a separation based on whether the intervention has an implication for the team or the whole organization. Such separation may have been biased by the choices of researcher and shall be further examined in future research. Additionally, the secondary data analysis includes only significant findings. But the frequency of reporting during the primary qualitative data analysis, shall provide a different angle and also valuable insight into the efficacy of various burnout intervention types. By examining the most successful methods utilized throughout the participants' journey in reducing burnout, researchers gain valuable understanding. Through the interviews, it becomes apparent that having opportunities for trainings, workshops, psychoeducation on burnout awareness and general mental health are the most frequently reported successful organizational interventions.

Even Moss (2019) in previous research emphasizes that organizations can make a difference, as burnout is preventable. She argues that any promotion of general organizational hygiene, collecting data, asking employees relevant questions on their well-being, and budgeting for wellness activities (e.g. yoga, mindfulness, resilience trainings etc. can optimize mental health, and help employees manage stress) shall assist with the burnout problematics. Pointing towards, that it is not only a within person issue but also organizational challenge that could be collectively prevented.

The Work-life model (Leiter & Maslach, 1999) is a crucial aspect in this study, focusing on work-life balance. It encompasses three individual dimensions (energy, involvement, and effectiveness) and six work environment domains (workload, control, reward, community, fairness, and values), making it highly relevant to the development of the enhanced burnout reduction model as well as understanding burnout. This model explains a significant portion of the variables contributing to burnout. It places burnout on a continuum scale, ranging from low energy levels, low involvement, and low effectiveness (characteristics of burnout) to engagement (on the opposite end). The work-life model emphasizes the alignment (or mismatch) between an individual's characteristics and the specific work environment domains. This comprehensive approach makes it the main theoretical foundation for all three layers: individual, team, and organizational in the current study.

### **In Line of the Work-Life Model**

Even though the work-life theoretical model is highly relevant to all three layers of burnout interventions and are used as a base for the INVIGORATE model and the 43 pieces

deck of cards (guidelines), the current focus is brought specifically to the third research question. Related to the organizational support which if related to the Work life model is linked to the six domains of workload, control, reward, community, fairness, and values amongst employees. It can be seen how the findings of the primary and secondary research show that if an organization invests in trainings and hiring kind, supportive managers, they are more likely to promote an organizational culture of fairness, community, equal spread of workload and rewards as well as efficient communication and support of the employees if they feel that things are getting “out of hand, or too stressful”. As shown by previous research (Naji et.al, 2021).

Such communication, kindness and compassion amongst employees makes one feel more included and a part of community. Providing workshops related to awareness of burnout, improved overall health, or giving opportunities of flexible contracts and working hours, makes one feel more autonomous and in control as they can manage their own tasks accordingly (Naji et.al., 2021). These kind of flexibilities, positive and safe working environment are promoting values that are often in line and close to human nature and healthily thriving in social working environments. All six worklife areas have been previously found to be significant predictors of health-related outcomes (Brom et.al., 2015). It needs to be noted, that based on the 40 burnout reduction experts in the current study, having a sense of community, manageable workload, managerial involvement and support, improved communication, having a sense of safe work environment have been confirmed as important burnout reduction factors. Thus, being in line with Work-life model (Leiter & Maslach, 1999). Therefore, the findings and all five theoretical models have been contributing to the implications related to all three layers of interventions and result in the final enhanced burnout reduction and the INVIGORATE card deck which are later discussed

more in depth. The following section dives into the implications for using a combined-three layered support, in order to increase a burnout reduction effectiveness.

### **5.8 Implications for the Three-Layered Support to Increase Effectiveness**

The findings in the current study show that out of 40 burnout reduction professionals in primary data, 29 of them and at least half of the studies from secondary data highlight that any burnout treatment or prevention needs to take into consideration all the layers of support simultaneously. The secondary data may have shown even higher prevalence of this three-layered support however, some studies do not compare individual and organizational interventions together or can not provide conclusions due to the high heterogeneity of the studies (e.g. Sheepers et.al., 2019). These findings are in line with previous quantitative research (West et.al, 2016; Leiter & Maslach, 2016; Ahola et.al., 2017), suggesting that in order to offer the most effective support to people suffering from burnout, such assistance shall include a support on combined layers including the individual, and organizational. Rather than providing individual, team or organizational interventions alone. Based on the primary and secondary data analysis, the current research is also in line with Smith (2016), who also recommends the implementation of multilayered support.

### **Organizational Support Shall Go Hand in Hand with Individual Support**

Dr. Justin Varney, interim deputy director for Health and Wellbeing at Public Health England (2013-2014; 2024), emphasizes the significance of workplaces as a crucial setting for improving individuals' mental and physical health, as well as their overall well-being.

This approach not only reduces sickness absence and staff turnover but also enhances productivity. Dr. Varney asserts that employers should not wait for burnout to occur but instead adopt a proactive and supportive approach to taking care of their employees. This shall happen not only on individual levels (within person) but as findings of the current research show, having a support from the team manager or other empathic colleagues as well as being guided by supportive organizational policies strengthens the protection against and enhances the treatment of burnout. The majority of experts involved in the current study echoe this sentiment, emphasizing the need for organizations to actively engage in supporting their employees. Furthermore, they stress the importance of cooperation and mutual support among team members, while individuals should also take steps to address their own unique stressors and needs.

Building upon the aforementioned findings, a comprehensive set of three-layered structured guidelines is developed, which can be accessed in Appendix Section 7. These guidelines provide remedies and strategies addressing all three layers (individual, team, and organizational) to effectively combat burnout. An important question to ask at this point though, is: how did the current research contribute to the theories and empirically? The following section is providing an answer to this question.

## **5.9 Theoretical and Empirical Contribution**

The five previously described theoretical constructs have been all an important contributor to the current burnout topic and research field as well as they all create a core base for burnout prevention and intervention. One area that is however, missing in all of the five theories and has come to the surface via the interviews of the burnout reduction



professionals and through the literature review (e.g. Orloff, 2017; Cloud, 2002) is setting boundaries as a protective factor in the work environment. In the final enhanced burnout reduction model, one could see the importance of setting boundaries that is highlighted and subdivided into boundaries between personal life and work vs boundaries between self and others.

### **5.10 Boundaries as an Inclusion to the Theories**

This inclusion has been justified, through the discussions with the burnout reduction professionals who mention, that in the modern world, where individuals often face high levels of stress and constant demands from both personal and professional spheres, the importance of setting boundaries cannot be overstated. Boundaries serve as protective barriers, shielding individuals from potential sources of burnout and exhaustion. These two critical types of boundaries -work-life boundaries and personal boundaries with others play crucial roles in preventing burnout. Although they are distinct, they also serve different purposes in safeguarding mental and emotional well-being. Differentiating between personal boundaries with others and work-life boundaries (e.g. Ratnawati &Putranti, 2018) can have distinct impacts on burnout as they are quite diverse within the context of burnout and are discussed more in detail in the following paragraphs.

### **Positive Impact of Boundaries Between Work and Personal Life on Burnout**

There are few main areas how boundaries between work and personal life can help prevent or reduce burnout. Recent study shows that establishing boundaries between work and personal life involves defining specific times for work-related activities and personal activities (Ratnawati &Putranti, 2018). Helping preventing work from encroaching on

personal time, allowing individuals to recharge and relax outside of work has been found to reduce stress, increase overall job satisfaction, and increase organizational commitment (Ratnawati &Putranti, 2018). However, creating this kind of personal balance is not the only way how to set the personal life and work boundary. Literature, also suggests that additional ways of drawing lines between personal life and work as a boundary moreover includes avoiding overcommitment at work (Thai, et.al., 2022) and in the recent years, also a digital detox (Durmus, et.al., 2022). Where, over-commitment can be characterized as setting personal limits on work. Specifically, related to limiting overbearing tasks and responsibilities, which can lead to chronic stress and eventually to burnout. An example of such boundary setting is learning to say "no" when necessary for maintaining a healthy balance (Orloff, 2017). While, digital detox, is associated with establishing boundaries around technology and work-related communication outside of work and during personal time. By setting a digital detox boundary, an individual can be fully present in their personal lives and rest from work. Setting boundaries between work and personal life is vital to prevent work-related stress from permeating into one's personal life. Establishing this separation provides essential time for rest, relaxation, and pursuing hobbies or activities that bring joy and fulfillment (Orloff, 2017; Cloud, 2002).

The importance of boundary setting between work and personal life is also shown through the interviews of the burnout reduction professionals. Highlighting the need for people to do exercise, self-care, listen to music and other relaxing activities outside of their work. For this reason, it is included as one of the factors in the enhanced burnout reduction model, the Invigorate model and in the Invigorate card deck. While studies emphasize the importance of setting boundaries, it's worth noting that the majority of these studies have focused on healthcare professionals (e.g., Thai et al., 2022) or healthcare students (Durmus et al., 2022).

In contrast, the current research involves interviews with burnout reduction professionals who work with individuals from diverse work environments, not limited to medical fields, and still supports the significance of boundary setting. However, further research is warranted, especially considering the qualitative nature and limited participant pool of our present study. Despite these limitations, establishing clear boundaries between work and personal life emerges as a crucial addition to burnout interventions. It's noteworthy that none of the five theories mentioned this aspect, suggesting it may be an important theoretical concept to explore in future studies. The following section also highlights the positive impact of the boundaries setting between self and others.

### **Positive Impact of Boundaries between Self and Others on Burnout**

Throughout the interviews with the burnout reduction professionals, it became noticeable how crucial the impact of personal boundaries is on burnout. The protection and prevention against burnout become evident, when individuals consistently prioritize self-care and emotional well-being. By recognizing the importance of setting and maintaining boundaries with others, individuals can foster healthier relationships and better handle emotional challenges without becoming overwhelmed. This was the reason why, some of the burnout reduction professionals suggest self-care, cognitive behavioral therapy and other nurturing, and positive thought enhancing strategies. To practice, being aware of own physical, emotional and mental boundaries that help to separate own needs and values from others. It is found, that personal boundaries between self and others involves firstly recognizing and respecting emotional, physical, and mental limits in interpersonal relationships (Orloff, 2017; Cloud, 2002).

## **Emotional Boundaries and Burnout**

Where characterization of emotional boundaries entail:

- understanding how one's emotions and those of others are separate and shall not cause burden on each other excessively.
- meaning, that individuals may offer empathy and support, however without absorbing the emotional weight of others.
- thereby, preventing emotional fatigue and emotional burnout

Individuals lacking strong emotional boundaries may find themselves constantly drained by others' emotional turmoil, eventually leading to chronic stress and exhaustion (Orloff, 2017; Cloud, 2002).

## **Physical Boundaries and Burnout**

Maintaining one's physical boundaries protects from the stress of intrusions into personal space or unwanted touch. Thus, fostering feelings of safety and comfort in relationships, reducing the potential for stress-related tension.

## **Mental Boundaries and Burnout**

While, mental boundaries play a pivotal role in preserving mental well-being. By discerning between their own thoughts and beliefs and those of others, individuals can shield themselves from adopting external negativity or undue criticism, preventing self-doubt and negative thought patterns (Orloff, 2017; Cloud, 2002). For this reason, the boundary awareness, setting but also their communication has been an additional inclusion in the enhanced burnout reduction model (seen in Fig.3) and for the Invigorate model as well as the

structured guidelines 43 card deck (See Appendix, section no. 7). Recently the topic of boundaries is gaining more attention throughout the literature as it is an inevitable form of self-care. As Tawwab (2021) points out it requires paying attention to own needs thus, practicing continuous self-care. Self-care has been also repeatedly shown throughout the systematic reviews as a successful form of burnout prevention (Martin, 2017). With a possible explanation that boundaries serve as a shield for mental well-being, effectively minimizing exposure to stress (Chen, 2023).

Therefore, based on the current research, findings highlight that setting up boundaries between self and others shall be an additional inclusion for the final enhanced contextual burnout reduction model and the theories.

To sum up overall theoretical and empirical contribution, it needs to be noted that both types of boundaries are essential, as they serve different purposes in preventing burnout. Personal boundaries with others help protect against emotional and mental fatigue caused by interpersonal relationships, while work-life boundaries help individuals recharge and recover from the demands of their professional lives. By recognizing and implementing both types of boundaries, individuals can reduce or prevent the overall risk of burnout and maintain a healthier general personal lifestyle.

The following section addresses the limitations of the current research more in depth.

### **5.11 The Limitations of the Current Study**

The current findings are subject to several limitations. Firstly, the data collected solely represents the perspectives of burnout reduction professionals, without including input from individuals experiencing burnout themselves. It would have been valuable to gather data from both groups and compare their perceptions to determine the alignment between experts

and sufferers regarding efficacy. Additionally, the current study employs a qualitative approach, aiming to provide in-depth insights from professionals' perspectives. However, future research shall consider incorporating a mixed-method approach, which involves utilizing burnout questionnaires to quantify the level of efficacy before and after the treatment interventions. This shall allow for a numerical assessment of the total burnout scores, potentially mitigating any biases in professionals' perceptions.

### **5.12 Contribution to the Clinical Practice**

Despite of some of the limitations, the current study has confirmed the complexity of burnout treatment. It suggests specific types of individual, team and organizational support for burnout treatment and prevention, explored through the 3 research questions. That can serve as a stepping stone to a three-layered intervention research and be re-tested for their efficacy in future research. The significance and implication lie in creation of the 43 pieces card deck provided as easy to follow step by step guidelines for any individual to enhance their mental and physical health, promote stress reduction and burnout symptoms minimizing on all three layers (individual, team, organization) simultaneously. The card deck has been created as additional tool accompanying psychotherapy for homework, be applied as self-growth and self-help tool, or a psychoeducation applied in psychology, by general health practitioners, physiotherapists and HR professionals.

Another contribution for clinical practice is to use the final enhanced contextual burnout reduction model, comprising of 10 major factors (Workload, Values, Rewards, Fairness, Community, Control, Physical and Mental Well-being, including positive thinking, Balance between demands and resources, Boundaries between work and personal life space

as well as Boundaries between self and others) in interventions design. These are explained more in depth in previous chapter 4. The final enhanced model as well as its' simplified version, the developed Invigorate model are both inspired by a comprehensive review of burnout reduction expertise in primary data collection, as well as secondary data and the five theories applied in the current study.

The Final enhanced contextual burnout reduction model also points out that the 10 comprising factors, can be referred to as risk factors or protectors associated with levels of burnout. Which may serve as a contextual reference for clinicians when conducting assessments of burnout, searching for strengths or coping amongst their patients, therefore creating an individual relevant treatment serving as antidotes for ones' problematics. As the final model highlights in one reference place how the 10 factors may assess an interplay between Individual factors such as ones' personality, past traumas, coping/boundaries, health and overall worklife balance and environmental factors and social factors, partially inspired by burnout reduction experts and previous research (e.g. Magnano, et.al., 2015; Scott, 2020; Alarcon, et.al., 2009; Abedi & Schaufeli, 2012). Indeed, creating essential components of three-layered interventions to address burnout. Another significant enhancement in the final model is the explicit inclusion and distinction of personal boundaries, as highlighted by a participant in an interview (ID 17) (cited in Chapter 4). Showing the importance of individuals being aware of their own physical, emotional, and mental boundaries as well as creating a line between work and personal relaxation/life to protect against burnout, which comes to the light mostly after the Covid-19 lock down period. While people need to work remotely from home, and need to become more mindful of establishing boundaries between personal time and work time (Giurge & Bohns, 2020; Ashforth, et.al., 2020).

The boundary awareness is also included in the "INVIGORATE" model. As it offers a better protection for any individual in both private and work environments. The Invigorate model is also inspired by previous burnout and brain research, highlighting the neurological changes associated with burnout (Golkar et al., 2014). The model underscores the potential for reversing these changes through increased self-care, lifestyle improvements, rest, exercise, stress reduction, positive relationships, and positive thoughts, as supported by various studies (Sallon et al., 2015; Scheepers et al., 2019; Bretland & Thorsteinsson, 2015; Kumar, 2016; Buruck et al., 2018). The INVIGORATE model represents a holistic approach to addressing burnout, incorporating both psychological and physiological well-being. Therefore, creating a reference point of information and guidance for clinicians and patients.

### **5.13 Recommendations for Application of Individual Intervention**

The current research findings offer several recommendations for the benefit of communities and suggest avenues for further exploration. Firstly, the findings underscore the efficacy of individual support interventions for burnout sufferers, with psychotherapy emerging as the most effective and sustained approach. Other interventions, such as self-care practices, sports and exercise, relaxation techniques, coping and resilience building, mindfulness, and cognitive-behavioral therapy (CBT), have also been found to be effective in previous research (e.g., Scott, 2020) and are corroborated by burnout reduction professionals in the primary data. Based on the consensus among clinicians and research, these interventions serve as the foundation for burnout reduction guidelines that can be utilized by various healthcare professionals, including general doctors, physiotherapists, psychologists, and HR professionals, when working with individuals experiencing burnout. The guidelines encompass a diverse range of supportive strategies aimed at preventing and treating burnout,



and a detailed overview can be found in the Appendix (Section 7), comprising of a comprehensive 43-card deck. These guidelines serve as an addition to previous research and a stepping stone for future research. As majority of the previous studies do not provide specific guidelines of their interventions, which is a point of criticism of burnout research by the experts in the field (e.g Maslach and Leiter, 2016; Wiederhold, & Riva, 2018).

Additionally, no combination of individual, department/team and the whole organization has been previously studied.

### **Individual Characteristics and Burnout**

For years, researchers have been trying to understand what makes an individual more prone to burnout and how to prevent or treat it. There are some findings pointing out how certain individual characteristics such as emotional instability, characterized as ineffective coping, not controlling emotions or impulses, along with low self-efficacy, low levels of openness, characterized as a tolerance for new ideas may all act as moderators of burnout (e.g. Magnano, et.al., 2015). Using psychotherapy as significant means to assist people to learn new ways of coping and resilience make it an important starting point, as well as accompany an individual for the rest of their life once they acquired these new sets of skills. Through psychotherapy an individual can also learn CBT techniques, which are also suggested by findings of this research as efficient intervention. As previous research points out other human characteristics like perfectionism, related to a fear of failure if things are not perfect, pessimism linked to expecting bad things to happen all the time, are considered as significant burnout risk factors (Scott, 2020). Such benefits of applying the Cognitive Behavioral techniques, as well as Mindfulness, and in the form of self-help information as an

individual intervention are also confirmed in a Murray, et.al.'s systematic review study (2016).

### **Different Areas Supporting Healthy Life-Style**

Other recommendations of application of the current findings is to use any types of relaxation techniques such as breathing exercises, muscle tension relaxation, hypnosis or even mindfulness as a relaxation or philosophy of living to firstly try to prevent the occurrence of burnout. Or a way of support and treatment, if that occurrence could not have been prevented. As meta-analytic research (e.g. Alarcon, et.al., 2009) points out the way how someone perceives or responds to certain stressors, specifically having increased perception of threat at work too belongs to the individual burnout risk factor. Along with individual physiological reactions, that are being heightened during stress, neuroticism, lowered confidence, negative affectivity, low consciousness all show to be linked to three dimensions of burnout (emotional exhaustion, depersonalization, and personal accomplishment) (e.g. Alarcon, et.al., 2009; Abedi & Schaufeli, 2012). Such finding explains how learning a variety of relaxation techniques can be preventative or treating factor in burnout.

Exercise and cultivating habits of regular sports is also strongly recommended by the current findings. Which confirms previous research (e.g. Bretland & Thorsteinsoon, 2015). That show how exercise significantly increases one's positive well-being, personal accomplishment, decreases psychological/physiological stress, and emotional exhaustion. Through physiological processes when during physical exercise the serotonin (a neurotransmitter in the brain) production increases and promotes mood elevation, its' stabilization, increases happiness and general well-being. For these empirical evidences,

suggestions like exercise, psychotherapy, CBT, relaxation techniques, and mindfulness are all included in the self-help guidelines of an individual intervention (refer to the Appendix section no.7). The following section outlines some recommendations for application of team interventions.

#### **5.14 Recommendations for Application of Team Intervention**

There are several recommendations how the current's research findings can be applied or beneficial for team members within organizations or work environments. The findings related to the team support show that the most efficient, and continuous way of support of burnout sufferers includes changes at work and cannot only be accounted for an individual support. This is also shown in previous research which demonstrates that individually based interventions have very small significant reductions in burnout (e.g. Panagioti et.al., 2017).

Even, the current research' findings show that any individual suffering from burnout shall receive a 3 layered (individual, team, organizational) support. This study highly recommends that team support includes the use of Mindfulness teaching team members being in control of their mind and body, have awareness that certain actions have consequences for themselves and others within their team. Other recommendations include psychoeducation for being able to assess and decrease work stressors. One such way can include practicing relaxation, dance, fitness, music or having massage as creative and relaxing activities. The current study highlights how practicing empathy, social skills or communication can also improve relationships and make individuals feel less stressed and more as a part of community at work. All these suggestions are in line with previous

research that propose applying five basic components for burnout intervention (Sallon et.al, 2015).

- first component shall include a cognitive aspect of support such as practicing mindfulness, be non-judgmental, more in control and decrease repetitive negative thought processes.
- a second component shall include a somatic type of support such as learning relaxation of the body, practice focused attention on bodily sensations, apply exercises activating parasympathetic nervous system (such as progressive muscle tension, guided imagery, breathing relaxations etc.). The purpose of such exercises includes shifts in weight and movement to relief pain due to long standing or sitting positions at work.
- the third component for a burnout intervention shall cover the emotive/expressive aspect such as drawing, journaling, or attending to one's emotions also via group meetings where different participants are offered a possibility to listen to each other and vent what goes for them emotionally.
- the fourth component shall comprise of a dynamic-interactive part involving expression of movements like dance.
- while the fifth component shall include hands on intervention such as acupressure, shiatsu (palm massage), massage or any other form of touch therapy.

These 5 components that can be a part of interventions have been also shown in the current study and have a need to be incorporated across all three layers of support (individual,

team, organizational). Practicing these components within a team, can motivate group participants, increase understanding for other team members, decrease stress and occurrence of burnout. It is also shown in previous research that if employees are taught about burnout symptoms, their prevention, coping strategies enhancing care, awareness of tiredness, setting limits on working hours, and keeping general balance in life through psychoeducation, they are experiencing less burnout (Kumar, 2016). Part of the team psychoeducation shall be training not to regularly work over time. Studies show that if employees clock 60 hours a week, they are by 23% more likely to have accidents, are by 2.4% less productive for every 10% increase in hours in an industrial setting. Thus, regularly working overtime affects employees' performance, their safety, health and well-being (Arnold & Itkin, 2021).

Along with the above recommendations, the current study has developed the INVIGORATE model and the specific 43-card deck guidelines, which can be applied as an additional Team support, for team discussions, and psychoeducational trainings or as a self-help tool for individual team members for burnout prevention (to view the model and the card deck, refer to Appendix, section no. 7). The following section discusses the recommendations for organizational interventions.

### **5.15 Recommendations for Application of Organizational Intervention**

There are several recommendations how the current's research findings can be applied and benefit the organizations and work environments. The findings support recommendations to provide budget for workshops/trainings related to general psychoeducation related to mental health including burnout awareness. Promote a culture of compassion, kindness and tolerance that employees can trust colleagues and higher

management. Train and have in place policies and rules for improving internal communication. Have a possibility of flexible contracts with possibilities of working partially from home, manage own working hours or deadlines (if possible). As well as keeping stimulating the personal growth, skills updates and stimulation of healthy positive work environment to keep employees healthy, stimulated, and motivated. Some of these suggestions are overlapping with suggestions from the team interventions' recommendations. One explanation for this can be that in order to implement any of these ways of support, the higher management, the companies' rules and resources need to be aligned and allowing that.

The above suggestions are found to work as effective antidotes related to the certain red flags within organizations identified by Korunka et.al. (2020). Highlighting affective signals, characterized as satisfaction or negative attitude that someone feels towards their job. Such as certain cognitive signals, linked to expressing cynicism about one's work role, or showing signs of distrust towards management, or colleagues as potential burnout risk factors. Including, behavioral signals, defined by reduced effectiveness, work performance and one's productivity, high turnover within the organization, absenteeism, increased sick leave, accidents or showing over dependence on supervisors. Other motivational signs, related to the loss of work motivation, resistance to attend work, and general low morale are also identified as putting one at risk of developing burnout (Korunka, et.al., 2020). The risk factors, can be minimized by certain remedies identified by both the literature and the current's study findings. Such remedies include giving employees a sense of work control by enhancing a level of decision-making processes, creating opportunities of flexible working hours, protecting against occupational risks, managerial involvement. Such features support employees' mental and physical health and their work life balance and are in line with Kumar (2016) and Buruck et.al. (2018).

It needs to be noted that Buruck et.al. (2018) implements and evaluates the organizational intervention, through a more standardized procedure, theoretically based on the areas of Worklife model and its' six work related factors (explained in Chapter 2). This theoretical model is also applied in the current study in relation to the organizational interventions. The evaluation processes in Buruck's et.al. (2018) study of burnout interventions focus on the management support, increased communication, and information strategy (using psychoeducation). Psychoeducation on burnout, and its' triggers are based on Worklife model assessing Control-Workload-Fairness-Values-Reward-Social support. Their study implements 7-12 solution-based strategies which are developed to target and overcome specific problems of the studied institution. Findings show that any initiation phase of intervention shall emphasize and clearly communicate the importance of the prevention/intervention program, its' aims, time line, standardized records in order to increase organizational awareness and commitment/motivation of both employees and management team/organization.

### **Companies May Use the Invigorate Card Deck as Extra Resource**

Other phase shall facilitate the intervention results into their daily work practices. The findings of the current study also support the idea of psychoeducation in a form of trainings and workshops, along with increased communication, as the most effective organizational interventions for prevention and treatment of burnout. Just like in Buruck's et.al. (2018) study, the current study also includes the Worklife model with the 6 areas as a part of the enhanced burnout reduction model, based on which the INVIGORATE model has been developed and some of the 43-cards of the specific burnout reduction guidelines are created (refer to Appendix, section no.7). The Buruck's et.al. study (2018) also indicates that from

the intervention activities based on the Worklife model, workload has been their highest mismatch risk factor for burnout between employees and the workplace. Along with workload, reward and social support as the most important issues, therefore the solutions in any organization need to be applied accordingly.

Their other finding is that the psycho-education of the employees needs to be an initial step for a successful outcome of any intervention. As it makes employees empowered, and understand the importance of the intervention process. The current study is in line with psychoeducation as an important and effective part of organizational support. It also suggests, that managing workload, having a sense of reward, building social support, applying psycho-education are effective interventions, thus are all included as part for the organizational support in the card deck (see Appendix, section no. 7). The INVIGORATE model and the card deck guidelines, can be utilized as additional organizational support. Companies may use the card deck for group discussions of specific themes on individual cards in the meetings, implement their suggestions for creating rules and supportive company procedures, or have the deck as a self-help tool and extra resource in the work library promoting overall burnout prevention (refer to Appendix, section no. 7).

### **5.16 Overall Recommendations to Utilize 43- Pieces Card Deck**

Overall, the current findings can provide benefits by implementing the three-layered intervention (individual, team, organizational) as suggested by the guidelines (refer to the Appendix section no.7) within 3 ways of support including primary, secondary and tertiary. Previous research (Ahola, et.al., 2017) identified the primary support interventions as a prevention or reduction of known burnout risk factors amongst all employees. The secondary



interventions as targeting only a selected group of employees, who have been assessed and at an increased risk of burnout development. While, the tertiary interventions aim to support employees, who have already been diagnosed with burnout to minimize its' consequences (Ahola, et.al., 2017). The current guidelines and INVIGORATE model, developed in this study have been created as both a self-help tool for prevention as well as a self-help tool used as an additional support. While an individual is treated by a general practitioner, psychologist/psychotherapist, physiotherapist if already diagnosed. Additionally, the card-deck can be used by HR professionals or any policy makers supporting well-being of employees within organizations, and in employment settings for workshops, or as a library addition for increasing burnout awareness, recognition of the symptoms and their potential remedies. The following section will address recommendations for future research.

### **5.17 Recommendations for Future Research**

This dissertation has discussed burnout world-wide problematics due to increases in sick leave, large financial corporate or organizational losses and adverse effects on employees' physical and mental health and safety (Pijpker et.al., 2019). The current study has been dedicated to develop an enhanced burnout reduction INVIGORATE model and through the model, creates structured guidelines on a three-layered individual, department (team) and the whole organization levels. Throughout this research however, certain limitations are detected, which can be used as a new lead for a broader exploration in future studies.

### **Developing an In-Depth Three-Layered Assessment of Burnout Risk/Protective Factors**

One of the recommendations for future research includes developing a comprehensive assessment tool to explore the interplay of risk and protective factors contributing to burnout across three critical layers: individual (within person including their personal and professional lives), team, and organizational. This necessity is to holistically understand the dynamics driving burnout affecting individuals in their workplaces. By delineating these factors, organizations can implement targeted interventions to lower occurrence of burnout and improve employee well-being effectively. Such a measure promises to broaden insights, facilitating tailored strategies aimed at fostering healthier work environments and enhancing overall productivity.

### **To Explore Differences Between TI and OI**

Upon investigating a three-layered approach to reducing burnout, the current study highlights notable disparities between team-based and organizational interventions. Recognizing the emerging trend of categorizing organizational interventions into distinct team and overarching organizational initiatives, further exploration of these variances is essential. The study finds that organizational interventions typically involve the establishment of protocols, fostering a culture of empathy, and implementing compassionate practices. While both team and organizational interventions may share common features such as workshops and psychoeducation, team interventions are tailored to address the dynamics within specific groups, whereas organizational interventions encompass broader strategies, resources, and managerial support aimed at benefiting all employees. It is possible for an individual to work in a company committed to promoting a safe and healthy workplace

environment, yet find themselves part of a team characterized by unhealthy interpersonal relationships. Consequently, delineating between team and organizational interventions enables a more precise assessment of risk factors and facilitates targeted remedies. For this, recommendation is for future research to delve deeper into the assessment of the discrepancies. Uncovering a clearer distinction between the two layers of interventions.

### **To Assess the Perspectives of Professionals vs Burnout Sufferers**

Other limitations noted in the current study include exploring the effects of interventions only from the expert's side. It is worth to also know the feedback from people who undergo the treatment and experience the three- layered support through their own journey and perspective. The total score of burnout sufferers can be tested before and after the treatment and compared with the clinician's opinions about their well-being. As research shows that there is a possibility of clinicians to have both explicit (involving conscious awareness) and implicit (involving outside of consciousness awareness) biases leading to negative or faulty evaluations of a person in both diagnosis or treatment influenced by irrelevant characteristics such as gender, race and others (Hairston, et.al., 2019). Applying a mixed method and including both qualitative and quantitative methodology and having the perspectives of burnout reduction supportive professionals as well as burnout sufferers can provide a more concrete result and control certain level of such biases.

### **To Assess the Interventions' Efficacy Longitudinally**

The current methodology is purely of qualitative nature. Therefore it does not allow to test the efficacy of the final enhanced contextual burnout reduction model, the guidelines and the INVIGORATE model's accuracy and efficacy especially in a long term. Having either mixed method design or quantitative methodology and providing an opportunity to test and retest the efficacy using scores before treatment, 6 months after and more than 6 months post treatment can provide a more concrete result about the accuracy and efficacy of the interventions proposed. Even though, this is not the aim of the current study, previous research shows differences in the level of efficacy up to 6 months, and 6 months post treatment. Where if individual interventions are applied, studies show an effectiveness of the intervention for up to 6 months straight after the provided intervention is concluded (Awa, et.al., 2010; Westermann et.al., 2014). While, the organizational interventions appear to show a longer lasting positive effect on employees' health and a decrease their burnout symptoms, when compared to the individual interventions (Gregory, 2015; Buruck et.al., 2018; Gascon et. al., 2019). Thus, the future research can apply a longitudinal time design to compare the efficacy of all 3 layers of support (individual, team and organizational) together, individually and with control group involving burnout-free participants.

### **To Assess Differences Between Self-Referred and the Third-Party Referred Participants**

Another limitation and recommendation of the current study includes the fact that primary data has been collected based on the experience of experts who work only with people suffering from burnout. These professionals have been approached by burnout sufferers out of own initiative or because they requested such referrals. It is possible that

burnout sufferers are thus, seeking help and are motivated to feel better, at least at their initial stage. There is a possibility that they may have felt more motivated and influenced the efficacy of their support. Compared to any burnout suffering general population who do not seek help. Daniel Goleman and colleagues, experts on emotional intelligence, highlight self-motivation as an important EI's component. Arguing that self-motivation plays a major role in achieving certain results, specific goals, succeeding at acting on the opportunities provided, and having a tendency being more optimistic. In focusing ahead and preserving the belief that they can reach their goal (Goleman, et.al., 2018). For this reason, future research can test the efficacy of the three-layered interventions on any general population that may have been identified via screening at work, or within their organizations and being offered the interventions as a prevention if showing higher scores on burnout spectrum. Then comparing the efficacy outcome of the interventions between the self-referred participants with the screened participants via a third party.

### **For Exploring Burnout within Cultural Diversities**

Future research can further explore the intersection of burnout and cultural diversities, particularly in terms of the stigmatization of burnout, the manifestation of symptoms across cultures, and the appropriateness of diagnosis and interventions within different cultural contexts. Although the current study has made efforts to address these aspects by considering the perspectives of burnout reduction professionals from two distinct countries - the "collectivist" Slovakia and the "individualistic" Netherlands - the primary data does not reveal differences in the approaches to burnout treatment when comparing professionals from these two countries. However, more extensive research is needed to gain deeper insights into cultural influences on burnout and to tailor supportive interventions accordingly. One

explanation could be that both countries are members of European union. "There are certain regulations and rules how to approach mental health , or conditions affecting mental health support within the EU countries according to WHO European Framework for Action on Mental Health (2021-2025)" (WHO, 2021). Having similar health care regulations in place have explained the similarities in approaches of treatment. Perhaps future research can focus on cultural differences in treatment provided, as well as in responses given to the treatment, thus comparing treatment across different countries and continents outside of EU which may apply a different set of regulations. There are several studies who emphasize the fact that the cultural diversities, work procedures, career opportunities as well as the types of occupation need to be taken into account when designing interventions, as differences may apply (Kumar, 2016).

### **Differences in Burnout between USA Doctors vs European Doctors**

As evidence serves a meta-analysis amongst doctors finds that overall burnout prevalence may vary between countries, as well as the scores on the three dimensions of burnout (Lee, et.al., 2013). More specifically, the USA doctors experience lower levels of Emotional Exhaustion, than the European doctors. One explanation provided for this discrepancy is a stronger quality, safety culture and career development opportunities in the USA. The American doctors are found to experience elevated levels of emotional exhaustion, when facing conflict at work or having ineffective coping. On the other hand, in that meta-analysis, European doctors show more positive work attitudes and experience lower emotional exhaustion. Along with possible lower levels of depersonalization. In the meta-analysis, the authors emphasize the impact of various work/environment stressors/demands like quality, safety culture or the personal attributes that may have a role of a stressor or a

resource like conflict at work or positive work attributes as important pointers for specifically designed intervention (Lee, et.al., 2013).

Even though, the current study does not explore the three dimensions of burnout amongst burnout sufferers, Lee's et.al. study (2013) still highlights that someone's attitude, the expression of distress, or perception of stressors, regulations around safety and other factors may be influenced by cultural diversities. Thus, having a possible impact on proposed interventions. Thus, future research can assess such burnout and cultural diversities in its' stigmatization, the manifestation of symptoms, the appropriate diagnosis and fitting the most supportive interventions across countries of different parts of the world.

### **To Replicate and Test the Structured Guidelines and Invigorate Model**

A number of studies investigate the occupational stress, burnout management, as well as combined interventions (e.g. Bresesti, et.al., 2020). From the studies that are examining the effectiveness of combined interventions of burnout, it can be seen that there are not precise guidelines shared for the specific design of interventions. The current study attempts to correct for this shortcoming and create specific guidelines Based on the burnout interventions' effectiveness from previous studies of secondary data and the reports of burnout reduction professionals in primary data, the enhanced burnout reduction model and the 43-card deck are created. That can serve as structured guidelines for future research. With a recommendation to test the suggestions of the current guidelines in future research, and be enhanced with the new findings. The 43-card deck serves as a stepping stone and may need improvements and enhancements in future.

### **To Test the Efficacy of a Three-Layered Intervention**

The findings from both the primary data and secondary research in the current study highlight the effectiveness of integrating all three layers of therapy for supporting individuals experiencing burnout. This combination of interventions, encompassing both individual and organizational approaches, has consistently shown effectiveness in numerous previous studies (e.g., Gregory, 2015; Aryankhesal et al., 2019; Kumar, 2016). Even though, across most of the studies, there is an application of diversified interventions, and no distinction between team and organizational interventions is applied, the studies still show that a combination of the individual along with organizational approaches appear to be more effective in burnout reduction, when compared to control groups (e.g. Aryankhesalet.al, 2019; Tang, et.al, 2021). This combination of all three interventions can be explored by future research. As data is limited and the findings of the current study also due to its' qualitative nature cannot be generalized across a broad population. More research can provide additional data, and increase the confidence that these findings can be implemented across a wider range of population.

### **To Assess Interventions Across Different Populations**

As can be seen, there is a continuous need for more research to be done on burnout topic and interventions across different populations especially, since the previous research appears to be mostly conducted on participants from medical fields (e.g. Aryankhesal et.al, 2019; Bresesti, et.al., 2020; Lee, et.al., 2013). Although Wiederhold et.al., (2018) argues that the prevalence of burnout can be found amongst all professional fields. Although, the current study is conducted amongst participants who treat burnout sufferers from diverse professional



fields. It is only conducted on a small population sample, more research is definitely warranted.

Overall, the current study provides several recommendations for future research. Firstly, there is a need for further exploration to differentiate between team-level and organizational-level interventions. Additionally, assessing the long-term effectiveness of the structured guidelines should be considered, as well as replicating the evaluation of combined interventions across all three layers. Another important area for future investigation is the examination of burnout diagnosis, prevention, and treatment within diverse cultural contexts. The present research serves as a valuable starting point for these aforementioned topics, highlighting the necessity for additional studies. The subsequent section of this dissertation outlines the key conclusions that may be drawn from this research.

### **5.18 Drawn Conclusions**

Regarding to the conclusions, it needs to be noted that due to the fact that the current research has been of qualitative nature and with a limited number of participants, no affirmative conclusions can be drawn. However, throughout the process of this dissertation research and writing, certain deductions have been resurfacing.

- one of the deductions, is that it is apparent that burnout topic needs more attention and further examinations in future scientific research. As burnout is a condition, that has been interfering with employees' healthy functioning due to their emotional, physical exhaustion, cynicism, feelings of ineffectiveness, of being trapped in a work environment, with personal

experiences of having no options to grow and burnouts' increased correlation with depression (Brower, 2022).

- systematic reviews depict scant information, related to burnout interventions.

With limited application of a combined three-layered burnout intervention, supporting individuals on personal level and in their work, despite burnout's constant rise world-wide (Elflein et.al., 2019; Brower, 2022). Thus, studying the effectiveness of the intervention and support is inevitable.

- another conclusion that can be made throughout the current study, is the finding that there is no one type of intervention fitting all. Therefore, providing guidance of support to an individual suffering from burnout on a broader three-layered (individual, team and organizational) scope appears to be the most effective and influential.

Which is elaborated more in detail in the consequential sections.

### **Importance of the Individual Support**

The main finding shows that individual support is needed, the person learns new way of coping, increases resilience and applies new acquired skills across different environments. One type of such support suggested by both primary and secondary data, is psychotherapy. An explanation can be that through a talk therapy a person sets specific individual goals based on own needs. Along with gaining a new perspective on job with main focus on learning, gains, balancing the expectations, and understanding that different downs due to stressors need to be balanced with ups-the resources (Brower, 2022). The individual

interventions partially support two theories related to stress: the Transactional model analysis (Lazarus & Folkman, 1984) and The Job Demand-Control Model (Karasek 1985).

### **Individuals Evaluate Stressors in Different Ways**

Previously mentioned, the transactional model analysis (Lazarus & Folkman, 1984) postulates how an individual's perception of stress, job stressors, and defensive coping may increase a risk of burnout. The transactional theory, postulates that stress is characterized as "a particular relationship between the person and the environment that is appraised by the person as taxing or exceeding his or her resources and endangering his or her well-being" (p. 19). Stress only occurs if an individual believes their well-being is suffering due to the interaction with their environment (either due to stressors or other individuals). According to this theory, stress is transactional in how the person and environment interact. As well as due to the imbalances (i.e., stress) that occur if the demands of the environment outweigh the available resources. Each individual assesses the stressor and its potential impact as either harmful, helpful or irrelevant. Known as primary appraisal. If the event is considered as harmful to well-being, it may cause physical or psychological harm. If it's appraised as helpful to well-being, a variety of positive outcomes such as love, fun arise (Lazarus & Folkman, 1984).

The secondary appraisal occurs when individuals consider whether some action is warranted, considering resources available, and what may likely reduce stress. During this stage, individuals employ various coping strategies when stressors are appraised as threatening vs challenging. This theory is crucial to the burnout topic as it explains why one needs to have a tool box of various strategies to reduce burnout, especially as there is no one

strategy fitting all individuals. The transactional model analysis (Lazarus & Folkman, 1984) emphasizes that various individuals are likely to evaluate work stressors in different ways. Such evaluations lead to differences in perceived stress levels, their own coping behaviors, and adjustments to the situation. For this reason, the psychotherapy seems like the most consistent way of individual support, during which the therapist can assist each individual exploring own stressors, assess coping, and teaches new skills to adjust. Both assessing the stressors and coping seems relevant and are conducted during the psychotherapy where an individual also learns about self-care, CBT to control the negative perceptions, the benefits of exercise on overall well-being and other techniques suggested in the current study as effective types of individual interventions. Different options of individual interventions can be a part of psychotherapy process or applied as a way of living. Variety of intervention techniques reflect on different views of burnout across literature.

For example, Cherniss (1993), views burnout as a consequence of a complex interaction among individual, socio-cultural and organizational factors. While Leiter and Maslach (1999) argues that burnout is related to the interaction between individual, socio-cultural and cultural factors combined with high emotional demands (e.g. client related stressors). If work demands a great deal of emotional, cognitive and physical energy and is combined with overload and conflicting demands on an individual, such interaction may lead to emotional exhaustion, mental weariness and overall physical fatigue. Sarason, et.al. (1983), on the other hand emphasizes the impact of society on development of burnout, rather than the impact of individual or organization. Varied perceptions of burnout may actually show that there are many risk factors and interactions between them leading to burnout, and each individual's circumstance or perception of them leads to different outcome. Thus, each individual's intervention also needs to be treated on a very specific personal basis.

### **Building of Autonomy and Control**

It needs to be noted, that this variety of other types of individual interventions are not explained by the transactional model analysis (Lazarus & Folkman, 1984). As the theory mainly focuses on one's perception of the stressors and their coping, but does not explain other areas of psychological resilience such as overall physical and mental health, personality, sense of autonomy/control etc. This can be perceived as a limit of the transactional model analysis (Lazarus & Folkman, 1984). Through the complexity of burnout's manifestation and its' treatment it is apparent that other factors are also influencing whether a person develops burnout or not. That is also the reason, why the current study additionally uses the Job Demand-Control Model (Karasek 1985; Karasek & Theorell, 1990), for the base of explaining the importance of other types of individual intervention tools. Related to the building of autonomy and control as a contributor to an increased well-being and to overcome certain stressors at work.

### **The Workload and Work-Related Stress**

The findings of the current study also partially support the Job Demand-Control Model (Karasek 1985; Karasek & Theorell, 1990). Which has become one of the best-known models connected to the workload and work related stress or psychological well-being. Because of two main aspects: the height of strain (job demands) such as heavy workload, time pressure, effort, difficulty, role ambiguity. Such strains cause stress to employees. The other aspect, includes the decision latitude (or control), related to organizing own duties, and how to perform certain tasks. Consisting of competency and decision-making authority. Postulating that, stressors can be managed through application of various buffers such as job skills that allow individuals to obtain control and autonomy over their work (Karasek

&Theorell, 1990). This theory also emphasizes that strains themselves do not lead to high psychological distress. Rather the combination of the strain and the latitude ideas of the decision that the job offers, influences the level of distress. Especially, if the latitude to organize one's work according to own ideas is limited. This regulation of one's work can assist a person to handle the workload more adequately and a person feels more motivated (Karasek, 1985). Once the element of control is removed or decreased, the workload feels higher, thus contributes more to stress or burnout.

Relating this theory to the current findings it is apparent that this model relates to the Individual intervention. The current results show that one of the most efficient ways of support of individuals is growing one's psychological well-being by strengthening their physical and psychological health, levels of optimism and self-efficacy. These types of support assist with assessing the strains/demands as well as tap into one's control. Practicing self-care, various relaxation techniques, mindfulness, physical exercise, make a person more confident, in control of their emotions and improve cognitive abilities (Bretland &Thorsteinsoon, 2015; Kumar, 2016; Jaworska-Burzynska et.al, 2016). It needs to be however also mentioned that there are certain unresolved issues regarding the Job Demand-Control Model (Karasek 1985; Karasek &Theorell, 1990).

Its' limitations include the model's "epistemological status, the definition of and distinction between demands and resources, the incorporation of personal resources, the distinction between the health impairment and the motivational processes, as well as the issue of reciprocal causation" (Schaufeli & Taris, 2014). The authors also imply that this model is hard to apply beyond the applicability of individual's level. Since, the current study examines the interventions on team and organizational levels, the following sections explore the importance of team intervention and explore its' link with the Conservation of resources theory of motivation (Hobfoll, 1989).

## **The Importance of Team Support**

The current research also highlights the significance of interventions beyond individual support, emphasizing the importance of seeking support from immediate work surroundings, including managers and colleagues. Previous research shows, that the individual intervention appears to be effective, its' effectiveness however seems to wear off once a person reenters the work environment where there are no further improved changes or support amongst colleagues or managers (e.g. Jaworska-Burzynska et. al. ,2016; Ahola et.al. ,2017; Aryankhesal et.al. , 2019; Awa et.al. ,2010; Bagnal et.al. ,2016; Pijpker et.al. ,2019; Westermann et.al. ,2014). This is also supported by Ahola et al. (2017), who emphasize that individual interventions appear to be effective on their own for a short period of time -up to 6 months after the initial intervention has been administered.

## **Group Awareness and Learning Decreases Stigma**

Although, the current research does not assess the time-line of effectiveness, the results suggest that on top of individual support, intervening within a work environment where for example a team attends workshops on psychoeducation about mental health and burnout symptoms may potentially increase collegial understanding and support. This can be partially explained by increased awareness about the burnout phenomenon, its' symptoms, the warning signs and with more information and understanding one is more likely to decrease stigma. It is even demonstrated in previous research, which shows a significant efficacy of psycho-educative approaches in combating the stigma surrounding various mental health conditions (e.g.Waqas et.al., 2020). Some of those educational methods, include lectures, case scenarios, contact-based interventions, or role-plays, all aimed at addressing

stigmatization of mental health conditions. Research further shows that, such educational methods decrease stigma by 76% in their sample of participants (Waqas et.al., 2020) Along with improved attitudes (72%), increased willingness for people to seek help (72%), general better understanding of mental health, or reduced social distance (57%) (Waqas et.al. 2020). More interestingly, the psycho-educative interventions are also effective in diminishing both public and self-imposed stigma (Waqas et.al., 2020).

### **Team Members Shall Support Each Other**

Current results additionally show that having a possibility to attend communication skills training (decision making, open conversation etc.); group mindfulness, psycho-social skills trainings; or do recreational art/sports creative therapy, get managerial support work as other types of effective burnout reduction team interventions. Along with promoting work as a team, valuing support from colleagues and managers and nurturing healthy positive relationships. The current research also suggests that any work environment shall benefit from offering possibilities to be referred to psychotherapist in order to be able to discuss certain issues, feelings of being overwhelmed with a neutral person who can guide them and reinforce decreasing stressors. These kind of supportive team interactions, and interventions are also found in previous research (Heinz, 2021).

Recent study named the most common causes of burnout including working in a way that a person feels isolated, has a lack of manager's support, unattainable or unclear goals, is disconnected from team mates or managers and has excessive amounts of job (Heinz, 2021). The current research findings similarly suggest that having regular talks or check ins with the manager and colleagues about the goals, processes, and achievements feels more motivating,



supportive and gives employees a meaning. Interventions for good strong supportive relationships in a work environment contribute to building individual coping mechanisms, which is also previously demonstrated showing that positive social ties can go as far as to reduce deaths (Brummett et.al., 2001), decrease stress and inflammation, individual's sense of meaning and purpose of life (Brody, 2017).

### **Stress has Central Environmental, Social, and Cultural Basis**

Since the currents' findings show that psychoeducation, communication and psycho-social trainings of team members are effective team interventions. One explanation can be that these types of interventions not only increase understanding of how this cooperative interaction influences everyone's well-being and creates a more positive working culture but also creates a preventative healthy work environment. Which is also confirmed by previous research (Ahola et.al., 2017). Such findings show a support of the Conservation of resources theory of motivation (Hobfoll, 1989). Suggesting that stress is neither first nor foremost a product of individual's appraisal of events. Rather, stress has central environmental, social, and cultural basis in terms of demands on people to acquire or protect the circumstances to ensure well-being. Or avoid the threats to well-being. Therefore, the stress can be culturally determined.

This theory proposes that when resources are close to or exhausted, human beings enter a defensive mode by being more aggressive, irrational to preserve the self (Hobfoll et.al., 2018; Vinokur & Schul, 2002). Through learning or personal experiences, people recognize their needs for success within their culture or for survival (Hobfoll, 1989). This theory explains how certain work places may reinforce chronic stress by creating limited

opportunities for renewal of resources such as finances, social bonds, or complete losses of them and in turn negatively affects one's well-being (Halbesleben et. al. 2014; Buchwald & Hobfoll, 2004) and relationships between colleagues. This theory also explains the motivation behind someone's approaching or avoiding tendencies at work and its' connection with consequences. It provides an explanation how specific trainings and learnings promote certain culture within work environment reinforcing approachable surroundings rather than be threatening. According to the Conservation of Resources theory, a stress results if resources are threatened, depleted or met inadequately (Hobfoll, 1991).

### **Interventions Shall Promote the Whole Team's Coping**

Such suggestion is in line with the current findings, showing that any team benefits from promoting better work/team relationships, collegial support, better managing workload as a team, providing trainings for certain skills including improved communication, mindfulness. Such interventions promote the whole team's coping, preservation or fair share of resources and acquisition and growth of the new ones. There is however, a downside to this particular theoretical construct pointing towards certain criticisms due to the diverse loose definitions of resources, their fluctuations in dynamics and measurements across studies (e.g. Halbesleben et. al, 2014) as well as its' skewed cultural/societal/personal differences (Halbesleben et. al, 2014). Meaning that resources may mean different things to different people, which may not always be taken into considerations across different studies. That is why other additional two theoretical constructs are included in the following section that expand beyond these limits while evaluating the organizational interventions. As organizational level of support has the power, means and resources on macrolevel to promote specific culture, or set of values within the individual departments and their team members.

Each organization can also identify specific resources that they can provide or have a lack of. Thus, the following section dives deeper into the conclusions related to the effective types of organizational support.

### **The importance of the Organizational Support**

Previous research suggests that combined individual and organizational interventions are more effective than applying one layer of intervention on its' own (West et.al, 2016; Leiter & Maslach, 2016; Ahola et.al., 2017). The findings based on primary and secondary data in the current study also suggest that the most effective support of people suffering from burnout includes a support on all three layers including the individual, and then subdividing the organizational interventions into team and organizational layers. Thus, the current research is in line with previous limited research (West et.al, 2016; Leiter & Maslach, 2016; Ahola et.al., 2017). Suggesting that any burnout treatment or prevention needs these three layers of support simultaneously. It's the workplaces that have the power to improve people's mental and physical health, their overall wellbeing, to reduce sickness absence, lower the staff turnover and enhance productivity, according to Dr Justin Varney (2013-2014; 2024). By taking care of employees in a preventative supportive manner rather than waiting until burnout occurs.

The findings of the current study also recommends for organizations to support employees' health by allowing flexibility of working hours, psycho-social trainings, overall health promotion such as information in a form of workshops, effective internal communication between and within departments and amongst colleagues, safe working environment also meaning having empathic kind compassionate, non-judgmental culture, and

having professional opportunities to grow and learn. These findings are in line with previous research highlighting that employees' autonomy by having flexible working hours, more lenient deadlines, having opportunities to grow and learn and having a positive collegial environment can all significantly reduce occurrence of burnout and motivate employees (Brower, 2022).

### **Managerial Trainings for Competence and Organizational Policies**

The results of the current study suggest that organizations may benefit from trainings of managers and promotion and support overall health/well-being amongst all employees including one on one sessions with coaches or psychologists to motivate and assist employees. Certain policies can promote a healthy balance between family/personal life and work. Such findings also confirm the importance of the Job-Demands-Resources Model (Demerouti et.al., 2001), as a partial explanation of occupational stress. Proposing that specific risk factors linked to the job stress include physical, psychological, organizational and social demands or costs. That may cause personal work life misbalance. Demands may include time pressure and/or workload negatively affecting health and energy for a period of time, thus decreasing job performance (Demerouti & Baker, 2011).

Resources on the other hand, may include positive factors stimulating personal growth, learning and development (e.g. receiving a support from the higher management, gaining a positive feedback for a work, or having a sense of autonomy (Shahnawaz et.al.,2018). The Job-Demands-Resources Model (Demerouti, et.al., 2001) is an alternative model of the demand-control model, explained above, however additionally enhanced by working conditions along with both positive and negative outcomes, in a sense of well-being.

This particular model is included in the current research due to its relevance to organizations. As organizations in their higher up levels are often responsible for arrangement of specific job demands/objectives, the resources that would be provided along with the building a specific culture and values that have the power either promote or dismiss physical and psychological well-being of their employees.

The current findings further show that specific trainings, investments, health promotion, more lenient free policies promote better overall health and satisfaction, reduced burnout at work, or supported treatment of burnout. Which explains why the primary data finds organizational trainings as one of the most important interventions, along with providing possibility to cooperate with a coach or psychologist and be aware of employees' level of interest and motivation. With an explanation, that through any talks, the managers can detect each employees' demands and resources and reinforce the motivation through the increase of resources as indicated also by the Job-Demands-Resources Model (Demerouti et.al., 2001; Shahnawaz et.al., 2018). Some studies suggest that only if each employee's support at work is addressed uniquely and with different form of support based on their personal needs, they are able to stay healthy and a company's overall culture boosts mental and physical health opportunities (Heinz, 2021).

Just like any theory, even the Job -demand-resources model has its' own limits. Especially, in its' non-clear interaction of demands and resources (Baker & Demerouti, 2017). As demands may have both a positive influence if they are provided as a challenge or negative influence if provided as an obstacle. Both demands and resources have a cumulative effect and cause spirals of gains and losses, which are the main part of the Job-Demand-Resources framework along with the workplace aggression. Therefore, the organizational environment is not only about resources, demands, but also about any other factors that can

contribute to the overall better work/life balance. This can be achieved by investing in social policies supporting employees through more involved unions, or offering longer paid vacations, therefore providing resources (Naji et. al., 2021). Highlighting how supporting employees also outside of their work environments contributes to improved personal part of life, which in turn makes employees more dedicated, rested and motivated to perform at work.

### **Organizational Investment in Mental Health Promotes a Culture of Community**

For this kind of better work-life balance, the current study also includes the Work-life model (Leiter & Maslach, 1999) that complements the other four theories mentioned earlier. The Work-life model (Leiter & Maslach, 1999) describes burnout in relations to the three individual dimensions (individual characteristics including energy, involvement and effectiveness) and six domains (including workload, control, reward, community, fairness, and values) related to the work environment. Explaining the largest proportion of variables (individual and working environment) of burnout, which can be viewed as a match vs mismatch, between a person (the three individual characteristics) and six specific work environment domains. The organizational interventions, can be viewed in relations to the Work life model and its' 6 dimensions of workload, control, reward, community, fairness, and values amongst employees.

The findings of the current research show that if an organization invests in trainings about mental health, burnout and teach kindness, support, and compassion they are more likely to promote an organizational culture of fairness, community, equal spread of workload and rewards as well as efficient communication and support of the employees during stressful

moments. Such findings are also in line with previous research (Naji et.al, 2021). Showing that communication, kindness and compassion amongst employees makes one feel more included and a part of community. Providing workshops related to awareness of burnout, improved overall health, or giving opportunities of flexible contracts and working hours, makes one feel more autonomous and in control as they can manage their own tasks accordingly (Naji et.al., 2021).

All six worklife areas have been previously found to be significant predictors of better health-related outcomes (Brom et.al., 2015). Including, organizational sense of community, manageable workload, feeling adequately rewarded, experiencing aligned personal and work values, having a sense of being treated fairly and in control as shown in the current research as important burnout reduction factors. Supporting the Work-life model (Leiter & Maslach, 1999). The following section addresses conclusions deriving from the current study specifically related to the boundaries.

### **Adding Boundaries Enhancing the Five Theories**

All five theoretical models, namely the Resources Model (Demerouti et.al., 2001), the Conservation of Resources model (Hobfoll, 1989; Halbesleben, & Buckley, 2004), the Job Demand-Control Model (Karasek, 1985; Van der Doef, & Maes, 1999), the Transactional model (Lazarus & Folkman, 1984), and the Work-life model (Leiter and Maslach, 1999), have made significant contributions to burnout research, prevention, and intervention. These theories encompass various aspects such as work resources, demands, motivation, perception of stressors, coping mechanisms, and experiences of work-life balance. While each theory

has its limitations and truths, the combination of all five provides a broader understanding of burnout, risk factors, and potential remedies.

Through interviews with 40 burnout reduction professionals, it is discovered that something is missing from these theories: the importance of individuals being aware of their physical, emotional, and mental boundaries and their ability to identify and communicate them when crossed. In the current study, personal boundaries between self and others are defined as the limits individuals set for themselves in terms of personal space, time, emotions, and relationships with others. Establishing personal boundaries helps maintaining self-respect, autonomy, and overall well-being. It involves understanding one's limits and effectively communicating them to others, which helps foster healthy relationships and prevents feelings of being overwhelmed or violated. By setting clear boundaries with others, individuals can prevent work-related stress from encroaching on their personal emotional and physical boundaries.

### **Personal Boundaries are Influenced by Within-Person Factors**

The current study finds that insufficient boundaries may manifest as excessive workloads, the reshuffling of priorities, and individuals assuming responsibilities that extend beyond their designated job descriptions. For this reason, the 40 burnout reduction experts provide a set of interventions to prompt individual's personal boundaries protected. Previous research has also shown that personal boundaries may be influenced by within-person factors such as personality characteristics, individual attitudes towards work, maladaptive coping styles, and demographic factors. Additionally, work environment factors, including the amount of allocated tasks, given responsibilities, sense of control, social connections, and



clarity of job expectations, contribute to the protection of personal boundaries. These factors all play a role in determining the extent to which work-related stressors can encroach on an individual's personal boundaries (Mayo clinic, 2021; Magnano, et.al., 2015).

Setting personal boundaries is therefore, a crucial skill and a protective factor for an individual's psychological, physical, and social health. Selva (2021) argues that strict self-boundaries around others contribute to a personal sense of identity. Personal boundaries encompass physical, mental, psychological, and spiritual aspects of one's life, including beliefs, emotions, intuitions, and self-esteem (Porter-O'Grady & Malloch, 2003). When personal boundaries are not respected or supported, individuals experience a sense of physical or psychological constraint, increasing the risk of burnout (Selva, 2021; Baker & Demerouti, 2007). Therefore, the current study incorporates personal boundaries as a separate area within the enhanced burnout reduction model.

Setting personal boundaries involves determining limits and spaces between oneself and others. It is a fundamental aspect of self-care. Ignoring, neglecting, or not respecting personal boundaries can lead to mental distress, including stress, financial burdens, wasted time, and relationship issues. Conversely, learning to set healthy personal boundaries brings benefits in decision-making and a sense of autonomy. Examples of personal boundaries include establishing clear expectations and responsibilities in relationships, prioritizing self-care, and maintaining a separation between personal and work life. Effective boundary setting involves defining individual needs, communicating with others, setting consequences, and practicing saying no when necessary (Selva, 2021). The awareness, establishment, and communication of personal boundaries are included as part of the Final enhanced contextual burnout reduction model and the structured guidelines of the study.

The literature underscores the significance of personal boundaries as a protective factor against burnout (Haas, 2019). Despite this awareness, it has yet to be integrated into burnout reduction models. The explicit incorporation and differentiation of the two boundary types—between work and personal life and between self and others—constitute an additional enhancement to the final contextual burnout reduction model, the Invigorate model, and the associated card deck. Given that poor workplace boundaries can lead to diminished productivity and a higher incidence of burnout, recognizing and addressing the importance of boundaries is crucial. Insufficient boundaries may contribute to overwhelming workloads, the reordering of priorities, and individuals assuming responsibilities beyond their job descriptions (Haas, 2019). Therefore, enhancing awareness regarding the necessity of boundaries and integrating this knowledge into burnout theories becomes imperative. The following section discusses the conclusions of the findings and their association with the INVIGORATE model.

### **Why is the INVIGORATE Model Important?**

Drawing upon the findings of the current study, an enhanced burnout reduction model, and its' simplified version called INVIGORATE has been developed (see Appendix, section 7). This model encompasses a comprehensive understanding of the stressors, buffers, and remedies for individuals experiencing burnout, providing practical guidance for implementation in both clinical and organizational settings. They can also be included in future research as at least a 30-31-day program for burnout reduction change, and evaluated before and after for its' efficacy. Extending beyond a 30-day timeframe is recommended, in line with the principle of brain neuroplasticity elucidated by Goodwin (2023). As neuroplasticity denotes the brain's capacity to form fresh neural connections by fortifying or

diminishing existing pathways and forming novel synapses. In the framework of this study, a regular engagement with the INVIGORATE card deck and a commitment to following its recommendations for a minimum of 30 days have the potential to initiate the cultivation of new habits and the enhancement of lifestyle patterns, ultimately contributing to an overall improvement in well-being. Also, forming a new stepping stone of having more structured guidelines for future studies.

As not only the lack of structured guidelines, but also another pitfall of previous studies (e.g. Ahola et. al., 2017) has been the lack of definition of burnout, its' assessment, and in detail described intervention which creates heterogeneity of studies and difficulty in replications or even assessing what, when and how precisely is the most efficient intervention and its' longevity.

The INVIGORATE model is a result of reviewing the 5 theories applied in this dissertation (Demerouti et.al., 2001; Hobfoll, 1989; Halbesleben, & Buckley, 2004; Karasek, 1985; Van der Doef, & Maes, 1999; Lazarus & Folkman, 1984 & Leiter and Maslach, 1999). The previous research on burnout reduction interventions (Jaworska Awa et.al. ,2010; Burzynska et. al. ,2016; Ahola et.al. ,2017; Aryankhesal et.al. ,2019; Bagnal et.al. ,2016; Bresesti et.al. ,2020; Kumar ,2016; Maricutoiu et.al. ,2016; Sheepers et.al. ,2019; Murray et.al. ,2016; Ong et.al. ,2020; Panagioti et.al.,2017; Pijpker et.al. ,2019; Westermann et.al. ,2014) along with shared expertise of 40 burnout reduction professionals. It combines taking care of one self physically, mentally, emotionally, and having social connection, manageable workload and being able to set up boundaries.

As recent neurological studies show that prolonged exhaustion, pilling workload and not having enough rest show enlarged amygdala, structure in the limbic system of the brain, and apparent weaker connections between the amygdala and brain areas associated with

emotional distress on the fMRI scans (Stilman, 2022). Studies, however also point out that these neurological changes can be reversed by applying CBT, hands on interventions like art, talking to people, switching off the mind through sports, long walks, other relaxations, and changing working conditions (Stilman, 2022). These strategies are included as part of the INVIGORATE model and remedies within the 43-card deck guidelines (See Appendix, section 7). The card deck is recommended to be applied individually, within the team, and the whole organization to support overall well-being and social work support needs. Due to a continuous significant increase of burnout and its' detrimental consequences (Elbarazi et.al., 2019).

### **Recognizing Diversity in Needs**

Overall, the results' meanings and applicability show that burnout treatment is a very complex and cannot apply "one treatment fits all" approach. Rather an individual assessment, understanding and specific targeting of individual stressors to counteract the effects or fully protect against burnout. Burnout shall not be treated as an issue of an individual, but rather as a part of a team, organization or the whole society. The treatment needs to reflect a support of an individual, team, and the whole organization. The creation of the INVIGORATE model and the 43-card deck product serves as a practical contribution to the individuals, teams and companies with the hope of lowering the burnout occurrence, making improvements to one's experience of well-being. As well, as the current dissertation enhanced the theoretical contribution to burnout research with the final enhanced contextual burnout reduction model, highlighting burnout's risk and protective factors as well as its' effective interventions.

## 5.19 Summary of Chapter 5

This chapter delves into how the present dissertation contributes to both theoretical understanding and practical application related to burnout interventions. It highlights the negative consequences of burnout on work engagement, absenteeism, and well-being. To address these issues, an enhanced burnout reduction model with three-layered interventions (individual, team, and organization) has been developed. The current research has pinpointed gaps in previous studies, which either focus solely on individual support or do not differentiate between team and organizational interventions (e.g. Wiederhold et al., 2018). The findings emphasize the complexity of the interaction between individual, team, and organizational factors, with the combination of support on all levels having a greater protective impact against burnout. The developed INVIGORATE model provides specific guidelines in the form of a 43-card deck, aiming to support individuals, teams, and organizations in addressing burnout. Limitations and recommendations for future research, such as exploring the perspectives of burnout sufferers and quantitatively testing the efficacy of the proposed interventions, are also discussed. In conclusion, this dissertation sheds light on the multifaceted nature of burnout, emphasizing the urgent need for comprehensive support systems and organizational reforms to ensure the well-being and success of future working generations.

## References

Adriaenssens, J., De Gucht, V., Maes, S. (2015). Determinants and prevalence of burnout in emergency nurses: A systematic review of 25 years of research. *Int. J. Nurs. Stud.*, 54, 649–661. doi: 10.1016/j.ijnurstu.2014.11.004

Ahola, K., Toppinen-Tanner, S., & Seppänen, J. (2017). Interventions to alleviate burnout symptoms and to support return to work among employees with burnout: Systematic review and meta-analysis. *Burnout Research*, 4, 1-11.

Alarcon, G., Eschleman, K., & Bowling, N.A. (2009). Relationships between personality variables and burnout: A meta-analysis. *An international Journal of Work, Health, & Organisations*, 23 (3), 243-263.

Alexander, M. and John R. (2018). Burnout in United States Healthcare Professionals: A Narrative Review. Doi: 10.7759/cureus.3681.

Angelini, G. (2023). Big five model personality traits and job burnout: A systematic literature review. *BMC Psychology*, 11(49). <https://doi.org/10.1186/s40359-023-00745-y>

Arnold & Itkin, L.L.P. (2021). “4 Dangers Caused by Too Much Overtime.”.  
Downloaded in August 2022 from: <https://www.workforcesoftware.com/blog/overtime-employee-burnout-how-to-fix-it/>

Aryankhesal, A., Mohammadibakhsh, R., Hamidi, Y., Alidoost, S., Behzadifar, M., Sohrabi, R., & Farhadi, Z. (2019). Interventions on reducing burnout in physicians and nurses: A systematic review. *Medical Journal of the Islamic Republic of Iran*, 33, 77.

Ashforth, B.E., Kreiner, G.E., & Fugate, M. (2000). All in a day's work: boundaries and micro role transitions. *The Academy of Management Review* 25, 472-491.

Awa, W.L., Plaumann, M., & Walter, U. (2010). Burnout prevention: a review of intervention programs. *Patient Educational Counselling* 78, 184–190.

Ayyala, R. S., Ahmed, F. S., Ruzal-Shapiro, C., & Taylor, G. A. (2018). Prevalence of Burnout Among Pediatric Radiologists. *Journal of the American College of Radiology*, [Advance online publication]. <https://doi.org/10.1016/j.jacr.2018.08.016>

Bagnal, A., Jones, R., Akter, H., Woodall, J. (2016). Interventions to prevent burnout in high risk individuals: evidence review. Downloaded in February 2021 from: [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/506777/25022016\\_Burnout\\_Rapid\\_Review\\_2015709.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/506777/25022016_Burnout_Rapid_Review_2015709.pdf)

Baker, A.B. &Demerouti, E. (2017). Job Demands-Resources Theory: Taking Stock and Looking Forward. *Journal of Occupational Health Psychology*, 22 (3), 273-285.

Bakker, A., Demerouti, E. &Schaufeli,W. (2003). Dual processes at work in a call Centre: An application of the job demands–resources model. *European Journal of Work and Organizational Psychology*, 12 (4), 393-417.

Bancos, I. (2018). What is serotonin. Downloaded in February 2021 from:  
<https://www.hormone.org/your-health-and-hormones/glands-and-hormones-a-to-z/hormones/serotonin>

Barbosa, P., Raymond, G., Zlotnick, C., Wilk, J., Toomey, R. 3rd, Mitchell, J. 3rd. (2013). Mindfulness-based stress reduction training is associated with greater empathy and reduced anxiety for graduate healthcare students. *Educational Health*, 26(1), 9–14.

Bernard, H. (1988). *Research Methods in Cultural Anthropology*. Sage, Newbury Park. Berry, J., & Biggers, A. (2018). Endorphins: Effects and how to increase levels. Downloaded in February 2021 from:  
<https://www.medicalnewstoday.com/articles/320839>



Bianchi, Renzo; Schonfeld, Irvin S.; & Laurent, Eric A. (2018). Neglected Problem in Burnout Research. *Academic Medicine*, 93 (4 ), 518-519 Doi: 10.1097/ACM.00000000000002103

Bon, A. T., & Shire, A. M. (2022). Review of Conservation of Resources Theory in Job Demands and Resources Model. *International Journal of Global Optimization and Its Application*, 1(4), 236-248. DOI: 10.56225/ijgoia.v1i4.102

Borgstede, M., & Scholz, M. (2021). Quantitative and Qualitative Approaches to Generalization and Replication—A Representationalist View. *Frontiers in Psychology*, 12. <https://doi.org/10.3389/fpsyg.2021.605191>

Boritz, M., Rugulies, R., Bjorner, J.B., Villadsen, E., Mikkelsen, O.A., Kristensen, T.S. (2006). Burnout among employees in human service work: design and baseline findings of the PUMA study. *Scandinavian Journal of Public Health* 34, (1), 49-58.

Bresemi, I., Folgori, L., & De Bartolo, P. (2020). Interventions to reduce occupational stress and burn out within neonatal intensive care units: A systematic review. *Occupational and Environmental Medicine* 77 (8), 1-5.

Bretland, R. J., & Thorsteinsson, E.B. (2015). Reducing workplace burnout: the relative benefits of cardiovascular and resistance exercise. *Peer Journal* 3. Downloaded in December 2020 from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4393815/>

Brom, S.S., Buruck, G., Horváth, I., Richter, P., & Leiter, M.P. (2015). Areas of worklife as predictors of occupational health-a validation study in two German samples. *Burnout Research*, 2, 60-70.

Brower, T. (2022). Burnout is a worldwide problem: 5 ways work must change. Downloaded in August 2022 from: <https://www.forbes.com/sites/tracybrower/2022/07/24/burnout-is-a-worldwide-problem-5-ways-work-must-change/>

Brummet, B.H., Barefoot, J.C., Siegler, I.C., Clapp-Channing, N.E., Lytle, B.L., Bosworth, H.B., Williams, R.B., & Mark, D.B. (2001). Characteristics of socially isolated patients with coronary artery disease who are at elevated risk for mortality. *Psychosomatic Medicine*, 63 (2), 267-272.

Brody, J.E. (2017). Social Interaction is Critical for Mental and Physical Health. Downloaded in June 2022 from: <https://www.nytimes.com/2017/06/12/well/live/having-friends-is-good-for-you>

Buchwald, P. &Hobfoll, S.E. (2004). Burnout in the conservation of resources theory. *Psychologie in Erziehung und Unterricht*, 51 (4), 247-257.  
DOI: [10.1016/B978-012373947-6.00093-3](https://doi.org/10.1016/B978-012373947-6.00093-3)

Buruck, G., Tomaschek, A., &Lütke-Lanfer, S.S. (2018). Burnout prevention team-process evaluation of an organizational health intervention. *Journal of Public Health: From the Theory to Practice*. Downloaded in February 2021 from:  
<https://doi.org/10.1007/s10389-018-0999-0>

Casteel, A., & Bridier, N. (2021, January). Describing Populations and Samples in Doctoral Student Research. *International Journal of Doctoral Studies*, 16, 339-362.  
<https://doi.org/10.28945/4766>

Castleberry, P.(2023). The 5 stages of burnout-and how to beat them. Downloaded in February 2024 from: <https://www.fastcompany.com/90740516/how-to-manage-each-of-the-5-stages-of-burnout>

Chen, S. (January 2023). Combating Burnout with Boundaries. Behavioral Health Partners Blog. Downloaded in July 2023 from:  
<https://www.urmc.rochester.edu/behavioral-health-partners/bhp-blog/january-2023/combating-burnout-with-boundaries.aspx>

Chetty, P., & Thakur, S. (2020). How to establish the validity and reliability of qualitative research? Retrieved In December 2023 from: <https://www.projectguru.in/how-to-establish-the-validity-and-reliability-of-qualitative-research/>

Chirico, F. (2016). Spiritual well-being in the 21<sup>st</sup> century: It is time to review the current WHO's health definition. *Journal of Health and Social Sciences*, 1 (1), 11-16.

Cherniss, C. (1993). Role of professional self-efficacy in the etiology and amelioration of burnout. In: Schaufeli. W., Maslach, C. , Marek, T. (Eds). *Professional burnout: recent developments in theory and research*. Washington, DC:

Cloud, H. (2002). *Boundaries: When to Say Yes, When to Say No, To Take Control of Your Life*. Publisher. Zondervan; Enlarged edition (2 Nov. 2017).

Cohen-Katz J., Wiley, S., & Capuano, T. (2005). The effects of mindfulness-based stress reduction on nurse stress and burnout: a qualitative and quantitative study. Part III. *Holistic Nursing Practitioner*, 19, 78–86.

Corney, A. (2021). Beyond Tired: Burnout Predictors, Prevention, and Programs to Implement in 2021. Downloaded in December 2023 from: <https://www.lifeintelligence.io/blog/tired-burnout-predictors-prevention-programs>

Crossley, J. & Jansen, D., (2021). *Saunders' Research Onion: Explained Simply*.

Downloaded in April 2022 from: <https://gradcoach.com/saunders-research-onion>

De Jonge, J., & Dormann, C. (2006). Stressors, resources and strain at work: A longitudinal test of the triple-match principle. *Journal of Applied Psychology*, 91, 1359-1374.

De Lange, A. H., Taris, T. W., Kompier, M. A. J., Houtman, I. L. D., & Bongers, P. M. (2003). 'The very best of the millennium': Longitudinal research and the demand-control-(support) model. *Journal of Occupational Health Psychology*, 8(4), 282–305.

Demerouti, E.; Bakker, A.B.; Nachreiner, F.; & Schaufeli, W.B. (2001). The job demands- resources model of burnout. *Journal of Applied Psychology*, 86, 499–512.

Demerouti, E., & Bakker, A.B. (2011). The job demands-resources model: Challenges for future research. *SA Journal of Industrial Psychology* 37 (2), DOI:[10.4102/sajip.v37i2.974](https://doi.org/10.4102/sajip.v37i2.974)

Demerouti, E., Peeters, M.C., & van der Heijden B.I. (2012). Work–family interface from a life and career stage perspective: The role of demands and resources. *International Journal of Psychology*, 47 (4) (2012), 241-258.

Deshmukh, A. (2013, May). Sampling - Probability Vs Non-Probability.

Downloaded in December 2022 from: DOI:10.13140/RG.2.2.22780.54404

De Vibe, M., Solhaug, I., Tyssen, R., Friborg, O., Rosenvinge, J., Sørli, T. (2013). Mindfulness training for stress management: a randomised controlled study of medical and psychology students. *BMC Medical Education*, 13, 13–107.

Dibley, L., Dickerson, S., Duffy, M., & Vandermause, R. (2020). *Doing Hermeneutic Phenomenological Research: A Practical Guide*. Sage Publications Ltd. London.

Durmus, S.C.; Gülnar, E., & Özveren, H. (2022). Determining digital burnout in nursing students: A descriptive research study. *Nurse Education Today*, 111, <https://doi.org/10.1016/j.nedt.2022.105300>

Dylag, A., Jaworek, M., Karwowski, W., Kozusznik, M., & Marek, T. (2013). Discrepancy between individual and organizational values: *Occupational burnout and work engagement among white-collar workers (43)* Netherlands: Elsevier Science.

Elbarazi, I., Loney, T., Yousef, S., & Elias, A. (2017). Prevalence of and factors associated with burnout among health care professionals in Arab countries: a systematic review. *BMC Health Services Research*, 17, 491.

Elfein, J. (2019). Stress and burnout-Statistics & Facts. Downloaded in July 2020 from <https://www.statista.com/topics/2099/stress-and-burnout/>

Eurofound (2018), *Burnout in the Workplace: A Review of Data and Policy Responses in the EU*, Publications Office of the European Union. Luxembourg.

Retrieved in August 2019 from:

[https://www.eurofound.europa.eu/sites/default/files/ef\\_publication/field\\_ef\\_document/ef18047en.pdf](https://www.eurofound.europa.eu/sites/default/files/ef_publication/field_ef_document/ef18047en.pdf).

Farrell, S. (2016). Open-Ended vs. Closed-Ended Questions in User Research. Downloaded in June 2023 from: <https://www.nngroup.com/articles/open-ended-questions/>

Farnsworth, B. (2019). Qualitative vs quantitative research – What is what? Downloaded in June 2022 from: <https://imotions.com/blog/qualitative-vs-quantitative-research/>

Folkman, S., Lazarus, R.S., Dunkel-Schetter, C., DeLongis, A., & Gruen, R.J. (1986). Dynamics of a stressful encounter: Cognitive appraisal, coping, and encounter outcomes. *Journal of Personality and Social Psychology*, 50, 992-1003.

Forero, R., Nahidi, S., De Costa, J., Mohsin, M., Fitzgerald, G., Gibson, M., McCarthy, S., & Aboagye-Sarfo, P. (2018). Application of four-dimension criteria to assess rigour of qualitative research in emergency medicine. *BMC Health Services Research*, (18), 120, <https://doi.org/10.1186/s12913-018-2915-2>

Freudenberger, H.J. (1974). Staff Burn-Out. *J. Soc. Issues*, 30, 159–165.

Gabriel, K. P., & Aguinis, H. (2022). How to prevent and combat employee burnout and create healthier workplaces during crises and beyond. *Business Horizons*, 65(2), 183-192. doi: <https://doi.org/10.1016/j.bushor.2021.02.037>

Gagne, M., & Deci, E.L. (2005). Self determination theory and work motivation. *Journal of Organizational Behavior*, 26, 331-362.

Gascon, S., Masluk, B., Montero-Marin, J., Leiter, M.P., Herrera, P., & Albesa, A. (2019). Areas of work-life in Spanish hostelry professionals: Explanatory power on burnout dimensions. *Health and Quality of Life Outcomes*, 17, 133.



Giurge, L.M., &Bohns, V.K. (2020). 3Tips to avoid WFH burnout. Downloaded in May 2021 from: <https://hbr.org/2020/04/3-tips-to-avoid-wfh-burnout>

Gnerre, P., Rivetti, Ch., Rossi, A.P., & Tesei, L. (2017). Work stress and burnout among physicians and nurses in internal and emergency departments. *Italian Journal of Medicine*, 11 (2), 151-158.

Goleman, D., Boyatzis, R. E., & McKee, A. (2018). *Primal Leadership, With a New Preface by the Authors: Unleashing the Power of Emotional Intelligence* (Illustrated ed.). Amazon.com.

Golkar,A.; Johansson, E.; Kasahara, M.; Osika, W.; Perski, A., & Savic, I. (2014). The influence of work-related chronic stress on the regulation of emotion and on functional connectivity in the brain. Downloaded in August 2022 from: <https://doi.org/10.1371/journal.pone.0104550>

Goodwin, J. (2023). *Change Your Brain for 30 Days: Harness the Power of Neuroplasticity to Transform Your Mind and Life in Just 30 Days*. Paperback edition. Amazon.

Grant, A.M. (2011). Beyond bad is bad and good is good: The benefits of negative relationships and the costs of positive relationships. *Paper presented at the Israel Organizational Behavior Conference*, Tel Aviv.

Gregory, S. T. (2015). Burnout among primary care physicians: A test of the areas of worklife model. *Journal of Healthcare Management* 60 (2), 133-148.

Grucela, A. (2023, June 11). 45+ Burnout Statistics, Trends, and Facts .  
Downloaded in September 2023 from: <https://passport-photo.online/blog/burnout-statistics/#gref>

Haas, S.B. (2019). Why lack of boundaries can lead to burnout. Downloaded from Psychology today in August 2022 from:  
<https://www.psychologytoday.com/us/blog/prescriptions-life/201902/why-lack-boundaries-can-lead-burnout>

Hairston, D.R., Gibbs, A.T., Wong, S.S., & Jordan, A. (2019). Clinician Bias in Diagnosis and Treatment: Contemporary Issues and Interventions. *Racism and Psychiatry* p.105- 137.

Hakanen, J.J., & Schaufeli W.B. (2012). Do burnout and work engagement predict depressive symptoms and life satisfaction? A three-wave seven-year prospective study. *Journal of Affective Disorders*, 141 (2), 415-424.

Halbesleben, J.R. & Buckley, M.R. (2004). Burnout in organizational life. *Journal of Management* 30, 859–879.

Halbesleben, J.R.B., Neveu, J., Paustian-Underdahl, S.C., & Westman, M. (2014). Getting to the “COR”: Understanding the role of resources in conservation of Resources Theory. *Journal of Management*, 40, (5), 1334-1364.

Häusser, J.A., Mojzisch, A., Niesel, M. & Schulz-Hardt, S. (2010). Ten years on: A review of recent research on the Job Demand-Control (-Support) model and psychological well-being. *Work & Stress*, 24 (1), 1-35.

Heinz, K. (2021). How to avoid employee burnout with a remote team. Downloaded in August 2022 from: <https://builtin.com/employee-engagement/employee-burnout>

Hobfoll, S.E. (1988). *The ecology of stress*. New York: Hemisphere.

Hobfoll, S.E. (1989). Conservation of resources: A new attempt at conceptualizing stress. *American Psychologist*, 44, 513-524.

Hobfoll, S. E., & Freedy, J. (1993). Conservation of resources: A general stress theory applied to burnout. In W. B. Schaufeli, C. Maslach, & T. Marek (Eds.), *Professional Burnout: Recent Developments in Theory and Research*, 115-129. Taylor & Francis

Hobfoll, S.E., Halbesleben, J., Neveu, J., & Westman, M. (2018). Conservation of Resources in the organizational context: The reality of resources and their consequences. *Annual Review of Organizational Psychology and Organizational Behavior*, 5, 103-128.

Holberg, C. (2019). Burnout: Its relationship to stress and individual susceptibilities. Downloaded in December 2023 from: <https://ntnuopen.ntnu.no/ntnu-xmlui/bitstream/handle/11250/2612399/Holberg%2C%20Caroline.pdf?sequence=1&isAllowed=y>

Holmes, B. J., Best, A., Davies, H., Hunter, D., Kelly, M. P., Marshall, M., & Rycroft-Malone, J. (2017). Mobilising knowledge in complex health systems: a call to action. *Evidence & Policy*, 13, (3), 539-560. Doi: <https://doi.org/10.1332/174426416X14712553750311>

Hooftman, W. E., Mars, G. M. J., Janssen, B., De Vroome, E. M. M., Pleijers, A. J. S. F., Michiels, J. J. M. et al. (2017), *Nationale enquete arbeidsomstandigheden 2016* [National working conditions survey 2016], TNO, Centraal Bureau voor de Statistiek (CBS) and Ministerie van Sociale Zaken en Werkgelegenheid, Leiden and Heerlen.

Imamura, K., Kawakami, N., Furukawa, T. A., Matsuyama, Y., Shimazu, A., Umanodan, R., Kawakami, S., & Kasai, K. (2015). Does Internet-based cognitive behavioral therapy (iCBT) prevent major depressive episode for workers? A 12-month follow-up of a randomized controlled trial. *Psychological Medicine*, 45, 1907–1917.

Ito, J.K., & Brotheridge, C.M. (2003). Resources, coping strategies and emotional exhaustion: A conservation of resources perspective. *Journal of Vocational Behavior*, 63, 490-509.

Izdebski, Z., Kozakiewicz, A., Białorudzki, M., Dec-Pietrowska, J., & Mazur, J. (2023). Occupational Burnout in Healthcare Workers, Stress and Other Symptoms of Work Overload during the COVID-19 Pandemic in Poland. *International Journal of Environmental Research and Public Health*, 20(3), 2428.

<https://doi.org/10.3390/ijerph20032428>

Jarzynkowski, P., Piotrkowska, R., Mędrzycka-Dąbrowska, W., & Książek, J. (2022). Areas of Work Life as Predictors of Occupational Burnout of Nurses and Doctors in Operating Theaters in Poland—Multicenter Studies. *Healthcare*, 10(1), 26.

<https://doi.org/10.3390/healthcare10010026>

Jaworska-Burzyńska, L., Kanaffa-Kilińska, U., Przysiężna, E., Szczepańska-Gieracha, J. (2016). The role of therapy in reducing the risk of job burnout—a systematic review of literature. *Archives of Psychiatry and Psychotherapy*, 4, 43-52.

Jie, H., Yansong, W., & Xuqun, Y. (2016). The Job Demands-Resources Model and Job Burnout: The Mediating Role of Personal Resources. *Current Psychology*, 35 (4), 562–569.

Kabat-Zinn, J. (1990). Full catastrophe living: Using the wisdom of your body and mind to face stress, pain, and illness. Delta

Karasek, R.A. (1985). *Job content questionnaire and user's guide*. Los Angeles: University of Southern California, Department of Industrial and System Engineering.

Karasek, R. & Theorell, T. (1990). *Healthy work: Stress, productivity, and the reconstruction of working life*. New York: Basic books.

Karin, O., Raz, M., Tendler, A., Bar, A., Kohanim, Y. K., Milo, T., & Alon, U. (2020). A new model for the HPA axis explains dysregulation of stress hormones on the timescale of weeks. *Molecular Systems Biology*, 16(7), e9510.  
<https://doi.org/10.15252/msb.20209510>

Kiger, M. E., & Varpio, L. (2020). Thematic analysis of qualitative data: AMEE Guide No. 131. *Medical Teacher*, 42(8), 846-854.  
<https://doi.org/10.1080/0142159X.2020.1755030>

Kim, S., Kim, H., Park, E. H., Kim, B., Lee, S. M., & Kim, B. (2019). Applying the demand-control-support model on burnout in students: A meta-analysis. *Journal of Employment Counseling*, 56(1), 27-43. <https://doi.org/10.1002/joec.12182>

Kim, D. I., Loo, L. K., Garrison, R. C., Motabar, A., Yu, M., Nathaniel, B., Ulrich, M. T., Skoretz, L., Jafari, J., Calzia, M., Gilmore, M., & Firekp, A. (2021). Does teaching optimism lower burnout in residency training– a pilot study. *J Community Hosp Intern Med Perspect*, 11(4), 429-432. <https://doi.org/10.1080/20009666.2021.1910408>

Kinnunen, U., Rantanen, J., de Bloom, J., Mauno, S., Feldt, T., & Korpela, K. (2016). The role of work–nonwork boundary management in work stress recovery. *International Journal of Stress Management*, 23(2), 99–123. <https://doi.org/10.1037/a0039730>

Kok, N., van Gurp, J., Teerenstra, S., van der Hoeven, H., Fuchs, M., Hoedemaekers, C., & Zegers, M. (2021). Coronavirus Disease 2019 Immediately Increases Burnout Symptoms in ICU Professionals: A Longitudinal Cohort Study. *Critical Care Medicine*, 49(3), 419-427. DOI: 10.1097/CCM.0000000000004865.

Korunka,Ch., Tement, S., Zdrehus, C., & Borza, A. (2020).Burnout: Definition, recognition and prevention approaches. Downloaded in April 2020 from: [https://www.bridgestoeurope.com/wp-content/uploads/2020/03/BOIT\\_theoretical\\_abstract\\_2705.pdf](https://www.bridgestoeurope.com/wp-content/uploads/2020/03/BOIT_theoretical_abstract_2705.pdf)

Kothari,C.R. (2006). *Research Methodology: Method and Technique*” New Age International, New Delhi. India.

Kronos Incorporated (2017), *The Employee Burnout Crisis: Study Reveals Big Workplace Challenge* downloaded in August 2020 from: <https://www.kronos.com/about-us/newsroom/employee-burnout-crisis-study-reveals-big-workplace-challenge-2017>

Kumar, S. (2016). Burnout and doctors: prevalence, prevention and intervention. *Healthcare (Basel)*, 4 (3), 37.

Kyngäs, H., Kääriäinen, M., & Elo, S. (2019). The Trustworthiness of Content Analysis. In *The Application of Content Analysis in Nursing Science Research* (Chapter). Retrieved in February 2024 from <https://doi.org/10.1007/978-3-030-30696-9>

Lambreghts, C., Vandenbroeck, S., Goorts, K., & Godderis, L. (2023). Return-to-work interventions for sick-listed employees with burnout: a systematic review. *Occupational Environmental Medicine*, 0, 1-7. doi:10.1136/oemed-2023-108867

LaMotte, S. (2022). Burnout may be changing your brain. Here's what to do. Life, But Better - Mindfulness. CNN. Retrieved in December 2023 from: <https://edition.cnn.com/2022/03/10/health/burnout-changing-brain-wellness/index.html>

Lastovkova, A., Carder, M., Rasmussen, H. M., Sjoberg, L., de Groene, G. J., Sauni, R., Vevoda, J., Vevodova, S., Lasfargues, G., Svartengren, M., Varga, M., Colosio, C., & Pelclova, D. (2018). Burnout syndrome as an occupational disease in the European



Union: An exploratory study. *Industrial Health*, 56(2), 160–165.

<https://doi.org/10.2486/indhealth.2017-0132>

Lazarus, R., & Folkman, S. (1984). *Stress, Appraisal, and Coping*. New York: Springer.

Lee, R.T., Seo, B., Hladkyl, S., Lovell, B.L., & Schwatzmann, L. (2013). Correlates of physician burnout across regions and specialties: a meta-analysis. *Human Resources Health*: doi: 10.1186/1478-4491-11-48.

Leininger, M. (1994). Evaluation criteria and critique of qualitative research studies. In J. M. Morse (Ed.), *Critical issues in qualitative research methods* (pp. 95-115). Thousand Oaks, CA: Sage.

Leiter, M.P., & Maslach, Ch. (1999). Six areas of worklife: a model of the organizational context of burnout. *Journal of Health and Human Resources Administration*, 21(4), 472-489.

Leiter, M.P., & Maslach, C. (2004). Areas of worklife: A structured approach to organizational predictors of job burnout. In Perrewé, P. & Ganster, D.C. (Eds.).

Research in occupational stress and well-being: Vol.3. *Emotional and physiological processes and positive intervention strategies* (pp. 91-134). Oxford:JAI Press/Elsevier.

Leiter, M.P., & Maslach, C. (2016). Interventions to prevent and alleviate burnout. *Burnout at work: a psychological perspective*. London: Psychology Press, p.145-67.

Lennartsson, A.-K., Sjörs, A., Währborg, P., Ljung, T., & Jonsdottir, I. H. (2015). Burnout and Hypocortisolism – A Matter of Severity? A Study on ACTH and Cortisol Responses to Acute Psychosocial Stress. *Frontiers in Psychiatry*, 6, 8.  
<https://doi.org/10.3389/fpsyt.2015.00008>

Leon, M.R., Halbesleben, J.R.B., & Paustian-Underdahl, S.C. (2015). A dialectical perspective on burnout and engagement. *Burnout Research*, 2 (2–3), 87-96.

Leone, S.S., Huibers, M.J.H., Knottnerus, J.A., & Kant, I.J. (2007). Similarities, overlap and differences between burnout and prolonged fatigue in working population. *Journal of Medicine*, 100, 617-627.

Li, Y., Li, Y., & Castaño, G. (2019). The impact of teaching-research conflict on job burnout among university teachers: An integrated model. *International Journal of*

*Conflict Management*, advance online publication. <https://doi.org/10.1108/IJCMA-05-2019-0080>

Lincoln, Y.S., & Guba, E.G. (1986). But is it rigorous? Trustworthiness and authenticity in naturalistic evaluation. *New Directions For Evaluation* (30), 73–84.

Long, T. & Johnson, M. (2000). Rigour, reliability and validity in qualitative research. *Clinical Effectiveness in Nursing* (4), 30-37. [doi:10.1054/cein.2000.0106](https://doi.org/10.1054/cein.2000.0106)

Listopad, I. W., Michaelsen, M. M., Werdecker, L., & Esch, T. (2021). Bio-Psycho-Socio-Spirito-Cultural Factors of Burnout: A Systematic Narrative Review of the Literature. *Frontiers in Psychology*, 12, 722862.  
<https://doi.org/10.3389/fpsyg.2021.722862>

Magnano, P., Paolillo, A., & Barrano, C. (2015). Relationships between personality and burnout: an empirical study with helping professions' workers. *International Journal of Humanities and Social Science Research*, 1, 10-19.

Maricutoiu, L.P., Sava, F.A., & Butta, O. (2016). The effectiveness of controlled interventions on employees' burnout: A meta-analysis. *Journal of OccupationalOrganizationalPsychology*, 89, 1–27.

Marshall, M. N. (1999). Improving quality in general practice: qualitative case study of barriers faced by health authorities. *British Medical Journal*, 319, 164-167.

Martin, G. (November 2017). *A Systematic Review and Meta-Analysis of Self-Care Interventions for Burnout Prevention in Healthcare Workers*. (Master's thesis). Advisor: Associate Professor Paul Rhodes and Professor Caroline Hunt. [The University of Sydney, Faculty of Science, Sydney].

Maslach, C. (2003). *Burnout: The Cost of Caring*. Malor Books: Cambridge, MA, USA.

Maslach, C., Leiter, M.P. (1997). *The Truth About Burnout*. San Francisco: Jossey-Bass.

Maslach, C., Leiter, M.P. (1999). Teacher burnout: A research agenda. *Understanding and Preventing Teacher Burnout: A Sourcebook of International Research and Practice*, 295-303.

Maslach, C., Jackson, S.E., & Leiter, M.P. (2017). *Maslach burnout inventory manual*. 4<sup>th</sup> ed. Palo Alto: Mindgarden Press.

Maslach, C.; Leiter, M.P. (2016). Understanding the burnout experience: recent research and its implications for psychiatry. *World Psychiatry* 15(2), 103-111.

Maslach, Ch., Schaufeli, W.B., & Leiter, M.P. (2001). Job burnout. *Annual Review of Psychology*, 52, 397-422.

Mason, M. (2010). Sample size and saturation in PhD studies using qualitative interviews. Forum: *Qualitative Social Research*, 11(3). <https://www.qualitative-research.net/index.php/fqs/article/view/1428/3027>

Marchand, A., Blanc, M.E., &Beauregards, (2018). Do age and gender contribute to workers' burnout symptoms? *Occupational Medicine*, 68 (6), 405-411.

Mayo clinic (2021). Job burnout: How to spot it and take action. Retrieved in April, 2021 from: <https://www.mayoclinic.org/healthy-lifestyle/adult-health/in-depth/burnout/art-20046642>.

Mcbride, K., Misnikov, Y., & Draheim, D. (2021). Discussing The Foundations for Interpretivist Digital Government Research. In Scientific Foundations of Digital Governance and Transformation. Springer Nature. [https://doi.org/10.1007/978-3-030-92945-9\\_6](https://doi.org/10.1007/978-3-030-92945-9_6)

McFarland, D.C., Hlubocky, F., & Riba, M. (2019). Update on addressing mental health and burnout in physicians: What is the role of psychiatry? *Current Psychiatry Reports*, 21, (108). <https://doi.org/10.1007/s11920-019-1100-6>

Molina, K. (2017, August 30). What happens with burn out in the Netherlands? Retrieved from: <https://blogs.transparent.com/dutch/what-happens-with-burn-out-in-the-netherlands/>

Morgan, G. (2016). The principles of qualitative research. Downloaded in May 2021 from: <https://www.healthknowledge.org.uk/public-health-textbook/research-methods/1d-qualitative-methods/principles-qualitative-methods-exercise2answers>

Morovicsová, E., & Valuš, L. (2022). Burnout Syndrome in Psychiatrists in Slovakia: A National Survey. *Slovak Academy of Sciences*. DOI: 10.20471/dec.2022.58.02.04

Moss, J. (2019). Burnout is about your workplace, not your people. Downloaded in April 2021 from: <https://hbr.org/2019/12/burnout-is-about-your-workplace-not-your-people>

Mudallal, R.H., Othman, W.M. & Al Hassan, N.F. (2017). Nurses burnout: the influence of leader empowering behaviors, work conditions, and demographic traits. *The Journal of Health Care Organization, Provision, and Financing*, 54, 1-10.

Murray, M, Murray, L, & Donnelly, M. (2016). Systematic review of interventions to improve the psychological well-being of general practitioners. *BMC Family Practice*, 17, 2-14.

Naji, L., Singh, B., Shah, A., Naji, F., Dennis, B., Kavanagh, O., Banfield, L., Alyass, A., Razak, F., Samaan, Z., Profetto, J., Thabane, L., & Sohani, Z. (2021). Global prevalence of burnout among postgraduate medical trainees: a systematic review and meta-regression. *CMAJ Open*, 9 (1), doi: [10.9778/cmajo.20200068](https://doi.org/10.9778/cmajo.20200068)

Neubauer, B. E., Witkop, C. T., & Varpio, L. (2019). How Phenomenology Can Help Us Learn from the Experiences of Others. *Perspectives on Medical Education*, 8, 90-97. <https://doi.org/10.1007/s40037-019-0509-2>

Noble, H., & Heale, R. (2019). Triangulation in Research, with Examples. *Evidence-Based Nursing*, 22, 67-68. <https://doi.org/10.1136/ebnurs-2019-103145>

Ochentel, O., Humphrey, C., & Pfeifer, K. (2018). Efficacy of Exercise Therapy in Persons with Burnout: A Systematic Review and Meta-Analysis. *Journal of Sports Science of Medicine*, 17 (3), 475-484.

Ohu, E.A., Spitzmueller, C., Zhang, J., Thomas, C.L., Osezua, A., & Yu, J. (2009). When work-family conflict hits home: parental work-family conflict and child health. *Journal of Occupational Health Psychology*, 24 (5), 590-601.

Ojala, B., Nygård, C.-H., Huhtala, H., Bohle, P., & Nikkari, S. T. (2019). A Cognitive Behavioural Intervention Programme to Improve Psychological Well-Being. *International Journal of Environmental Research and Public Health*, 16(1), 80.  
<https://doi.org/10.3390/ijerph16010080>

Ong, J., Swift, C., Bath, M., Ong, S., Lim, W., Al-Naeeb, Y., Shankar, A. & Young Dan, Y. (2020). The prevalence of burnout, risk factors and job-related stressors in gastroenterologists: a systematic review. *Journal of Gastroenterology and Hepatology*. <https://doi.org/10.1101/2020.12.24.20248839>

Orloff, J. (2017). *The Empath's Survival Guide: Life Strategies for Sensitive People*. Sounds True Inc.

Otto, M. C. B., Van Ruysseveldt, J., Hoefsmit, N., & Van Dam, K. (2021). Examining the mediating role of resources in the temporal relationship between proactive burnout prevention and burnout. *BMC Public Health*, 21(1), 599.  
<https://doi.org/10.1186/s12889-021-10525-9>



Oxfam GB (2020) for Oxfam International under ISBN 978-1-78748-641-6 2021

DOI: 10.21201/2020.6416. Downloaded in November from:

<https://oxfamilibrary.openrepository.com/bitstream/handle/10546/621092/gd-research-ethics-practical-guide-091120-en.pdf;jsessionid=4104A236D13F7B5F59F8A680A1027E32?sequence=1>

Panagioti, M., Panagopoulou, E., Bower, P., Lewith, G., Kontopantelis, E., Chew-Graham, C., Dawson, S., van Marwijk, H., Geraghty, K., & Esmail, A. (2017). Controlled interventions to reduce burnout in physicians: A systematic review and Meta-analysis. *Jama International Medicine*, 177 (2), 195-205.

Park, Y., Liu, Y., & Headrick, L. (2020). When work is wanted after hours: Testing weekly stress of information communication technology demands using boundary theory. *Journal of Organizational Behavior*, 41(6), 518–534.  
<https://doi.org/10.1002/job.2461>

Parola, V., Coelho, A., Neves, H., Bernardes, R. A., Sousa, J. P., & Catela, N. (2022). Burnout and Nursing Care: A Concept Paper. *Nursing Reports*, 12(3), 464-471.  
<https://doi.org/10.3390/nursrep12030044>

Parvez, H. (2024). Cognitive Behavioral Theory (Explained). Downloaded in February 2024 from: <https://www.psychmechanics.com/cognitive-behavioural-theory-cbt-in/>

Peeters, M. C. W., Buunk, B. P., & Schaufeli, W. B. (1995). A micro analytic exploration of the cognitive appraisal of daily stressful events at work: The role of controllability. *European Journal of Social Psychology*, 25(3), 299-309.

Pijpker, R., Vaandrager, L., Veen, E.J., & Koelen, M.A. (2019). Complaints and promote return to work: a systematic review of effectiveness and mediators of change. *International Journal of Environmental Research and Public Health*, 17 (55). doi:10.3390/ijerph17010055

Pijpker, R., Vaandrager, L., Veen, E.J., & Koelen, M.A. (2020). Combined interventions to reduce burnout complaints and promote return to work: a systematic review of effectiveness and mediators of change. *International Journal of Environmental Research and Public Health*, 17 (1), 55.

Porter-O'Grady, T., & Malloch, K. (2003). Quantum Leadership, p.135, downloaded in May 2021 from: <https://archive.org/details/quantumleadershi00port>

Public Health England. (2016, March 2). Interventions to prevent burnout in high-risk individuals: Evidence review (PHE Gateway number: 2015709). Retrieved in July 2023 from: <https://www.gov.uk/government/publications/interventions-to-prevent-burnout-in-high-risk-individuals-evidence-review>

Ratnawati, H. & Putranti, D. (2022). Organizational Commitment of Hospital Nurses: an Empirical Study on Work-Life Balance and Burnout Management. *European Researcher. Series A*, 2018, 9(3), 235-248.

Rehman, A.U., Bhuttah, T.M., & You, X. (2021). Linking burnout to psychological well-being: the mediating role of social support and learning motivation. *Psychology Research and Behavior Management*. Downloaded in May 2021 from: <https://www.dovepress.com/getfile.php?fileID=59532>

Resnick, A. (2021). What is somatic theory? Downloaded in June 2022 from: <https://www.verywellmind.com/what-is-somatic-therapy-5190064>

Rich, A., Aly, A., Cecchinato, M.E., Lascau, L., Baker, M., Viney, R., & Cox, A.L. Evaluation of a novel intervention to reduce burnout in doctors-in-training using self-care and digital well-being strategies: a mixed-methods pilot. *BMC Medical Education*, 20 (294), <https://doi.org/10.1186/s12909-020-02160-y>

Rolfe, G. (2006). Validity, trustworthiness and rigour: Quality and the idea of qualitative research. *Leading Global Nursing Research*, 53 (3), 304-310.  
<https://doi.org/10.1111/j.1365-2648.2006.03727.x>

Rostami, Z., Abedi, M. R., & Schaufeli, W. B. (2012). Does interest predict academic burnout? *Interdisciplinary Journal of Contemporary Research in Business*, 3(9), 877–885.

Rubino, C. Perry, S.J. , Milam, A.C., Spitzmueller, C. , & Zapf, D. (2012). Demand– control–person: Integrating the demand–control and conservation of resources models to test an expanded stressor–strain model. *Journal of Occupational Health Psychology*, 17, 456.

Rupert, P. A., Miller, A. O., & Dorociak, K. E. (2015). Preventing burnout: what does the research tell us? *Prof. Psychol. Res. Prac.* 46:168. doi: 10.1037/a0039297

Sallon, S., Katz-Eisner, D., Yaffe, H., & Bdolah-Abram, T. (2015). Caring for the caregivers: results of an extended, five component stress reduction intervention for hospital staff. *Behavioral Medicine*, 43 (1), 1-15.

Sarason, I., Levine, H., Basham, R., Sarason, B., (1983). Assessing social support: the Social Support Questionnaire. *Journal of Personality and Social Psychology* (44), 127-39.

Saunders M, Lewis P and Thornhill A. 2007. *Research methods for business students*. (6th ed.) London: Pearson.

Sauro, J. (2015). 5 Reasons to Perform a Qualitative Study. Downloaded in May 2022 from: <https://www.studocu.com/en-us/document/florida-state-university/special-topics-in-religion/lecture-notes/measuring-u-5-types-of-qualitative-methods/2768371/view>

Scott, E., & Snyder, C. (2020). Traits and attitudes that increase burnout risk. Retrieved in April 2021 from: <https://www.verywellmind.com/mental-burnout-personality-traits- 3144514>

Selič-Zupančič, P., Klemenc-Ketiš, Z., & Onuk Tement, S. (2023). The Impact of Psychological Interventions with Elements of Mindfulness on Burnout and Well-Being in Healthcare Professionals: A Systematic Review. *Journal of Multidisciplinary Healthcare*, 16:, 1821-1831; <https://doi.org/insert DOI number when available>

Sharma, G. (2017). Pros and Cons of Different Sampling Techniques. *International Journal of Applied Research*, 3, 749-752.

Schaufeli, W.B., & Bakker, A.B. (2010). Defining and measuring work engagement Bakker, A.B. & Leiter, M.P. (Eds.), *Work engagement: A handbook of essential theory and research*, Psychology Press, New York.

Schaufeli, W.B. & Buunk, B.P. (2003). Burnout: An overview of 25 years of research and theorizing. In: M.J. Schabracq, J.A.M. Winnubst and C.L. Cooper (Eds.), *The*

*Handbook of Work and Health Psychology* (2<sup>nd</sup> edition), pp. 383-425. Chichester: John Wiley and sons.

Schaufeli, W.B., Taris, T.W. (2005). The conceptualization and measurement of burnout: Common ground and worlds apart. *Work Stress*; 19, 256–62.

Schaufeli, W. B., & Taris, T. W. (2014). A Critical Review of the Job Demands-Resources Model: Implications for Improving Work and Health. *Bridging Occupational, Organizational and Public Health*, DOI 10.1007/978-94-007-5640-3\_4

Schreuder, H. T., & Gregoire, T. G. (2001, March). For What Applications Can Probability and Non-Probability Sampling Be Used? *Environmental Monitoring and Assessment*, 66 (3), 281-291. <https://doi.org/10.1023/A:1006316418865>

Selva, J. (2021). How to set healthy boundaries: 10 examples + Pdf worksheets. Downloaded in May 2021 from: <https://positivepsychology.com/great-self-care-setting-healthy-boundaries/>

Sepala, E. (2017). The Happiness Track: How to Apply the Science of Happiness to Accelerate Your Success. HarperOne; Reprint edition.

Séveno, V. (2023, January 9). Number of workers in the Netherlands at risk of burnout rising post-pandemic. Downloaded in July 2023 from:

<https://www.iamexpat.nl/career/employment-news/number-workers-netherlands-risk-burnout-rising-post-pandemic>

Shahnawaz Adil, M., & Braig, M. (2018). Impact of job demands-resources model on burnout and employee's well-being: Evidence from the pharmaceutical organisations of Karachi. *IIMB Management Review*, 30 (2), 119-133.

Shanafelt T.D., Hasan O., Dyrbye L.N., Sinsky C., Satele D., Sloan J., & West C.P. (2015). Changes in Burnout and Satisfaction With Work-Life Balance in Physicians and the General US Working Population Between 2011 and 2014. *Mayo Clin. Proc.* 90, 1600–1613.

Shane, J., & Heckhausen, J. (2016). For better or worse: Young adults' opportunity beliefs and motivational self-regulation during career entry. *International Journal of Behavioral Development*, 40 (2), 107-116.

Scheepers, R. A., Emke, H., Epstein, R. M., Lombarts, K. M. J. M. H. (2019). The impact of mindfulness-based interventions on doctors' well-being and performance: A systematic review. *Medical Education*, 54 (2), 138–149.

Smith, B. (2016). *Narrative analysis*. In E. Lyons & A. Coyle (Eds.), *Analysing qualitative data in psychology* (2nd ed., pp. 202-221). London: Sage.

Sorkhehei, S. A., & Fazel, A. (2019). Predicting burnout based on coping styles and personality characteristics in principals and assistants of primary school region 5 education of Tehran. *Indian Journal of Positive Psychology*, 10(4), 256-259.

Spini D., Bernardi, L. & Oris, M. (2017). Toward a life course framework for studying vulnerability. *Research in Human Development*, 14 ,5-25.

Stillman, J. (2022). How Burnout Physically Changes Your Brain (It's Not Pretty). *Workforce Wellness*. Downloaded in April 2023 from: <https://www.inc.com/jessica-stillman/burnout-brain-chemistry-mental-health.html>

Streefkerk, R. (2019, April 12). Qualitative vs. Quantitative Research | Differences, Examples & Methods. Title of the Website or Platform. Downloaded in April 2022 from : <https://www.scribbr.com/methodology/qualitative-quantitative-research/>



Suppes, P. (2014). *What is a Scientific Theory? In The Nature of Scientific Theory* (1st ed., pp. 13). Routledge. DOI: 10.4324/9781315051963

Tang, L., Zhang, F., Yin, R., & Fan, Z. (2021). Effects of interventions on learning burnout: a systematic review and meta-analysis. *Frontiers in Psychology*, <https://doi.org/10.3389/fpsyg.2021.645662>

Tawwab, N. G. (2021). Set Boundaries, Find Peace: A Guide to Reclaiming Yourself. Downloaded in July 2023 from: [https://www.shortform.com/summary/set-boundaries-find-peace-summary-nedra-glover-tawwab?gclid=CjwKCAjwLJimBhAsEiwA1hrp5jBsRdzepdKcjq2-In-rXdQEEKWpbI19ZY4L-zhyLW2rgkj7tz9MfxoCdsMQAvD\\_BwE](https://www.shortform.com/summary/set-boundaries-find-peace-summary-nedra-glover-tawwab?gclid=CjwKCAjwLJimBhAsEiwA1hrp5jBsRdzepdKcjq2-In-rXdQEEKWpbI19ZY4L-zhyLW2rgkj7tz9MfxoCdsMQAvD_BwE)

Tee-Melegrito, R. A. (2023). Cortisol and stress: What is the connection? Medical News Today. <https://www.medicalnewstoday.com/articles/cortisol-and-stress#summary>

Thai, B.T.H.; Trang, N.T.N.; Cam, V.T.; Trang, L.T.; & Trang, P.T.H. (2022). Effort–reward ratio, over-commitment and burnout: a cross-sectional study among Vietnamese healthcare professionals. *Personality & Individual Differences*. Downloaded in August 2023 from: <https://doi.org/10.1080/23311908.2022.2075614>

Thau, L., Gandhi, J., & Sharma, S. (2023). Physiology, Cortisol. In StatPearls [downloaded in December 2023 from: <https://www.ncbi.nlm.nih.gov/books/NBK538239/>]. Last Update: August 28, 2023.

The International Labour organization (2022). World Employment and Social Outlook Trends 2021. Retrieved from [https://www.ilo.org/wcmsp5/groups/public/---ed\\_protect/---protrav/---travail/documents/publication/wcms\\_864222.pdf](https://www.ilo.org/wcmsp5/groups/public/---ed_protect/---protrav/---travail/documents/publication/wcms_864222.pdf)

Thomas, David R. (2003). A general inductive approach for qualitative data analysis. *American Journal of Evaluation*, 2006 (27), 237.

Upadyaya, K., & Salmela-Aro, K.. (2017). Developmental dynamics between young adults' Life satisfaction and engagement with studies to work. *Longitudinal and Life Course Studies*, 8 ,20-34.

Vaismoradi, M., Jones, J., Turunen, H., & Snelgrove, S. (Year). Theme development in qualitative content analysis and thematic analysis. *Journal of Nursing Education and Practice*, 6 (5), 100. <https://doi.org/10.5430/jnep.v6n5p100>

Vaismoradi, M., & Snelgrove, S. (2019). Theme in Qualitative Content Analysis and Thematic Analysis. *Forum: Qualitative Social Research* 20, ( 3,) Art. 23.

Van Dam, A. (2021). A clinical perspective on burnout: diagnosis, classification, and treatment of clinical burnout, *European Journal of Work and Organizational Psychology*, 30:5, 732-741, DOI: [10.1080/1359432X.2021.1948400](https://doi.org/10.1080/1359432X.2021.1948400)

Vandercammen, L., Hofmans, J., &Theuns, P. (2014). The mediating role of affect in the relationship between need satisfaction and autonomous motivation. *Journal of Occupational and Organisational Psychology*, 87, 62-79.

Van der Doef, M., &Maes, S. (1999). The job demand-control (-support) model and psychological well-being: A review of 20 years of empirical research. *Work Stress*13, 87–114.

Varney, J. (2013-2014). Findings from the Labour Force Survey. Downloaded in June 2022 from: <https://www.yorkshireeveningpost.co.uk/health/health-firm-advice-companies-after-leeds-study-finds-best-ways-combat-staff-burnout-624381>

Varney, J (2024); cited in Calkin, S. (2024, January 5). “Discrimination is a public health issue’. You Are Here: Health and Care. Downloaded in December 2023 from:

<https://www.lgcplus.com/services/health-and-care/justin-varney-discrimination-is-a-public-health-issue-05-01-2024/>

Vasileiou, K., Barnett, J., Thorpe, S., & Young, T. (2018). Characterising and justifying sample size sufficiency in interview-based studies: systematic analysis of qualitative health research over a 15-year period. *BMC Medical Research Methodology*, 18, 148. <https://doi.org/10.1186/s12874-018-0594-7>

Vinokur, A. D., & Schul, Y. (2002). The web of coping resources and pathways to reemployment following a job loss. *Journal of Occupational Health Psychology*, 7(1), 68–83. <https://doi.org/10.1037/1076-8998.7.1.68>

Waqas, A., Malik, S., Fida, A., Abbas, N., Mian, N., Miryala, S., Amray, A. N., Shah, Z., & Naveed, S. (2020). Interventions to Reduce Stigma Related to Mental Illnesses in Educational Institutes: a Systematic Review. *Psychiatr Q.* 91(3): 887–903. doi: [10.1007/s11126-020-09751-4](https://doi.org/10.1007/s11126-020-09751-4)

West, C.P., Dyrbye, L.N., Erwin, P.J., & Shanafelt, T.D. (2016). Interventions to prevent and reduce physician burnout: a systematic review and meta-analysis. *The Lancet* 388 (10057), 2272-2281.

Westermann C., Kozak, A., Harling, M., & Nienhaus, A. (2014). Burnout intervention studies for inpatient elderly care nursing staff: systematic literature review. *International Journal of Nursing Studies*, 51, 63–71.

Wiederhold, B.K.; Cipresso, P.; Pizzoli, D.; Wiederhold, M. & Riva, G. (2018). Intervention for physician burnout: A systematic Review. *Open Medicine Warsaw*, (13), 253-263.

Wigert, B. & Agrawal, S. (2018). Employee Burnout, Part 1: The 5 Main Causes. Retrieved in July 2019 from: <https://www.gallup.com/workplace/237059/employee-burnout-part-main-causes>.

Williams, H. (2021). The Meaning of “Phenomenology”: Qualitative and Philosophical Phenomenological Research Methods. *The Qualitative Report*, 26(2), 366-385. <https://doi.org/10.46743/2160-3715/2021.4587>

Wilmar S. and Leuven K. (2018). *Burnout in Europe Relations with National Economy, Governance and Culture*. Utrecht University, The Netherlands aspx.

Wilson, A. (2015). A guide to phenomenological research. *Nursing Standard* (2014+), 29(34), 38. <https://doi.org/10.7748/ns.29.34.38.e8821>

Whittemore, R., Chase, S. K., & Mandle, C. L. (2001). Validity in qualitative research. *Qualitative Health Research*, 11(4), 522-537.

<https://doi.org/10.1177/104973201129119299>

Whitfield, Ch.L. (2010). Boundaries and relationships: *Knowing, protecting and enjoying self* (2<sup>nd</sup> ed.). HCI Books.

World Health Organization (2019). Burn-out an "occupational phenomenon": International Classification of Diseases. Retrieved in November 2019 from:

[https://www.who.int/mental\\_health/evidence/burn-out/en/](https://www.who.int/mental_health/evidence/burn-out/en/).

Xanthopoulou, D., Bakker, A.B., Demerouti, E., & Schaufeli, W.B. (2009), Reciprocal relationships between job resources, personal resources, and work engagement *Journal of Vocational Behavior*, 74 (3), 235-244.

Zimmerman, B.J. (2000). Self-efficacy : an essential motive to learn. *Contemporary Educational Psychology*, 25, 82.

## Appendix

### Section 1

Containing the interview sample of questions asked in the semi-structured interview. As well as the Gate keeper letter, informed consent and a copy of the ethics application form used in the current study. The following section first contains the 21 questions of the interview.

#### **Interview questions for the experts in the burnout field**

1.Participants number (filled by the researcher):

2.Age:

3.Gender: male      female

4.Occupation:

5.Highest level of education:

- Some College
- College Graduate

- Advanced degree (Masters/ Phd)

6. Are you currently working in your profession with people suffering from burnout?

- Yes
- No

7. If so what is your area of expertise

- Gp
- Psychologist/Psychotherapist/Researcher
- Physiotherapist
- HR expert

8. How long have you been an expert in the field of burnout?

- Less than 3 years
- 4-10 years
- 10 years and above

9. In what capacity have you been supporting people suffering from burnout?

10. Do you apply specific methods or tools to support people suffering from burnout?

If so please specify (what, why, how).....



11. Are these science-based methods that you are applying in your practice?

12a. Are you teaching specific skills/tools that people can apply regularly at home if suffering from burnout?

12b. Are you teaching specific skills/tools that people can apply regularly at work if suffering from burnout?

13. In your opinion, what do you believe is the most efficient way of support?

- On an individual level (related to someone's overall well-being, stress levels, thoughts, moods, life style, pain managements etc.)
- Within a team or a group of employees (related to a person's sense of community/being part of a team, mentoring support, personal growth & development, sense of fairness and reward etc.)
- Within the whole organization (related to protocols and regulations supporting mental and physical health, life-work balance etc.)?

14. What would you suggest as a preventive tool for burnout?

- On an individual level
- Within a team
  - Within the whole organization

15. Based on your professional experience and results, what suggestions would you have for people on individual level to prevent or support them through burnout?

16. Based on your professional experience and results what suggestions would you have for people in a team at work to prevent or support them through burnout?

17. Based on your professional experience and results, what suggestions would you have for people in the whole organization /at work to prevent or support them through burnout?

18. You know that part of this research is to create specific guidelines with suggestions for employees and employers to support general well-being, prevent burnout or intervene in cases of confirmed diagnosis- Based on your professional experience and results what would be the most important tool(s) that you would include for such guidelines?

19. Would you recommend something different for general population for prevention vs diagnosed population (intervention)? If so what would be the differences?

20. How have you measured in your field the level of success of your support? (How did you know that the person has recovered, improved or decreased level of distress after your intervention?)

21. If there would be a model describing burnout and remedies to minimize its' symptoms-how would you view such model? It can be described in words, in drawing, in images etc.

Oral interview conducted via phone/face to face-estimated time approximately 60 min

Thank you for the participation in the current study

The following section contains a copy of all the forms submitted to the ethics committee at UNICAF UNIVERSITY . The first form includes the Gatekeeper form (1page).



### Gatekeeper letter

**Address:** Sweelinckplein 9-11, Den Haag, NL

**Date:** 4.11 2021

**Subject:** Recruitment of volunteers for research

Dear Sir/Madam,

I am a doctoral student at Unicaf University of Zambia.

As part of my degree I am carrying out a study related to burnout reduction interventions.

I am writing to enquire whether you would be interested in/willing to participate in this research yourself or refer a colleague of yours who is working in the field of general health care, such as general doctor, psychologist, physiotherapist or is an HR specialist. As part of this research is to collect opinions/experiences about effective tools and strategies that are applied to prevent and minimize burnout symptoms.

Subject to approval by Unicaf Research Ethics Committee (UREC) this study will be using semistructured interviews. Related to the experiences with interventions within a health care sector (of physical health support / body, posture and pain management support / mental health support, or within the field of HR profession. If you cannot participate yourself and are willing to recruit some of your colleagues in the same field of your profession, please do kindly refer them directly to myself that I can inform them how to proceed.

\*Please note, that no participants with burnout symptoms themselves, or any kind of disability will be taking a part in this research.

The current study, named "Enhanced burnout reduction model and guidelines for three layered burnout interventions" research is supervised by Dr Elizabeth George, who is working at Unicaf university. You will be asked to interview for approximately 60 minutes about experiences and opinions related to burnout reduction interventions. Findings from data collection will be used to create an enhanced burnout minimizing model and structured guidelines for an individual, team and the whole organization intervention. Participants' anonymity and confidentiality of the interviews will be assured, data strictly protected and destroyed after 5 years from the date of finishing the study. Voluntary participation is emphasized and anyone can withdraw at any point of the study without any consequences. Thank you in advance for your time and for your consideration of this project. Kindly please let me know if you require any further information or clarifications.

Yours Sincerely,



**Student's Name:** Katarina Gaborova

**Student's E-mail:** gaborovak@psychologistinthehague.com

**Student's Address and Telephone:** Sweelinckplein 9-11, Den Haag, NL, tel. +31 6 11887 587

**Supervisor's Title and Name:** Dr Elizabeth George

**Supervisor's Position:** Lecturer at Unicaf University

**Supervisor's E-mail:** [e.george@unicaf.org](mailto:e.george@unicaf.org)

The second form includes the Informed Consent form (2 pages) provided to all the participants prior data collection.



## Informed Consent Form

### Part 1: Debriefing of Participants

**Student's Name:** Katarina Gaborova  
**Student's E-mail Address:** gaborovak@psychologistinthehague.com  
**Student ID #:** R1812D7177971  
**Supervisor's Name:** Dr Elizabeth George  
**University Campus:** Unicaf University Zambia (UUZ)  
**Program of Study:** UUM: DBA - Doctorate of Business Administration  
**Research Project Title:** "Enhanced burnout reduction model and guidelines for three layered burnout interventions"

**Date:** 4.11 2021

**Provide a short description (purpose, aim and significance) of the research project, and explain why and how you have chosen this person to participate in this research (maximum 150 words).**

The purpose of the current study is to develop an enhanced burnout reduction model combining findings from previous research (application of desktop research) along with conducting a primary qualitative data collection of 40 experts in the field of burnout interventions. You are asked to participate in the research because you are a general practitioner, psychologist, physiotherapist, or work in a field of human resources. These occupations were chosen to collect data about the most effective techniques and tools related to prevention and treatment of burnout. For this information, individual semi-structured interviews, will be administered and will take approximately 60min to complete. \*Please note, that no participants with burnout symptoms themselves, or any kind of disability will be recruited for this research. Only the health care professionals and HR specialists who are treating these symptoms and are willing to share their opinions, tools related to burnout prevention, & treatment as part of their work will be included. Based on the findings of this research individual, team and the whole organization interventions in a form of structured guidelines and the enhanced burnout reduction model will be proposed. Significance of the study lies in the future benefits of support and wellbeing of employees at work and to treat and prevent burnout.

The above named Student is committed in ensuring participant's voluntarily participation in the research project and guaranteeing there are no potential risks and/or harms to the participants.

Participants have the right to withdraw at any stage (prior or post the completion) of the research without any consequences and without providing any explanation. In these cases, data collected will be deleted.

All data and information collected will be coded and will not be accessible to anyone outside this research. Data described and included in dissemination activities will only refer to coded information ensuring beyond the bounds of possibility participant identification.

I, Katarina Gaborova, ensure that all information stated above is true and that all conditions have been met.

**Student's Signature:** \_\_\_\_\_





### Informed Consent Form

#### Part 2: Certificate of Consent

**This section is mandatory and should to be signed by the participant(s)**

**Student's Name:** Katarina Gaborova  
**Student's E-mail Address:** gaborovak@psychologistinthehague.com  
**Student ID #:** R1812D7177971  
**Supervisor's Name:** Dr Elizabeth George  
**University Campus:** Unicaf University Zambia (UUZ)  
**Program of Study:**  
**Research Project Title:** "Enhanced burnout reduction model and guidelines for three layered burnout interventions"

I have read the foregoing information about this study, or it has been read to me. I have had the opportunity to ask questions and discuss about it. I have received satisfactory answers to all my questions and I have received enough information about this study. I understand that I am free to withdraw from this study at any time without giving a reason for withdrawing and without negative consequences. I consent to the use of multimedia (e.g. audio recordings, video recordings) for the purposes of my participation to this study. I understand that my data will remain anonymous and confidential, unless stated otherwise. I consent voluntarily to be a participant in this study.

Participant's Print name:

Participant's Signature:

\_\_\_\_\_

Date:

**If the Participant is illiterate:**

I have witnessed the accurate reading of the consent form to the potential participant, and the individual has had an opportunity to ask questions. I confirm that the aforementioned individual has given consent freely.

Witness's Print name:

Witness's Signature:

\_\_\_\_\_

Date:

The third form includes a copy of the ethics application form (11 pages) submitted to gain a permission to initiate the current study.



REAF\_DS - Version 3.1



**UNICAF UNIVERSITY  
RESEARCH ETHICS APPLICATION FORM  
DOCTORAL STUDIES**

UREC USE ONLY:  
Application No: \_\_\_\_\_  
Date Received: \_\_\_\_\_

**Student's Name:** Katarina Gaborova

**Student's E-mail Address:** gaborovak@psychologistinthehague.com

**Student's ID #:** R1812D7177971

**Supervisor's Name:** Dr Elizabeth George

**University Campus:** Unicaf University Zambia (UUZ)

**Program of Study:** UUZ: DBA Doctoral of Business Administration

**Research Project Title:** "Enhanced burnout reduction model  
and guidelines for three layered burnout  
interventions"

**1. Please state the timelines involved in the proposed research project:**

Estimated Start Date: November'21

Estimated End Date: November'22

**2. External Research Funding (if applicable):**

**2.a. Do you have any external funding for your research?**

☐ YES

☒ NO

If YES, please answer questions 2b and 2c.

**2.b. List any external (third party) sources of funding you plan to utilise for your project. You need to include full details on the source of funds (e.g. state, private or individual sponsor), any prior / existing or future relationships between the funding body / sponsor and any of the principal investigator(s) or co-investigator(s) or student researcher(s), status and timeline of the application and any conditions attached.**

NA

**2.c. If there are any perceived ethical issues or potential conflicts of interest arising from applying or and receiving external funding for the proposed research then these need to be fully disclosed below and also further elaborated on, in the relevant sections on ethical considerations later on in this form.**

NA



### 3. The research project

#### 3.a. Project Summary:

In this section fully describe the purpose and underlying rationale for the proposed research project. Ensure that you pose the research questions to be examined, state the hypotheses, and discuss the expected results of your research and their potential.

It is important in your description to use plain language so it can be understood by all members of the UREC, especially those who are not necessarily experts in the particular discipline. To that effect ensure that you fully explain / define any technical terms or discipline-specific terminology (use the space provided in the box).

Burnout is one of the most known occupational syndromes, causing absenteeism from work, a variety of negative financial corporate or organizational consequences but mostly, concerning adverse effects on workers' physical and mental health (Pijpker, Vaandrager, Veen, & Koelen, 2019). Until today, there were no specific guidelines of a three-layered treatment developed to support employees on an individual level (e.g. their own physical health, mood, thought patterns etc.), within a team at work (e.g. mentoring, support in personal growth and development, increasing sense of fairness) and within the whole organization (setting up rules/protocols for better work-life balance, boundary settings, financial, mentoring support during illness at work etc.). The current study aims to develop an enhanced burnout reduction model and develop specific guidelines for a three-layered burnout interventions. By combining a few burnout theories the Job Demands Resources Model (Demerouti, Baker, Nachreiner, & Schaufeli, 2001), the Conservation of Resources model (Hobfoll, 1989; Halbesleben, & Buckley, 2004) that are featuring an idea that burnout occurs mostly due to either untreated or unresolved chronic stress and distress but also emphasizing that job and personal resources serve as a preventative and reducing burnout factors. Including the Job Demand-Control Model (Karasek, 1985; Van der Doef, & Maes, 1999), and the Work-life model (Leiter and Maslach, 1999). Along with findings from desktop research (previous studies) and conducting a phenomenological qualitative data collection. The sample will be obtained via convenience sampling and snowballing. Consisting of 40 experts (10 general practitioners, 10 psychologists, 10 physiotherapists and 10 HR specialists) who are experienced in assisting people suffering from burnout in their fields. Data will be collected via semistructured interviews which will allow initial open-ended questions but also give a researcher the flexibility to inquire further, based on the initial responses of the participants. Their "narratives" will be recorded generating large data. Then translated and analysed. Based on the analyses, the current study will present data in a form of guidelines and propose the enhanced burnout minimizing model. The purpose is to propose findings as an additional tool in and out of psychotherapy, within health care centres or within human resources departments in various organizations in order to minimize the occurrence of this condition that has been on a constant rise (Elflein, 2019). Research Aims are as follows:

- Establish specific guidelines for individual intervention on psychological reduction of burnout. Along with establishing specific guidelines for organizational intervention (team and whole organization) on psychological reduction of burnout in work.
- Design a combined burnout minimizing intervention model to enhance psychological/ physical well-being and reduction of burnout.

### 3.b. Significance of the Proposed Research Study and Potential Benefits:

Outline the potential significance and/or benefits of the research (use the space provided in the box).

Burnout is constantly on rise (Hooftman, et al., 2017). Therefore, having a study proposing and researching an upgraded three- layered intervention program would support employees on individual level, within their team/group of colleagues, and within the whole organization or work environment. The current study will combine desktop research (findings from previous research) as well as the "knowledge of clinical experience" from 40 experts (10 general practitioners, 10 physiotherapists, 10 psychologists, 10 HR specialists) who work at least 10 years in the field of burnout interventions. Their most effective strategies will be gathered and presented in specific guidelines. Aimed to be made into easy to follow instructions that could be used in and out of psychotherapy sessions, by HR specialists in work environments or as an additional support outside of physical therapies. The study also aims to propose an enhanced burnout reduction model that will be partially based on a few burnout theories such as the Work life Model (Leiter & Maslach, 1997, 1999, 2004, 2014, 2016) , desktop research (previous research e.g. by McFarland, Hlubocky, & Riba, 2019; Jaworska-Burzynska et.al., 2016; Scheepers, Emke, Epstein, & Lombarts, 2019) and findings from the 40 experts interviewed in the current study. The specifically designed three-layered interventions guidelines are much needed as previously pointed out by burnout experts in the empirical research (Maslach and Leiter, 2016). The current study serves as a stepping stone for future studies interested in continuous improvement and enhancement of interventions and reduction of heterogeneity in studies (Eurofound, 2018) . The proposed burnout model and interventions would be beneficial for overall support and wellbeing of employees.

### 4. Project execution:

#### 4.a. The following study is an:

- ☒ experimental study (primary research)
- ☒ desktop study (secondary research)
- ☐ desktop study using existing databases involving information of human/animal subjects
- ☐ Other

If you have chosen 'Other' please Explain:

Experimental study (primary research)- Would target sample- of 40 experts working in burnout intervention field. Definition of experts =adults working at least 10 years in health care as GP's, physiotherapists, psychologists & HR field) . Who will be interviewed about burnout interventions. No sample of people suffering from any kind of disabilities is used. + Combining with desktop study (secondary research related to individual and organizational interventions from online scientific journals e.g. McFarland, Hlubocky, & Riba, 2019). This choice was made to strengthen the validity of the current research.

**4.b. Methods. The following study will involve the use of:**

Method	Materials / Tools
Qualitative:	<input checked="" type="checkbox"/> Face to Face Interviews <input checked="" type="checkbox"/> Phone Interviews <input type="checkbox"/> Face to Face Focus Groups <input type="checkbox"/> Online Focus Groups <input type="checkbox"/> Other *
Quantitative:	<input type="checkbox"/> Face to Face Questionnaires <input type="checkbox"/> Online Questionnaires <input type="checkbox"/> Experiments <input type="checkbox"/> Tests <input type="checkbox"/> Other *

\*If you have chosen 'Other' please Explain:

Face to face and phone-semi-structured interviews will be conducted individually, once and lasting approximately 60 min

**5. Participants:**

**5 a. Does the Project involve the recruitment and participation of additional persons other than the researcher(s) themselves?**

- ☒ YES    If YES, please complete all following sections.  
☐ NO      If NO, please directly proceed to Question [7](#).



### 5 b. Relevant Details of the Participants of the Proposed Research

State the number of participants you plan to recruit, and explain in the box below how the total number was calculated.

Number of participants

No focus groups are used. 40 experts (10 GP's, 10 psychologists, 10 physiotherapists, 10 HR specialists) will be interviewed about burnout minimizing interventions. No people with burnout or other mental disabilities will be used in the study, only participants who can provide informed consent for themselves, will participate. The semi-structured interviews will be conducted individually, recorded, with each experts either face to face or via phone. The participants will be recruited via convenience sampling and snowballing.

Describe important characteristics such as: demographics (e.g. age, gender, location, affiliation, level of fitness, intellectual ability etc). It is also important that you specify any inclusion and exclusion criteria that will be applied (e.g. eligibility criteria for participants).

Age range From  To

Gender ☒ Female  
☒ Male

#### Eligibility Criteria:

- Inclusion criteria 

Experts need to be working in Health care (specifically-Physical health doctors - GP's, Psychologists, Physiotherapists) or in Human resources. At least 10 years of working experience is required. Due to convenience sampling-participants will be recruited from Slovakia and the Netherlands.
- Exclusion criteria 

People suffering from burnout are excluded in the current study. Only participants who are working as experts in treating or supporting people suffering from burnout will be included. To share their experience regarding the treatment and support for the guidelines' development.

Disabilities 

None. The study only includes the participants who can provide informed consent for themselves, therefore, people with mental disabilities will not take part in this research.

Other relevant information (use the space provided in the box):

NA

**5 c. Participation & Research setting:**

Clearly describe which group of participants is completing/participating in the material(s)/ tool(s) described in 5b above (use the space provided in the box).

40 Experts from Slovakia and Netherlands (due to convenience sampling and snowballing) will be recruited. Participants need to be at least 10 years working in health care sector as GP's-10 participants, Psychologists-10 participants, Physiotherapists-10 participants or in HR such as HR specialists-10 participants. Participants will be interviewed. Semi-structured (open ended questions) -will be asked to find out information about the most efficient practices that they use for treatment and support when working with people suffering from burnout. Please note that no participants suffering from burnout or any other form of disability or minors will be used in the current study.

**5 d. Recruitment Process for Human Research Participants:**

Clearly describe how the potential participants will be identified, approached and recruited (use the space provided in the box).

The participants (all adults aged 28 y.o to 70 y.o) will be approached by the researcher who herself works in a private psychological clinic with Dutch and Slovakian population. This clinic has a referral network of health care professionals and HR specialists who are seeking support for their patients or employees. Upon directly contacting the researcher, she will explain the current research and ask whether they would to be a part of it. It will be emphasized that their participation will be voluntary and that they can withdraw at any point. If they agree, they will receive the consent form, the gatekeeper's letter followed by the scheduling of a face to face or phone interview. If they prefer not to participate themselves but may be willing to refer a colleague who works in the same field of expertise, they will be asked to pass on the researcher's contact details to get in contact directly. Each referred participant will be then provided information about the study and the steps that need to be taken for its' participation. Each interview is conducted individually and will take approximately 60 min to complete.

**5 e. Research Participants Informed Consent.**

Select below which categories of participants will participate in the study. Complete the relevant Informed Consent form and submit it along with the REAF form.

Yes	No	Categories of participants	Form to be completed
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Typically Developing population(s) above the maturity age *	Informed Consent Form
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Typically Developing population(s) under the maturity age *	Guardian Informed Consent Form

\* Maturity age is defined by national regulations in laws of the country in which the research is being conducted.

**5 f. Relationship between the principal investigator and participants.**

Is there any relationship between the principal investigator (student), co-investigators(s), (supervisor) and participant(s)? For example, if you are conducting research in a school environment on students in your classroom (e.g. instructor-student).

☒ YES

☐ NO

If YES, specify (use the space provided in the box).

Participants (Gp's, psychologists, physiotherapists, HR specialists) will be included via convenience sampling as they will be approaching researcher's psychological clinic for a referral of someone in their network for an intervention of burnout. They will be asked about participation in the study. As they are specialized in the field of support of burnout. If they would agree to volunteer in the study or would refer their colleague then these volunteers will be included in the qualitative data collection of the current study.

**6. Potential Risks of the Proposed Research Study.**

**6 a. i. Are there any potential risks, psychological harm and/or ethical issues associated with the proposed research study, other than risks pertaining to everyday life events (such as the risk of an accident when travelling to a remote location for data collection)?**

☐ YES

☒ NO

If YES, specify below and answer the question 6 a.ii.

No as participants are only interviewed about their work experience of their past 10 years. And about the methods applied and efficacy of their interventions. No patients suffering from burnout, participants with any disabilities or minors will be included in the current study. The most beneficial suggestions from their experience will be included in the guidelines of the three-layered intervention in the current study and for the development of the enhanced burnout minimizing model.

**6 a.ii Provide information on what measures will be taken in order to exclude or minimise risks described in 6.a.i.**

Participants will be explained the objectives of the study, the anonymity and confidentiality of the interviews will be assured, and data protected. Their voluntary participation will be emphasized.



**6 b. Choose the appropriate option**

	Yes	No
i. Will you obtain written informed consent form from all participants?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii. Does the research involve as participants, people whose ability to give free and informed consent is in question?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii. Does this research involve participants who are children under maturity age? <b>If you answered YES to question iii, complete all following questions. If you answered NO to question iii, do not answer Questions iv, v, vi and proceed to Questions vii, viii, ix and x.</b>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv. Will the research tools be implemented in a professional educational setting in the presence of other adults (i.e. classroom in the presence of a teacher)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
v. Will informed consent be obtained from the legal guardians (i.e. parents) of children?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
vi. Will verbal assent be obtained from children?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
vii. Will all data be treated as confidential? If NO, explain why confidentiality of the collected data is not appropriate for this proposed research project, providing details of how all participants will be informed of the fact that any data which they will provide will not be confidential. <div style="border: 1px solid black; height: 100px; width: 100%; margin-top: 5px;"></div>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
viii. Will all participants /data collected be anonymous? If NO, explain why and describe the procedures to be used to ensure the anonymity of participants and/or confidentiality of the collected data both during the conduct of the research and in the subsequent release of its findings. <div style="border: 1px solid black; height: 100px; width: 100%; margin-top: 5px;"></div>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

	Yes	No
ix. Have you ensured that personal data and research data collected from participants will be securely stored for five years?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
x. Does this research involve the deception of participants? If YES, describe the nature and extent of the deception involved. Explain how and when the deception will be revealed, and who will administer this debrief to the participants:	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**6 c. i. Are there any other ethical issues associated with the proposed research study that are not already adequately covered in the preceding sections?**

☐ Yes ☒ No

If YES, specify (maximum 150 words).

**6.c.ii Provide information on what measures will be taken in order to exclude or minimise ethical issues described in 6.c.i.**

Participants will be explained the objectives of the study, the anonymity and confidentiality of the interviews will be assured, and data protected. Their voluntary participation will be emphasized. Their data will be kept , securely electronically with zipped passwords for the duration of 5 years after the last day of the study and destroyed afterwards.

**6 d. Indicate the Risk Rating.**

☐ High ☒ Low



### 7. Further Approvals

Are there any other approvals required (in addition to ethics clearance from UREC) in order to carry out the proposed research study?

☐ YES ☒ NO

If YES, specify (maximum 100 words).

### 8. Application Checklist

Mark ✓ if the study involves any of the following:

- ☐ Children and young people under 18 years of age, vulnerable population such as children with special educational needs (SEN), racial or ethnic minorities, socioeconomically disadvantaged, pregnant women, elderly, malnourished people, and ill people.
- ☐ Research that foresees risks and disadvantages that would affect any participant of the study such as anxiety, stress, pain or physical discomfort, harm risk (which is more than is expected from everyday life) or any other act that participants might believe is detrimental to their wellbeing and / or has the potential to / will infringe on their human rights / fundamental rights.
- ☐ Risk to the well-being and personal safety of the researcher.
- ☐ Administration of any substance (food / drink / chemicals / pharmaceuticals / supplements / chemical agent or vaccines or other substances (including vitamins or food substances) to human participants.
- ☐ Results that may have an adverse impact on the natural or built environment.

### 9. Further documents

Check that the following documents are attached to your application:

		ATTACHED	NOT APPLICABLE
1	Recruitment advertisement (if any)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2	Informed Consent Form / Guardian Informed Consent Form	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3	Research Tool(s)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4	Gatekeeper Letter	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5	Any other approvals required in order to carry out the proposed research study, e.g., institutional permission (e.g. school principal or company director) or approval from a local ethics or professional regulatory body.	<input type="checkbox"/>	<input checked="" type="checkbox"/>



#### 10. Final Declaration by Applicants:

- (a) I declare that this application is submitted on the basis that the information it contains is confidential and will only be used by Unicaf University for the explicit purpose of ethical review and monitoring of the conduct of the research proposed project as described in the preceding pages.
- (b) I understand that this information will not be used for any other purpose without my prior consent, excluding use intended to satisfy reporting requirements to relevant regulatory bodies.
- (c) The information in this form, together with any accompanying information, is complete and correct to the best of my knowledge and belief and I take full responsibility for it.
- (d) I undertake to abide by the highest possible international ethical standards governing the Code of Practice for Research Involving Human Participants, as published by the UN WHO Research Ethics Review Committee (ERC) on <http://www.who.int/ethics/research/en/> and to which Unicaf University aspires to.
- (e) In addition to respect any and all relevant professional bodies' codes of conduct and/or ethical guidelines, where applicable, while in pursuit of this research project.



I agree with all points listed under Question 10

Student's Name: Katarina Gaborova

Supervisor's Name: Dr Elizabeth George

Date of Application: 17.11 2021

#### **Important Note:**

Save your completed form (we suggest you also print a copy for your records) and then submit it to your UU Dissertation/project supervisor (tutor). **In the case of student projects, the responsibility lies with the Faculty Dissertation/Project Supervisor.** If this is a student application, then it should be submitted via the relevant link in the VLE. Please submit only electronically filled in copies; **do not** hand fill and submit scanned paper copies of this application.

# Appendix

## Section 2

Containing the description of participants in the current study

### Description of the participants

**Participant 1** was a psychologist, aged 34, female, Master's education, work experience 10 years, nationality Greek, working in the **Netherlands**, In the private practice

**Participant 2** was a psychologist, aged 50, male, Master's education, work experience 10 + years, Nationality Slovak, works in the **Netherlands** at a psychological clinic

**Participant 3** was a psychologist, aged 57, female, Master's education, work experience 10 + years, Nationality Scottish, works in the **Netherlands** at own private clinic

**Participant 4** was a general practitioner, aged 80, male, Doctorate of medicine, work experience 10 + years, Nationality Slovak, works in the **Netherlands** at the state hospital clinic

**Participant 5** was a general practitioner, aged 80, female, Doctorate of medicine, work experience 10 + years, Nationality Slovak, works in the **Netherlands** at the state hospital clinic

**Participant 6** was a general practitioner, aged 42, male, Doctorate of medicine, work experience 10 + years, Nationality Slovak, works in the **Netherlands** at the state hospital clinic

**Participant 7** was a physiotherapist, aged 44, male, Doctoral degree in physiotherapy and manual therapy, working foran organization as an external physiotherapist, 10+ years working experience, Slovak nationality, Working in the **Netherlands**

**Participant 8** was a HR aged 45, male, Masters degree in human resources, coaching certificate, working for a private multinational company, 10+ years working experience, French nationality, Working in the **Netherlands**

**Participant 9** was a general practitioner, aged 57, male, Doctorate of medicine, work experience 10 + years, Nationality Slovak, works in **Slovakia** at the private clinic

**Participant 10** was a HR, aged 42, male, Masters degree in human resources, working for a national company, 10+ years working experience , Slovak nationality, Working in the **Netherlands**

**Participant 11** was a HR, aged 46, female, Masters degree in human resources, , working for a private international company, 10+ years working experience , British nationality, Working in the **Netherlands**

**Participant 12** was a psychologist. aged 50, male, Master's education, work experience 10 + years, Nationality Slovak, works in **Slovakia** at own private clinic

**Participant 13** was a psychologist, aged 40, female, Master's education, work experience 10 + years, Nationality Slovak, works in **Slovakia** at own private clinic

**Participant 14** was a HR, aged 46, female, Masters degree in human resources, working for a public company, 10+ years working experience , Irish nationality, Working in the **Netherlands**

**Participant 15** was a general practitioner, aged 66, male, Doctorate of medicine, work experience 10 + years, Nationality Slovak, works in **Slovakia** at the private clinic

**Participant 16** was a physiotherapist, aged 37, male, Bachelors degree in physiotherapy, working for a private company, 10 years working experience, Slovak nationality, Working in **Slovakia**

**Participant 17** was a physiotherapist, aged 41, female, Masters degree in occupational therapy, working for a private company, 10+ years working experience, Slovak nationality, Working in **Slovakia**

**Participant 18** was a HR, aged 57, female, Masters degree in human resources, , working for a private international company, 10+ years working experience, British nationality, Working in the **Netherlands**

**Participant 19** was a physiotherapist, aged 46, male, Doctoral degree in physiotherapy and manual therapy, working for a private company, 10+ years working experience, Slovak nationality, Working in **Slovakia**

**Participant 20** was a psychologist, aged 39, female, Master's education, work experience 10 + years, Nationality Russian, works in the **Netherlands** at own private clinic

Participant 21 was a HR, aged 40, female, Masters degree in human resources, working for a public international company, 10 years working experience, Slovak nationality, Working in the **Netherlands**

Participant 22 was a physiotherapist, aged 67, female, Bachelors degree in physiotherapy, working in a private clinic, 10 years working experience, Slovak nationality, Working in **Slovakia**

**Participant 23** was a psychologist, aged 67, female, Doctoral degree in Psychology education, work experience 10 + years, Nationality Slovak, works in **Slovakia** at own private clinic

**Participant 24** was a general practitioner, aged 40, female, Doctorate of medicine, work experience 10 + years, Nationality Slovak, works in **Slovakia** at the state hospital clinic

**Participant 25** was a general practitioner, aged 79, female, Doctorate of medicine, work experience 10 + years, Nationality Slovak, works in **Slovakia** at the state hospital clinic

**Participant 26** was a general practitioner, aged 32, female, Doctorate of medicine, work experience 10 years if internship is included, Nationality Slovak, works in **Slovakia** at the state hospital clinic

**Participant 27** was a physiotherapist aged 32, male, Doctoral degree in physiotherapy and manual therapy, working for a private company, 10+ years working experience, Slovak nationality, Working in **Slovakia**

**Participant 28** was a psychologist, aged 57, male, Master's education, work experience 10 + years, Nationality British, works in the **Netherlands** at own private clinic

**Participant 29** was a psychologist, aged 50, female, Master's education, work experience 10 + years, Nationality Slovak, works in **Slovakia** at own private clinic

**Participant 30** was a physiotherapist, aged 33, male, Masters degree in physiotherapy, working for a private company, 10 years working experience, Slovak nationality, Working in **Slovakia**

**Participant 31** was a psychologist, aged 57, female, Master's education, work experience 10 + years, Nationality British, works in the **Netherlands** at own private clinic

**Participant 32** was a physiotherapist, aged 38, male, Masters degree in physiotherapy and manual therapy, working for a private company, 10+ years working experience, Slovak nationality, Working in **Slovakia**

**Participant 33** was a HR, aged 37, female, Masters degree in human resources, , working for a private international company, 10 years working experience, Slovak nationality, Working in the **Netherlands**

**Participant 34** was a physiotherapist, aged 47, female, Masters degree in physiotherapy and manual therapy, working for a hospital, 10+ years working experience, Slovak nationality, Working in **Slovakia**

**Participant 35** was a HR, aged 50, male, Masters degree in human resources, , working for an NGO, 10+ years working experience, Indian nationality, Working in the **Netherlands**

**Participant 36** was a HR , aged 33, female, Masters degree in psychology, working for an NGO, 10 years working experience, Indian nationality, Working in the **Netherlands**

**Participant 37** was a general practitioner, aged 83, female, Doctorate of medicine, work experience 10 + years, Nationality Slovak, works in **Slovakia** at the state hospital clinic

**Participant 38** was a general practitioner aged 34, male, Doctorate of medicine, work experience 10 + years, Nationality Slovak, works in **Slovakia** at the state hospital clinic

**Participant 39** was a HR, aged 43, female, Masters degree in human resources & a medical degree, , working for a private own company, 10+ years working experience, Slovak nationality, Working in the **Netherlands**

**Participant 40** was a physiotherapist, aged 71, female, Masters degree in physiotherapy and rehabilitation, working for a private hospital, 10+ years working experience, Slovak nationality, Working in **Slovakia**

## **Appendix**

### **Section 3**

Containing Tables 15, 16, & 17, with experts' suggestions for individual, team and organizational interventions as well as their categories and codes used for the analysis.

Table 15 contains 23 themes and their categories and codes that are reported by the experts that are related to the individual interventions.



**Table 15***Experts' Suggestions for Themes of Individual Interventions and their Categories and Codes*

No	Themes	Category	Codes
1	Any form of individual psychotherapy (Talk therapy)	Talk therapy, identification of stressors/buffers, individual support of challenges, psychoeducation, body experience (psychosomatics) all with the help of a therapist	Homework activities Therapist's assessment Therapists's guidance
2	Self-care	Any form of mental and physical self-care (self-reflection), listening own body for discomfort, pains, identify stressors, emotional awareness, prioritize activities that bring joy	Personal life self-care Professional life self-care
3	Sport & physical exertion	Types of sports and regular exercises	Aerobic, endurance, Strength, balance Flexibility
4	Regular healthy lifestyle	Healthy diet, regular exercise, adequate hydration, sufficient sleep, healthy living, healthy coping (e.g substance use), regular health screenings, maintaining social connection	Combination of a few-activities for mental health Activities for physical health Sufficient rest No substance use
5	Positive thinking	Positive attitude, optimistic views	Elimination of negative thought patterns Neutralizing thoughts Reducing inner critic
6	Stress reduction techniques	Active science-based practices to distress e.g., breathing, hypnosis, meditations, or other self-chosen relaxations-aromatherapy, baths, knitting etc.	Breathing Muscle tension Autogenic training Individually chosen activities
7	Manager support request	Act seeking support from the manager/supervisor	Strategies for reaching out improved communication Bringing specific requests asking for feedback
8	Mindfulness	Mindful way of living and practice	Philosophy of life Mindful practice several times per week
9	Talking to family/friend when overwhelmed	Open communication with friends, colleagues, gaining understanding, empathy, emotional & physical support. To vent about issues	Strategies for reaching out Improved communication



			Bringing specific requests
<b>10</b>	Physiotherapy	Help with body posture, tensions, pains from a specialist	Dealing with body aches Exercising for improved health Interventions for body postures Techniques releasing tensions
<b>11</b>	Work/Life balance (Boundaries btw work & life)	Working to live, not living to work, valuing personal life outside work	Balanced private life Balanced professional life Setting boundaries between the two
<b>12</b>	Boundaries (btw self & others)	Self-awareness of physical, intellectual, emotional, mental, boundaries, saying No assertively, recognizing if pushed into the corners that feel uncomfortable	Knowing own boundaries Voicing out crossed lines Separating emotional, mental and physical boundaries
<b>13</b>	Confidence building exercises	Refer to structured activities or tasks designed to enhance an individual's self-assurance, self-esteem, and belief in their abilities. These exercises often involve challenges or situations that encourage individuals to step out of their comfort zones, take on new responsibilities, and overcome obstacles.	New challenging goal settings, Increasing own abilities Practicing new skills Reflection on reached goals
<b>14</b>	Keeping authentic to own values	Work, personal ethics/moral values aligned with own actions	Awareness of own values Addressing the needs
<b>15</b>	Working on supportive network relationships	Actively setting up a network of supportive, positive, uplifting people, understanding colleagues and professionals, actively asking for feedback, guidance	Creating positive network environment Strengthening positive working relationships
<b>16</b>	ABC approach (problem solving approach)	Analysing own behaviours, consequences, searching for solutions	Awareness of own behaviors Actions lead to consequences Being in control of the actions
<b>17</b>	Appreciating/savoring of rewards in environment	Scanning the environment for rewards	Verbal rewards Physical rewards Emotional rewards

	(positive psychology)		
<b>18</b>	CBT therapeutic approach/cognitive restructuring	Actively learning to restructure thoughts with CBT	Aware of bias thoughts Recognition of types of cognitive distortions Influencing emotions through thoughts Sticking to the facts
<b>19</b>	Building own buffers	Awareness and use of the resources	Setting up resources in environment Building Emotional/Cognitive/Physical Resources
<b>20</b>	Avoiding working beyond contracted hours	E.g Extra hours/Regularly unless compensated	No extra hours Asking for extra pay Asking for extra time off No compensation
<b>21</b>	Building emotional/physical resilience/coping	Building psychological immunity	Awareness of strengths Successful resolution of issues in past history
<b>22</b>	Practicing active stressors' minimizing	Understanding what diminishes energy, feels bad	Stress short term factors Long term stress factors
<b>23</b>	Uphold equity for oneself and others	Asserting balanced give & take	Treating people fairly in private life Treating people fairly in professional life Conflicts in private life due to unfairness Conflicts in professional life due to unfairness

Table 16 below includes Experts' suggestions for the most efficient team type of support and their categories and codes.

**Table 16***Experts' Suggestions for Themes of Team Interventions and their Definitions*

No	Themes	Categories	Codes
1	Interventions for strengthening relationships at work	Positive helpful interactions, understanding, empathy amongst 2 and more people	Interventions to improve relationships with colleagues With team manager With any superior
2	Psychoeducation in general	Providing information related to understanding and improving mental health, how to read own body, protect it etc.	Topics linked to psychoeducation Form of psychoeducation (workshop, professional development day, course)
3	Strategies promoting co-operation as a team	Efficient set up of strategies to work in a supportive co-operative way	Strategies for effective communication Weekly meetings of assessment/Reflection for actions Co-operative problem solving Co-operative policies Regularly shared reports
4	Burnout awareness campaigns	Organizing promotions, campaigns, trainings about burnout symptoms & remedies	Advertisements/Leaflets information around the work One or more days trainings Special burnout awareness day per year
5	Managing workload	Teaching team about boundaries of workload, how to request help or not agreeing on piling beyond one's ability to deliver that amount	Awareness of own limits Being able to voice if too much Asking for help Delegating tasks to others
6	Well-being promotion at work	Discussion related to well-being, steps to achieve a better well-being within a team	Well-being fun challenges at works Well-being bonuses, gifts, vouchers Discussions about well-being

<b>7</b>	Access or referral to psychotherapy	Having an on-site psychologist, or budget and referral list for employees for easily accessible profess. help	On site psychologist Off site psychologist
<b>8</b>	Mindfulness workshops	Teaching about science, the effects of practice & practice of mindfulness	Philosophy of life Practice mindfulness for relaxation Awareness of any actions right here/right now brings consequences
<b>9</b>	Maintaining work-life balance	Balance between private & professional life	Balance in private life Balance in professional life in a team
<b>10</b>	Training team empathy and compassion	Workshops on practice of kindness, problem solving and empathy at work	Practicing standing in others' shoes Compassion for self Compassion for others
<b>11</b>	Training democratic leaders	Offering modules on democratic leaderships	Open discussions Negotiations/adjustments
<b>12</b>	Treating all employees fairly	Equal rules, treatment & possibilities in team	One for all (resources, workload etc.) All for one (resources, workload etc.)
<b>13</b>	Massage, dance, fitness possibilities within work	Offering leisure area, or voucher	Within work Outside work
<b>14</b>	Nurturing creativity	Allowing creative expression, innovation at work	Rewarding out of the box thinking Rewarding innovation
<b>15</b>	Regular check in with the manager	One on one meeting with superior for support	Regular feedback Requesting personal growth stimulation
<b>16</b>	Letting go of control and perfection	Cost & benefits of good enough approach	Good enough approach 80/20 rule-if 80% is good Is working towards the 100 percent worth the time, energy, resources and finances?
<b>17</b>	Thanking employees regularly for their work	Culture of appreciation	Practicing appreciation Acknowledging effective/good deeds
<b>18</b>	Performance optimization	Finding ways for increasing efficiency	Increasing resources Providing more time Flexible working hours <u>Extra time to recuperate</u>

<b>19</b>	Minimizing negative, non-constructive criticism	Training positive reinforcement in feedback	Minimizing critical comments and feedback Problem solving strategies for improvement
<b>20</b>	More time for regular breaks & relaxation	Every 90 min-120 min	Check for regular breaks Use breaks efficiently
<b>21</b>	Regular check ins for decreasing stressful situations	Scanning for stressors regularly amongst employees	Acknowledgment of stressors Communicating to others stress factors Consciously <u>minimizing stressors</u>

Table 17 below includes experts suggestions for the most efficient type of support for the organizational interventions.

**Table 17**

*Experts' Suggestions for Organizational Interventions to Prevent Burnout and their Definitions*

No	Themes	Categories	Codes
1	Trainings, workshops, psychoeducation on burnout awareness and mental health	Learning forms related to stages of burnout and mental health topics	Professional development days Workshops Courses
2	Work with a psychologist, or coach within the organization	Investment into a professional mental health support	Psychologist Coach Counselor Another health care professional
3	Taking interest in employees' stimulation and motivation	Finding what stimulates employees, what gives them more fuel to work productively	Assessments for interests of employees Providing learning Financial support for learning new skills from work
4	Teaching tolerance and compassion	Learning and practicing skills to be kinder, understanding	Respect Tolerance Empathy
5	Communication in workplace between departments	Learning and practicing communication, listening skills Problem solving skills between departments	Learn about listening Expressing needs Communicating the needs Responding to needs if possible
6	Flexible contracts/working hours	Flexible on location, working hours, pacing	Flexible with dead lines (if possible) With working hours
7	Supportive day offs policies	Days off to recharge, invigorate	Policies for days of if needing recharging Number of free days per year Compensations for extra working hours
8	Pacing employees work	Working on dead-lines but having control over pacing	Work period Break period
9	Regular relaxation, meditation, mindfulness opportunities	Trainings, offering space, workshops to learn about relaxation techniques, higher management needs to find a budget for these forms of support	Trainings Space at work Financial bonuses for well-being

<b>10</b>	Growth opportunities	Providing learning, growth, intellectual stimulation to reduce routine and boredom. Allocating tasks according to expertise	Topics of interests Time at work provided for learning Freedom to choose the new skill set
<b>11</b>	Fun collective activities	Regular fun/leisure activities to increase team building	Afterwork outings Events Leisure Sports with colleagues
<b>12</b>	Training managers and/or hiring qualified and competent managers	Investing into people skills management training	Courses for managers Democratic leadership/philosophy at work
<b>13</b>	Regular checks on employee's progress	Defining employees progress, their accomplishments	Weekly check ins Monthly meetings Flexible timings
<b>14</b>	Higher budget for mental health	Having a specific budget for mental health	Well-being coordinators Councils Budget importance
<b>15</b>	Stress audit	Hiring an independent auditor to assess employees stress levels, providing suggestions , doing regular checks on progress	Independent assessor Specific criteria for stress assessment Stress reduction policies Regular revision
<b>16</b>	Purchase rehabilitation procedures for employees	Budget, gift vouchers promoting nurturing packages (e.g., Christmas gift?)	Promotion of health Destressing opportunities Vouchers, financial support
<b>17</b>	Individual approach to all employee	Treating everyone with an effort, respect and time	Individual needs Individual experiences Individual feedback
<b>18</b>	Healthy, safe (physically/mentally/working environment)	On all layers of the organization. Starting from top down	Work & break balance Effective policies Individually assess each organization for their specific needs

## Appendix

### Section 4

The section 4 contains the direct quotes from the participants related to the 3 most effective individual interventions. As well as a table with the whole list of all themes, and the quotes listing the most effective individual interventions.

#### *Individual Interventions identified by the participants of primary data*

#### **Psychotherapy**

This section answers the first research question, based on primary data. Nine out of 40 participants indicate that one of the most effective individual interventions is any form of psychotherapy.

The first most effective theme: *Psychotherapy* is the most recommended type of Individual intervention. Partially, because it helps identify the root cause of an issue.

One respondent comments that *“the efficiency and urgency to use psychotherapy as a most efficient form of support includes the possibility and providing space for understanding factors that may have contributed to burnout via self-reflective process and thinking about the factors that have negative costs in some ones’ life. The symptoms and burnout experiences are quite individual so they need to be individually approached”*.

(participant ID3, psychologist)

Psychotherapy also helps to understands how each individual functions and what they themselves consider as helpful and motivating to be applied as a remedy if they start feeling burnout symptoms.



A participant who is a general practitioner states that *“after a patient comes to me, I do a general assessment of their physical health. Often they open up about various life situations and issues that cause stress at work, in their life or relationships. At that point I refer them for psychotherapy. As it is the most helpful form of individual support to assist individuals with burnout by asking, what helps people, what's their everyday routine like, what motivates them and together with the therapist they could translate how to apply this information and connect them with the individual needs in the workplace”*.

(participant ID 38, general practitioner)

Another general practitioner comments that the effect of psychotherapy may be a long term transformative investment when stating *“psychotherapy is not only about the assessment of how strongly the symptoms manifested but provides a new way of coping in a long term. It teaches skills that an individual can use for the rest of their life”*.

(participant ID 4, general practitioner)

One participant describes how psychotherapy works as a check on persons well-being, and offers a possibility to trace past issues, heal them in order for them not to keep interfering with the present.

*“Since burnout is linked to stress, psychotherapy can help a person to scan for any stressors or trauma all the way from childhood until the present moment. If certain experiences have not been processed and they keep bringing pain throughout different stages of life, affecting a private life as well as professional life. Then additional stressful events in work environment may feel like a last drop before the bucket starts spilling.”*

(participant ID 20, psychologist)

Psychotherapy is also found to be effective in individual support as it offers a space of acceptance, empathy and understanding for one's situation.

One participant describes how *“as a person working in an organization, I am often the first point of reference for an employee. I may notice how someone may have been sick regularly, they may not performed as well at work as they used to or they appeared a lot more irritated and had conflicts with colleagues. These are some signs that a person may go through burnout. I immediately schedule a meeting and enquire what has been happening. I have noticed that quite a few employees dismiss the severity of burnout. They may be harsh and critical on themselves. Their colleagues may not have understanding for their missed deadlines, slower pace or bad mood. So they feel judged and misunderstood. I have learnt a lot about empathy the last few years when working with employees with burnout, as that is what they need. This is also the reason why after the talk I refer them for a psychotherapy. Our company has a psychologist on site who is providing that service or refers them externally if that is employees' wish. It really made a huge difference. As psychotherapy is the place to be heard, understood and someone just points out that your feelings are important.*

(participant, ID 14, HR)

### **Self-care**

Seven out of 40 participants indicate that one of the most effective individual interventions is self-care.

*Self-care* is the second most prevalently reported theme identified as the most efficient strategy for individual support.

One participant identifies several crucial strategies of how a person can learn different ways of taking care and nurturing their body to deal with burnout symptoms. As she described “*when working with clients on broadening their awareness of what feels like nurturing their body and sense of well-being, creating a structure to release levels of anxiety and set up an easy to follow up rituals of taking care of themselves as well as creating good sleeping patterns to wake up more rested. Once a client got a grasp of that and applied it regularly it made a whole world of a difference in weakening their symptoms.*”

(participant ID 1, psychologist)

Another participant, who is working for an organization, comments that self-care is really crucial to combat burnout and points out how to check for certain red flags “*in my experience I found out that self-care is a must for anyone and for people with burnout even more so. I found out that a good indication how a person takes care of themselves is checking for emotional signals, how they behave if there is something out of their usual standard, whether they are stress resistant, to keep their work responsibility and standards stable. If there is something out of this norm it puts me on alert and I realize that a person self-care may have been neglected and they need to apply some changes. I then try to refer my clients for the psychological support as well*”.

(participant ID7, physiotherapist)

Self-care is the foundation to well-being, brought by another participant. “*In my view there is no treatment or prevention to burnout without self-care. It literally feels like a*

*foundation when you are building a house. If there is not foundation, the house won't stand. That is what happens to a person if they do not apply self-care. Do it for a long time and eventually the nervous system burns out."*

(participant ID 15)

Another participant also emphasizes that self-care is not only effective way of treatment but also a prevention. He states *"if self-care such as prioritizing activities that bring joy, help someone rest their mind and body, bring inner peace even involve regular check ups are neglected, it increases a risk for burnout or impedes with any burnout treatment. Self-care is just a base even for prevention"* In those cases, he is asking the patients to start with their own basic care.

(participant ID37, Gp)

### **Sports and physical exertion**

The third most prevalent theme identified by 7 respondents as the most effective individual intervention includes *sports and physical exertion*.

One participant describes that regular exercise can lower the occurrence of burnout as well as other negative health issues. *"I myself have observed an indication of, a bigger problem linked to burnout, amongst employees if they start developing physical signals such as a person is more tired, suffers from more illnesses, tensions or bodily pains. Physical exercise, any type of sports or movement can really prevent many of those unhealthy signals. That is why every year we provide our employees as a bonus a discount voucher for the gym and we motivate employees with various challenges such as who ran the fastest in the month, who exercised the most minutes etc. We share these successes in the work app with funny*

*pictures. It's fun, it motivates them, and it improves their health. Then we started noting lower percentage of burnout sick-leave the last 2 years."*

(participant ID 35, HR)

Also, another participant notices that exercise and physical exertion makes a significant difference amongst their employees and increased resilience to stress.

*"After one on one talk I refer the client to get a multi layered support from their Gp, psychologist and a physiotherapist. I observe that work by a physio-therapist, and their exercise regime helps clients to increase their resilience to any types of stress."*

(participant ID 36, HR)

Such connection between exercise and overall stress reduction is also mentioned by another physiotherapist who confirms that *"setting up a regular exercise routine helps people to build bodily strengths, decrease stress levels and decrease the tensions and pains that were developed due to body trying to compensate on the stressful days."*

(ID 30, physiotherapist)

Exercise makes a person feel better physically as well as emotionally, as highlighted by another respondent, who says: *"Sports and regular movement assists in physical reduction of accumulated stress, increases overall mental and physical well-being, and if picked up as a habit brings with it long lasting effects and resistance to future stress. It makes people happier, healthier, improves their cognitive abilities, builds strength, and confidence. I have been definitely seeing that less stress equal less burnout."*

(participant, ID27 physiotherapist)

One participant describes how there is a connection between burnout and depression, and how exercise is the right tool to battle that when commenting: *“I do see indeed, that when the burnout is taking really long, people sort of like lose hope. And you hear them asking, will I be my old person, will I be able to do this or that, and then it can easily come into sort of like, I don't know, call it depression, sort of like a hopelessness not seeing things positive anymore. I saw that when people where prescribed an exercise regime, and got a bit more time to recuperate these were actually the right effective tools. And things started changing and they come out of that”*.

(Participant ID 10, HR)

There have been also other themes identified as effective individual interventions and are listed below in Table 5. The following sections contains Table 5 with the list of all themes for individual interventions, as well as the participants quotes.

**Table 5***Themes Identified through the Interviews of Individual Interventions*

<b>Ranking based on the frequency of occurrence</b>	<b>Themes of individual interventions</b>	<b>Quotes of the participants</b>	<b>Participants' IDs</b>
1	Any form of individual psychotherapy (Talk therapy)	"The symptoms and burnout experiences are quite individual so they need to be individually approached".	ID3 Psychologist
2	Self-care	"If self-care such as prioritizing activities that bring joy, help someone rest their mind and body, bring inner peace even involve regular check ups are neglected, it increases a risk for burnout or impedes with any burnout treatment. Self-care is just a base even for prevention"	ID 37 GP
3	Sport & physical exertion	"...Setting up a regular exercise routine helps people to build bodily strengths, decrease stress levels and decrease the tensions and pains that were developed due to body trying to compensate on the stressful days."	ID 30 Physiotherapist
4	Regular healthy lifestyle	"...That includes balanced diet with plenty of vegetables, limiting processed and sugary foods, regular work outs, avoiding substance use, adequate (around 2 l) a day hydration, sufficient 7-9 hours sleep, regular stress management all as a package can prevent but also speed up recovery"	ID5 GP
5	Positive thinking	"The process of gaining a more positive attitude and	ID9 Physiotherapist

		training a shift in perspective, related to the power of positive thinking.”	
6	Stress reduction techniques	“Stress reduction, and I mean very consciously. We have many science-based tools like hypnosis, autogenic trainings, progressive muscle tension relaxations and others. Through that you can really change a lot ...change identification of intro-projects that lead to workaholism, excessive focus on performance, material sphere, change of values in general”.	ID 12 Psychologist
7	Manager support request	...”To receive guidance, recognition or advocacy. Sometimes such an approach can give a person what they truly need on an individual level...”	ID 32 Physiotherapist
8	Mindfulness	“...Slowing down, being mindfully present in the moment, applying all the senses...just slows down everything else around and protects against stress, burnout or other conditions”	ID 2 Psychologist
9	Talking to family/friend when overwhelmed	“...I encourage employees to talk to those whom they feel close to whether it is a spouse, or best friend...to unload lingering things on their minds....”	ID 11 HR
10	Physiotherapy	"Dealing with elevated stress levels and alleviating the resulting tensions and discomforts that arise from the body's attempts to cope with demanding days can be effectively addressed through physiotherapy."	ID 30 Physiotherapist



11	Work/Life balance (boundaries btw work/life)	“One needs to hold equilibrium between professional and personal activities. Having well rounded lives, and not overwork, having a structure, designated workplace, break on free days...”	ID 29 Psychologist
12	Boundaries btw self & others	“Not to ignore the importance of employees being aware of their own personal physical, emotional, mental boundaries...”	ID 17 Physiotherapist
13	Confidence Building Exercises	“...Uou know a part of burnout is that people feel really bad, as they are not good enough and have negative self talk, bring themselves or their skills down. We can teach clients great tools to uplift their confidence”	ID 20 Psychologist
14	Keeping authentic to own values	“Saying what you believe in, doing what you believe in, being congruent on the inside out reduced inner tensions, and other burnout leading problems. Some patients just need to space and learn how to practice that”	ID 26 GP
15	Working on supportive network relationships	“...I’ve been checking on patients and encouraging them to have effective communications, seek understanding and empathic, reliable and trustworthy people in their surroundings and work as that definitely prevents and reduces stress . Such valuable relationships is a good remedy for burnout”	ID4 GP
16	ABC approach (problem solving approach)	“...Analyze and understand behavior, refers to the events that occur before a behavior (antecedent), the behavior	ID 28 Psychologist

		itself, and burnout as a consequence. This helps in understanding and modifying the contributing behavior....”	
17	Appreciation/savouring of rewards in environment (positive psychology)	“Consciously recognizing, valuing, and fully experiencing positive experiences or rewards. You know, when you intentionally focus on the positive aspects of a situation, object, or event. This can really enhance their sense of well-being, gratitude, decrease burnout and overall life satisfaction.”	ID 24 GP
18	CBT psychotherapeutic approach	“Thoughts, feelings, and behaviors are interconnected, and that by changing negative thought patterns, we can positively influence our emotions and behaviors. This is very effective for burnout treatment”	ID 31 Psychologist
19	Knowing own buffers	“Understanding, being on lookout for anything that gives energy, makes things easier “	ID 27 Physiotherapist
20	Avoiding working beyond contracted hours	"Not exceeding the agreed-upon working hours specified in the contract"	ID 10 HR
21	Building resilience/coping	“Building psychological immunity enables individuals to navigate difficult situations with greater mental fortitude and a more balanced emotional state”	ID 8 HR
22	Practicing active stressors minimizing	“...Recognizing stressors, finding a way to either remove them all together, or make certain changes to decrease their power”	ID 13 Psychologist
23	Upholding equity for oneself and others	“....Advocating for equality and fairness not only for oneself but also	ID 40 Physiotherapist

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for everyone in a given context or situation. Recognizing and respecting the rights, needs, and worth of both oneself and others, and taking action to promote a level playing field and inclusive treatment for all. That is like a mirror for one's health, stress, even burnout"

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## Appendix

### Section 5

This section contains the direct quotes from the participants related to the 3 most effective team interventions.

#### **Interventions for strengthening relationships at work**

14 out of 40 participants report that interventions for strengthening relationships at work are the most efficient types of team support.

For example, one participant notices in his practice that not having positive relationships at work is a contributing factor for burnout, especially if a person feels pressed to perform above their limits. *“Many burnout patients complain about the relationships at work, either having a colleague whom they do not get along well with, or a supervisor who appears strict and pushes their employees to work beyond their limits. Some patients were very non-conflicting types who tried to please their employers yet had a feeling that they are not doing enough. These kind of tricky, negative relationships are pushing a person over the edge, towards burnout. Thus interventions for improving relationships correct for that”.*

(participant ID5, general practitioners)

Another participant describes that a manager is one of the most significant figures at work with whom an employee needs to feel safe and have a good relationship with. That is a protective factor against burnout. He stated *“ I think the most effective one really is good*

*manager, if you have a supportive supervisor that knows what's going on, whom people trust, go to when something, is just not feeling right. That's the most supportive aspect, if that's missing, people do not feel safe. People may feel like they might lose their job, or experience other negative consequences if they appear as they are not able to do their job. Such good, kind, understanding manager takes a good care of the whole team atmosphere, and promotes more positive relationships in the whole work place.”*

(participant ID 11, HR)

Another aspect of interventions for strengthening relationships at work as an important burnout remedy is highlighted by a participant who emphasizes that if the companies for which she worked for *“reinforced a culture of understanding, empathy and collegial support that created better relationships between team members. That immediately decreased the amount of stress people go through in work environments. Investments in training related to increase empathy, problem solving, accepting that everyone functions differently on an individual level makes people happier, accepting their work community, which in turn decreases sick leaves and increases overall productivity”*. Which seems like an efficient way of working and having a healthy team environment around.

(participant ID11, HR)

Another participant describes that people spend a big part of their day at work, so investing into good work relationships can create an environment that decreases stress and burnout and vice versa: *“Last few years I had a few patients who showed symptoms of total physical and mental exhaustion. These symptoms are connected to depression but different as well. Because people are not losing the taste for life. They just don't have energy. I have learnt that discussions about how it started, where it came from and what is a continuous*

*factor adding to that exhaustion is important. I found out that often it's related to bad relationships with colleagues or someone's boss. People spend on average around 8 hours each day at work. It's a big chunk of their life so socially they need to feel good at that environment, appreciated, like they and their work matters. That is why I am certain that working on good relationships at work can be either a source of stress or uplift when it comes to burnout."*

(participant ID 4, GP)

Positive relationships at work amongst team members may be linked to better healthier posture and less burnout. As indicated by a physiotherapist participant who observes at work *"clients that have been seeing me regularly for burnout often reflected during the assessment session on tough relationships with their colleagues. They mention that they feel stigmatized if on sick leave. When even mentioning burnout their colleagues may have not been understanding towards my clients or other team mates. It's becoming more and more apparent that people feel better in understanding environments, where people treat each other with respect, empathy and helping nature. I myself think that positive work relationships are the most effective part of team support. You know having a place one for all, all for one type of a thing."*

(participant ID 22, physiotherapist)

### **Psychoeducation of all employees in general**

Psychoeducation within the team is another theme, identified as an efficient way of team intervention to reduce burnout. For example, one participant mentions that

knowledge of ones' own mind is one of the most valuable assets for treatment and prevention against burnout when describing: *“if one understands how human mind works, the factors that affect it, alter the states of well-being, and strategies how to improve if someone does not feel well is one of the most crucial ways of protection, prevention and treatment against burnout”*.

(participant, ID 12, psychologist).

Psychoeducation makes a person more in control, thus protects against burnout, as suggested by a participant who states: *“A person simply feels more empowered on many different levels- in a private life, with relationships and professionally, because through psycho-education/knowledge a person feels more in control which can make a huge difference against manifestation of burnout”*. (participant ID 13, psychologist).

Psychoeducation teaches the person of the problematics, the symptoms, how to assess them and apply remedies as mentioned by a participant who is a general practitioner: *“I also talk to the patients about psycho-education of burnout that they know what it is, how to assess general health and well-being, or burnout symptoms but they also need to understand what brought the person out of their normality, what increased the stresses that they go through. I point these out to patients, explain what may be helpful to deal with that and refer them to psychologist. So for team interventions, I would always recommend increasing awareness, how people can read their own symptoms or of their colleagues and how they can support each other through getting help”* (participant ID 25, Gp).

Team psychoeducation can help decrease stigma, or how people view burnout and making sure that this problematic is taken seriously. Just like people are taken care of

personal hygiene, they can learn to take care of their psycho-hygiene as highlighted by one of the participants, who reports: *“For the team intervention, I would definitely recommend group psychoeducation. I have been working for my private practice but providing support to a variety of schools. As you can imagine, schools have often a high prevalence of burnout. I have seen that when we were offering psychoeducational workshops on a variety of topics, it decreased stigma related to various psychological challenges. And people learnt how to take care of themselves, and the others. They suddenly understood that burnout is real, they were able to relate to some of the symptoms. They also knew that burnout needs to be addressed and anyone who belongs to a school community can make the work environment a better place also for others. Just like we teach people at a very young age about hygiene or brushing teeth, our psychohygiene also needs to be taken care of.”* (participant, ID 28, psychologist)

Additionally, to psycho-education as effective team intervention for burnout reduction there is also a third theme found as the most effective team burnout reduction intervention.

### **Good strategies promoting work as a team**

That includes *Good strategies promoting work as a team* and not everyone for themselves, as current primary data shows that it makes a person less prone to burnout or recover faster. For example, one participant suggests that *“each working place needs to have good strategies or rules in place reinforcing team cooperation. Things like structure support, mentoring systems making people feel that anyone can get guidance, and is a part of the*



*whole team network, as well as allocating tasks equally have been found efficient to decrease burnout occurrence". (participant ID10, HR).*

Another participant also emphasizes that Good strategies promoting work as a team is the most efficient way to prevent or heal burnout. When she talks about some of the strategies in her own business. *"Team needs to work as a team. Cooperate during the good times but also during the tough times. Some supporting tools that have been paying off in my company and I have 30 people working for me was showing employees the progress of all team members, achieving certain targets, and giving them regular positive feedback on the accomplished steps. It motivates employees, makes them feel valued and realizing that together they are the ones who make a difference"* (participant ID39, HR).

Another angle related not only cooperating together at work but also doing leisure activities outside of work together are some strategies promoting a team culture at work. This psychologist, who works as an external support for organizations states that *"as people can work and be productive together, they can relax and slow down together. As it motivates the person to exercise more if they are a part of a team and feel a slight push from others to also participate". He has developed an exercise program as part of the strategy to promote working as a team for companies to give regular few minutes stretch and exercise routine for employees in a work place. He notes that a team enthusiasm, regular movement and extra break between work has also decreased levels of burnout."* (participant, ID 31)

Good strategies promoting work as a team are about making team members feel included, respected, and creating a helpful network of colleagues that support in need. As is described by one of the participants: *"I usually work with individual patients if they suffer*

*from burnout or are starting developing the first symptoms. Now when you are asking me about the team support I would definitely mention finding a way of synchronizing the colleagues who work together. They need to find a way of balancing their work, lean on each other, find a way how they can function effectively together. I had enough patients who reported that they felt bullied at work or taken advantage of. Those kind of things related to be excluded are then contributing to burnout. The team unity can definitely be very effective.” (participant ID 9, Gp)*

Even a physiotherapist participant describes the importance of promoting strategies for close cooperation as a team when mentioning *“I work in the hospital and get to observe closely several departments. Those departments that work as a whole, promote collegial cooperation, have better relationships do not have such a high prevalence of burnout when compared to a couple of departments where it’s not organized like that”*. (participant ID 34, physiotherapist).

There have been also other themes identified as effective team interventions and are listed below in Table 8. The following sections contains Table 8 with the list of all themes for team interventions, as well as the participants quotes.

**Table 8***Themes Identified through the Interviews of Team Interventions*

<b>Ranking based on the frequency of occurrence</b>	<b>Themes of team interventions</b>	<b>Quotes of the participants</b>	<b>Participants' IDs</b>
1	Interventions for strengthening relationships at work	“Many burnout patients complain about the relationships at work, either having a colleague whom they do not get along well with, or a supervisor who appears strict and pushes their employees to work beyond their limits. Some patients were very non-conflicting types who tried to please their employers yet had a feeling that they are not doing enough. These kind of tricky, negative relationships are pushing a person over the edge, towards burnout. Thus interventions for improving relationships correct for that”.	ID5 GP
2	Psychoeducation in general	“... Support and prevent blaming themselves for things, being dependant , teaching them to set priorities also based on urgency to learn this efficiently I am a true believer that group forms of psychoeducation are extremely helpful like that..”	ID 2 Psychologist
3	Strategies promoting co-operation as a team	“Each working place needs to have good strategies or rules in place reinforcing team cooperation. Things like structure support, mentoring systems making people feel that anyone can get guidance, and is a part of the whole team network, as well as allocating tasks equally have been found efficient to decrease burnout occurrence”	ID 10 HR
4	Burnout awareness campaigns	“More awareness campaigns about burnout symptoms, to decrease stigma...”	ID18 HR
5	Managing workload	“But also make sure that one is aware of how much is doable, delegate some tasks if it's too much. Basically what I am trying to say is to manage the <u>workload.</u> ”	ID40 Physiotherapist

6	Well-being promotion at work	“Encourage the health and well-being by also setting up some good examples higher up where managers are taking care of themselves, openly share their experiences etc.”	ID 18 HR
7	Access or referral to psychotherapy	“If self balance can not be achieved I refer them to a psychologist/therapist . These can be at work, or external. For this I have prepared a referral list of network of different professionals. They thrive better in a team, the team benefit from a more balanced employee. I have seen that some companies actually offer on site an access to such service.”	ID 37 GP
8	Mindfulness workshops	“In particularly mindfulness workshops as they can teach people to be more mindful of their actions, and the effect it can have on others.”	ID 3 Psychologist
9	Maintaining work-life balance	“Maintaining work life balance-so giving some energy to work but mostly live. A bit like Italians have a saying "we work to live." ”	ID 16 Physiotherapist
10	Training team empathy and compassion	“Team activities that employees know each other also out of the professional setting that train them empathy and compassion. It's those types of exercises like Getting into others' shoes Compassion for self”	ID 36 HR
11	Treating employees fairly	“Treating the employees fairly. Not showing favouritism.”	ID 7 HR
12	Massage, dance, fitness possibilities within work	“Within the team leisure activities with the team several times a year, relaxing the atmosphere through music;, dance. Or doing massages etc.Those kind of fun things but through the work. Otherwise often people do not really find time to attend such activities. But it loosens and distresses their body•	ID 30 Physiotherapist
13	Nurturing creativity	“Giving a space to creativity, innovation”	ID 29 Psychologist
14	Training democratic leaders	“This definitely requires very effective strategies to do a positive reinforcement organization management. Open discussions Room for bringing in new ideas <u>Rewarding innovation.”</u>	ID 40 Physiotherapist

15	Regular check in with the manager	“Regular check ins with the manager and the team and open and concrete discussion also about this theme.having options of really talking to different specialists “.	ID14 HR
16	Letting go of control and perfection	“Letting go of control and perfectionism. Starting with higher up management as a great example”	ID 18 HR
17	Thank employees regularly for their work	“Recognizing, valuing, and thanking employees. It makes them feel appreciated and it sets a positive vibe at work”	ID 1 Psychologist
18	Performance optimization	“Firstly, any team shall cooperate together and devise a structure and efficiency. Having tools and working optimization strategies.”	ID 39 HR
19	Minimizing negative, non-constructive criticism	“You know there is a difference between negative criticism and constructive feedback. So this needs to be kept in mind.”	ID 8 HR
20	More time for regular breaks & relaxation	“More time for regular breaks in order to enhance relaxation , Break needs to be used efficiently for detaching and not jumping into another work related activity.”	ID 23 Psychologist
21	Regular check ins for decreasing stressful situations	“Regular check in with oneself how am I doing?, how am I doing as a part of the team?What gives me stress? Is this my doing or something that is a part of interaction with others? Do I have control over it? Etc. So keep be mindful and keep checking how to <u>decreass stress at all times.</u> ”	ID 20 Psychologist

## Appendix

### Section 6

This section 6 contains the direct quotes from the participants related to these 3 most frequently identified effective organizational interventions.

#### **Trainings, workshops, psychoeducation on burnout awareness and mental health**

The findings show that it is of great importance that companies to invest into trainings, workshops related to psychoeducation to increase mental health interest and support, and normalize employees experiences and eliminate judgements. One participant emphasizes: *“I would say that trainings and workshops are first of all cost effective, as they can teach a larger number of employees tools that break down into specifics, where people feel individual challenges, discover their needs, and teach new ways of coping, resilience or self-care to prevent or decrease burnout symptoms. It is an investment that pays off. I also think that workshops on mental health, burnout and psychoeducation help organize someone’s thoughts. It helps to pinpoint a little bit where it’s not going great. Having such discussions in groups normalize other co-workers’ feelings, and it’s also openly talked about creating a non -judgemental environment where there is no room for stigma.”* (participant ID18, HR)

Workshops, trainings and psychoeducation teach people about stressors and how that affects body posture and brings pains and more importantly how to reduce them on daily basis. It decreases burnout prevalence of burnout within the companies. Making it a worth

investment. One physiotherapist participant points out: *“I was running a couple of workshops related to physical/mental health awareness and burnout reduction. My role was supporting employees body posture, their seating arrangements and teach people about stress and psycho-somatics. How does stress affect our body and how these tensions create more pains, on both physical and emotional levels. People were surprised that we need to apply relaxation as a daily routine. There were so many things that they were not aware of. So it definitely was not a common knowledge. The fact that a company organizes workshops like these made a huge difference for employees and their stress levels. We saw difference of number of burnout cases going down”* (participant ID 19, physiotherapist)

Workshops, trainings and psychoeducation may eventually save companies money on sick leave. As indicated by a number of participants. One states: *“Such trainings teach individuals how to look after themselves, show that it affects many individuals and it’s not a sign of weakness, rather that certain pressures maybe happening within the organization, and with that insight we observed that people in general became more mindful of their colleague’s wellbeing, the signs to watch out for, then offer more help if needed. Workshops cost something but after a few years we started noticing that overall it saved us money on sick leave.”* (participant ID 29, psychologist).

Another participant also highlights how investments into workshops overall save companies and organizations money but also increase motivation and productivity. When mentioning: *“ There are a few things that we saw in our company working with offering help to our workers. One of the most significant one was hiring trained psychologists or coaches to run trainings or workshops on burnout topics, or how to deal with stress. At some point we needed to downsize the company and our employees were scared, it increased stress, they felt*

*unappreciated after the years of working for us , there was still a lot of work and we did not know exactly when and whom we will need to let go. Some employees were showing burnout symptoms, lack of motivation and lowered productivity. After bringing the trainers in, the workers stamina, motivation and productivity increased. They learnt how to protect themselves from burnout.”(participant ID 33, HR).*

As well as group workshops not only save money but are also efficient to provide help more people at the time. As brought up by another participant who discusses:”*In our hospital departments I was hosting workshops with another colleague of mine related to burnout. Its’ toll on human body and tensions that stress create and what needs to be done to compensate for that. It had a lot of success and our doctors and nurses were reporting feeling better. So the higher management saw their benefits. It decreased expenses on work disability, and the hospital was helping groups of people with each workshop that they provided. To me it seemed a very efficient way of support”*(participant ID 40, physiotherapist).

This suggests that through teaching individuals, the whole organization benefits.

The one on one support is however, also beneficial as can be seen in another organizational theme identified below.

### **Work with a psychologist, or coach within the organization**

Work with a psychologist, or coach within the organization is found to show the employees that the employer cares and provides guidance as reported by a participant who



stated that :*“bigger organizations, try to set up in house psychologists or coaches, with whom employees could go and talk to, about stress work, or any stress related issues. It provides the opportunity to deal with an issue then and there, shows that the company cares and wants to offer help as well as teaches then employees how to tackle specific problematics. Such guidance positively influences burnout reduction.”* (participant ID3, psychologist)

Another participant provides insights that company shall offer a support from a coach or psychologist to allow discussing things with a neutral person outside of company or organization. *“ Even though I have created a system how to check on person and do a general assessment of their situation, I am not a trained psychologist. That is why I refer them to a psychologist or a coach. As employees do not even believe that they have a burnout, or they do not feel comfortable to actually talk about it, worrying that it is going to be seen as a weakness. Having fears of being ostracized by their co-workers. I am aware that a psychologist or a coach offer is neutral objective and non-company related feedback and support”* (participant ID 35, HR)

This importance of having a neutral person to share things about work and that employees can trust is also confirmed by another participant, who describes it from a perspective of an employees whom she gets to see on regular basis. *“People feel drained, sometimes not trusting that they can express how they feel amongst colleagues or superiors. Having sessions with a neutral body provides that outlet to offload without judgements or worrying that their position would be threatened. We are the neutral people who care about employees well-being, before worrying about sales, losing a worker, increasing company costs etc.. And if employees do not need to pay for the sessions and are offered them via work environment, they feel more appreciated, and cared for”* (participant ID20, psychologist).

Work with a psychologist can enhance protective policies in work environments as showed by a participant who mentions: *“The last 10 years we see that companies are more willing to provide investments into mental health awareness and help. One of them is hiring external professional help by a psychologist. I think that’s one of the most effective tools to reduce burnout. They need to be a part of assessing the culture at work, the problems and worries that employees have, and help set up more protective policies. As let’s be honest companies sometimes neglect to care for what’s best for the employees. Their priority used to be financial gains. Now with Covid-19 in the picture, they are realizing that mental health is an absolute necessity to care for employees, and with such care they happily work harder. No care from companies side means more burnout and vice a versa.”* (participant ID 2, psychologist)

Psychologists may assist with changing things right from the organizational level, as indicated by the following participant: *“Working as a hospital doctor I realized that sometimes companies or organizations may not know what is the best for employees’ health. I would say hire health professionals who work in that (burnout) specialization. People like psychologists have the ingredients that they can share to deal with this issue. So if I was a CEO deciding how to deal with burnout on organizational level that is the direction I would go. Then we would also see less patients with burnout, right?”* (participant ID 6, general practitioner).

The findings show that there is also another organizational theme as quoted below.

### **Taking interest in employees' stimulation and motivation**

Being interested in employees' stimulation or motivation is suggested as one of the most efficient organizational interventions to decrease burnout. One participant mentions that she tries to give positions to specific employees based on their skills, trainings, interests. She noted *"throughout the years, I have noted that if people are either overstimulated that the tasks seem too hard, challenging like a struggle or too under stimulated that the tasks are slightly boring, uninteresting or not stimulating, the employees are more at risk of burnout. Ever since we found that out we try to balance the match for the employees giving them the right level of their stimulation"* (participant ID8, HR).

Another participant also highlights the importance of knowing what motivates or stimulates employees to keep their motivation, therefore their burnout in check when adding that *"if our employees feel unstimulated or overchallenged they lose motivation, they feel like needing to be dragged to work. Such feeling was described by some of them once retrospectively looking what made them slip into burnout"*. (participant ID33, HR)

Such motivation and stimulation shall be assessed by questionnaires and controlled for burnout, as explained by another participant: *"we administered a bunch of questionnaires to our employees to screen for burnout, assess their motivation, and seeking what could be organizationally improved. We were surprised to see a link between not giving a rewarding stimulation to employees which in turn decreased their motivation, which in turn eventually after a prolonged period of time increased risks for burnout. Today we know better and try to correct for that"* (participant ID31, psychologist).

Stimulation of employees keeps their interest, as indicated by another participant:

*“If working place constantly gently challenges employees, it keeps their interest. We saw they burnout less. Companies need to keep this in mind”* (participant ID 9, Gp).

Organizations that show interest in employees’ stimulation and motivation are creating meaning and a sense of belonging. Through which burnout can be decreased. As explained by one participant who mentions: *“that work needs to align peoples’ passions and interests with specific responsibilities in their positions. That way, the employees feel like they matter, and belong to that community. They are more aware how their work benefits other co-workers. Such stimulation and awareness protect against burnout.”* (participant ID 16, physiotherapist)

This is also confirmed by another participant who stated: *“if you do what you do not like or believe in, it drains you and increases stress hormones. Eventually you burnout.”*(participant ID 32, physiotherapist).

There have been also other themes identified as effective organizational interventions and are listed below in Table 11. The following sections contains Table 11 with the list of all themes for organizational interventions, as well as the participants quotes.

**Table 11***Themes Identified through the Interviews of Organizational Interventions*

<b>Ranking based on the frequency of occurrence</b>	<b>Themes of team interventions</b>	<b>Quotes of the participants</b>	<b>Participants' IDs</b>
1	Training, workshops, psychoeducation on burnout awareness and mental health	“I would say that trainings and workshops are first of all cost effective, as they can teach a larger number of employees tools that break down into specifics, where people feel individual challenges, discover their needs, and teach new ways of coping, resilience or self-care to prevent or decrease burnout symptoms. It is an investment that pays off. I also think that workshops on mental health, burnout and psychoeducation help organize someone's thoughts. It helps to pinpoint a little bit where it's not going great. Having such discussions in groups normalize other co-workers' feelings, and it's also openly talked about creating a non -judgmental environment where there is no room for stigma.”	ID 18 HR
2	Work with a psychologist, coach within organization	“Bigger organizations, try to set up in house psychologists or coaches, with whom employees could go and talk to, about stress work, or any stress related issues. It provides the opportunity to deal with an issue then and there, shows that the company cares and wants to offer help as well as teaches then employees how to tackle specific problematics. Such guidance positively influences burnout reduction.”	ID 3 Psychologist
3	Taking interest in employees' stimulation and motivation	“That work needs to align peoples' passions and interests with specific responsibilities in their positions. That way, the employees feel like they matter,	ID 16 Physiotherapist

		and belong to that community. They are more aware how their work benefits other co-workers. Such stimulation and awareness protect against burnout.”	
4	Teaching tolerance, compassion as a philosophy of organization	“Trainings to increase general compassion because only then people can respect other human beings around.”	ID12 Psychologist
5	Communication in workplace between departments	“Communication also with employee-superior; and very much in between departments,”	ID29 Psychologist
6	Flexible contract, working hours	“I think that what truly makes a difference is having flexible working hours that some days a person perhaps works a bit longer another day he/she compensates for it”	ID 39 HR
7	Supportive day off polices	“Offer some extra days off for support, or time to rebuild mentally.”	ID 34 Physiotherapist
8	Pacing the work	“Being allowed to pace work. No one know better how much they can handle only themselves. Employees shall be allowed to make some of these decisions how much they can handle”	ID 32 Physiotherapist
9	Regular relaxation, meditation, mindfulness opportunities within work	“Prompting employees to learn destressing techniques like relaxations, mindfulness etc. and offer this within the work space”	ID 40 Physiotherapist
10	Growth opportunities	“Another big one is to provide great opportunities to continuously develop self and grow.”	ID 27 Physiotherapist
11	Fun collective activities	“I also know places that they organize team building fun activities. Such as Afterwork outings Events, Leisure, Sports. People in general feel more recharged, happier, more resilient.”	ID 7 Physiotherapist
12	Training managers/or hire qualified and	“Training managers and/or hiring qualified and competent managers to preserve structure, yet	ID 4 GP

	competent managers	effectiveness and mostly be people trained people”	
13	Regular checks on employees’ progress	“ Regular checks on the health or feelings of the employees, that has a lot to do with their progress.”	ID 18 HR
14	Higher budget for mental health support	“Organizations and companies need to offer higher budget for mental health support. Mental health is as important as physical health”	ID 2 Psychologist
15	Stress audit	“I would suggest a stress audit. By definitely hiring an independent auditor who could help with independent assessor Specific criteria for stress assessment Stress reduction policies. So doing regular assessments, provide strategies but someone shall check whether the companies also do their part.”	ID 5 GP
16	Purchase rehabilitation procedures for employees	“Purchase various rehabilitation procedures for employees. Then they are more likely to follow it, if purchased by someone else.”	ID 32 Physiotherapist
17	Individual approach to all employees	“Individual approach to the employee; because any of these suggestions would work differently for different people “	ID 29 Psychologist
18	Healthy, safe(physically/mentally) working environment	“An employer can strive for a conducive and secure (both physically and mentally) work environment (through ergonomics, policies for promoting right balance etc.”.”	ID 3 Psychologist

# Appendix

## Section 7

Containing the burnout reduction INVIGORATE MODEL and 43 burnout reduction guidelines card deck

### INVIGORATE

You likely reached for this card deck because you may have been feeling exhausted, emotionally and physically. Perhaps you even experience a vicious cycle of never-ending chores, irritability, sleepless nights, darker thoughts, loss of motivation, blame, feelings of not being good enough and awareness of various other stressors that have been annoying you lately. If this has continued for a prolonged period of time you might be even asking, “How did I get on this high-speed train? and Will there ever be a stop that I can finally get off?” You recognize what I am talking about especially during the moments when you try to catch a breath yet you realize that you can no longer find a feeling of relaxation.

These could be burnout symptoms. For burnout definition and a quick assessment please check the green cards no 1 & 2. Studies showed that workplace burnout can cause changes to the neural circuits. Particularly, people suffering from burnout showed in R-f-MRI studies, enlarged amygdala (a brain structure associated with emotional reactions). As well as weaker connections between amygdala and the anterior cingulate cortex (linked to emotional distress). Along with weaker correlations between activity in amygdala and the medial



prefrontal cortex (associated with executive functioning). Explaining, how burnout may cause difficulties in controlling negative emotions, adversely impact on cognitive functioning such as ability to pay attention, retain memories, learn new things, increase the risk for mistakes and negative perceptions of work stress (e.g. Golkar et.al., 2014). Luckily, any of the above experiences as well as the neurological changes to the brain can be reversed with the right care such as an increased self-care, improving your life style, eliminating as many stressors as possible etc.. To set up the right help please discuss your family doctor about your feelings and an assessment along with finding a professional support from a psychologist.

Working as a psychologist, I have been lately facing more and more clients with similarly described feelings and thoughts of “not being good people”. Not realizing that those thoughts of worthlessness, helplessness and down spiral feelings were caused due to prolonged stress. While, I was searching for the right answer and support for my clients, I started revising a number of theories including:

- The Job Demand-Control Model (Karasek 1985; Van der Doef, &Maes, 1999);
- Conservation of resources theory (Hobfol, 1989; Halbesleben, & Buckley, 2004);
- The Job- Demands-Resources Model, (Demerouti, Baker, Nachreiner, &Schaufeli, 2001);
- The Transactional model (Lazarus & Folkman, 1984); and
- The Work-life model (Leiter & Maslach,1999) as well as others.

As well, as interviewed 40 professionals, whose work included supporting people suffering from burnout (10 Gp's, 10 psychologists, 10 physiotherapists and 10 HR professionals).

Did I get any answers? Partially, due to the complexity of burnout topic. However, I found out that the issue is not only within an organization, an individual, or a work team. It's a combination and interaction all of them together. Realizing that the remedy needs to include an individual approach. By minimizing stressors and establishing building blocks which create more energy, strengthening resilience, invigorating and supporting all three layers: the individual, within the work team and with the support of the employer or whole organization. Such three-layered support is exactly what this INVIGORATE card deck and model are all about.

INVIGORATE package contains in Total 43 cards. Including -3 sections related to the problematics and remedies of burnout

- 1<sup>st</sup> section: 10 green cards focus-on what an employer or organization/working environment can do for its employees.
- 2<sup>nd</sup> section: 15 blue cards relate to the support of team leaders or individual team members
- 3<sup>rd</sup> section: 18 red cards relate to the improved self-care of all the individuals holding this card deck in their hands or anyone who is currently struggling with burnout.

I truly hope that this card deck shows a new way of coping, provides some understanding and support and most importantly enhances positive changes to the state of being....

With warm greetings from the Netherlands

Katarina

This model has been designed based on the evaluation of the 5 earlier mentioned theoretical models, along with combining the expertise of 40 burnout reduction professionals.

Card 0

INVIGORATE MODEL for private and professional life Side a

<b>I</b>	<b>Invest daily in overall mental and physical well-being</b>
<b>N</b>	<b>Notify if needing help</b>
<b>V</b>	<b>Values aligned with the authentic self</b>
<b>I</b>	<b>Inform others of boundaries/keep a strong line</b>
<b>G</b>	<b>Grow, learn things that feel rewarding</b>
<b>O</b>	<b>Only workload that you manage</b>
<b>R</b>	<b>Reduce any stressors</b>
<b>A</b>	<b>Activate and nurture positive relationships</b>
<b>T</b>	<b>Take time to rest regularly, balance work vs rest</b>
<b>E</b>	<b>Exercise 4 times a week for 30 min</b>

## Side b

**Invest daily in overall mental and physical well-being**  
 =healthy diet, regular sleep time between 10pm-11pm,  
 drink around 2l of water per day, have a wide spectrum  
 of vitamins, cut alcohol or any substances etc.

**Notify if needing help**=ask for help if things are  
 overwhelming, what are your needs? wants?

**Values aligned with the authentic self**=speak opinions  
 honestly, decide according to your values, trust your  
 intuition (it's more scientific than it sounds)

**Inform others of boundaries/keep a strong line**=walk  
 away from toxic situations or people, you will recognize  
 that by feeling unhappy, angry, frustrated etc.

**Grow, learn things that feel rewarding**=spend time on  
 things that you feel passionate about, improve just a  
 tiny bit each day, try something challenging

**Only workload that you manage**=use to do lists, notice  
 resources, plan ahead, practice saying no at times,  
 prioritize, break big tasks into sub tasks

**Reduce any stressors**=identify what causes stress,  
 remove or minimize the stressors, search/ask for  
 resources, discuss different solutions with someone

**Activate and nurture positive relationships**=build  
 network of encouraging people

**Take time to rest regularly, balance work vs rest**= work  
 90 min, then 20 min break, learn relaxation techniques

**Exercise 4 times a week for 30 min**=increase serotonin  
 naturally= less stress, anxiety, low mood, more  
 resilience

### Recommendations for employer Card 1

#### Side a

Does your organization or company experience an increase in employees' burnout?

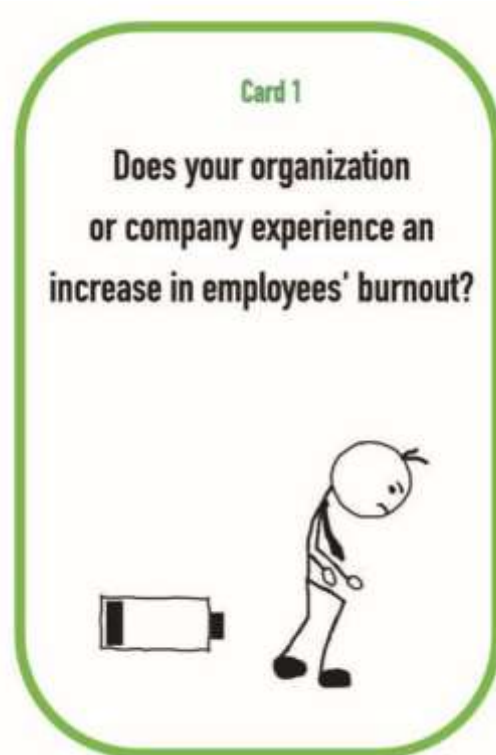
#### Side b

According to the 11th Revision of the International Classification of Diseases (ICD-11), burnout is classified as an occupational phenomenon. It is not a medical condition.

WHO (2019) characterized burn-out syndrome as “a result from chronic workplace stress that has not been successfully managed”. Characterized by three dimensions:

- feelings of energy depletion or exhaustion;
- increased mental distance from one's job, or feelings of negativism or cynicism related to one's job; and
  - reduced professional efficacy.

Luckily, you have the power to do something about it....



### Recommendations for employer Card 2

#### Side a

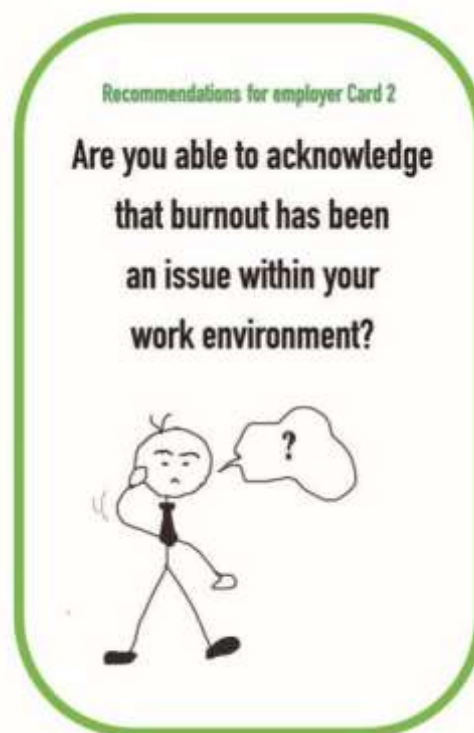
Are you able to acknowledge that burnout has been an issue within your work environment?

#### Side b

It may be scary to bring up this topic....but burnout is on the rise! It's a fact!

- the first starting point is to measure it. Use for example Maslach's burnout inventory. That can be purchased here:  
<https://www.mindgarden.com/maslach-burnout-inventory-mbi/172-mbi-remote-online-survey-license.html>
- train your leaders to be empathic, helpful mentors and a source of growth and career development as they play a significant role in your employees' well-being

If you can keep these up you are already making a difference!



### Recommendations for employer Card 3

Side a

Are you providing your employees with enough resources?

Side b

If you are not sure you can increase these ways of support:

- give your employees more autonomy (encourage their independence, creativity, self-interests etc.)
- create a culture of positive, supportive, encouraging, high-quality relationships among the colleagues (via team building get-togethers, or outside of work fun /leisure/well-being activities)
- provide opportunities for growth and excellence (workshops, professional development training that can be challenging and meaningful at the same time)
- offer regular feedback and provide a comfortable space for employees to ask any questions, or for help that are regular, frequent, relevant, and highly encouraging

These resources give your employees more motivation, energy and fuel to do their work.





### Recommendations for employer Card 4

#### Side a

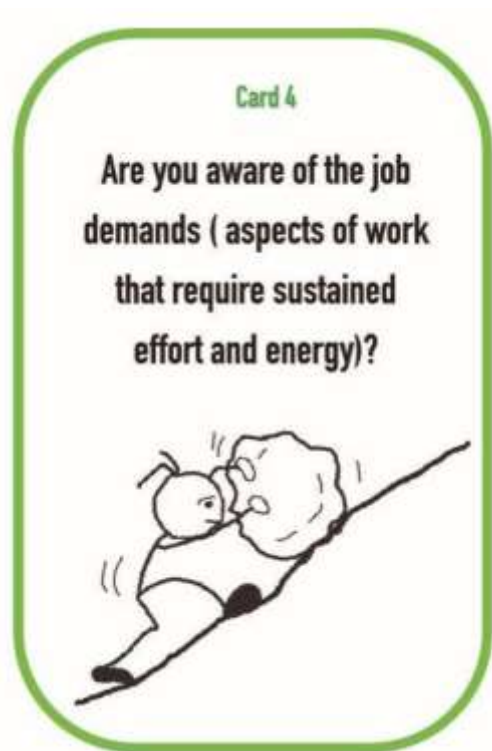
Are you aware of the job demands (aspects of work that require sustained effort and energy)?

#### Side b

If you are not sure you can minimize/cease some of these job demands:

- role ambiguity related to unclear expectations of someone's work objectives and duties
- role conflicts related to the conflicting requests from more than one person
- unfair/unequal treatments of employees (check green card no.5)

If you can correct for these, your employees will be more satisfied with their job and increase their productivity.



### Recommendations for employer Card 5

Side a

Do your employees FEEL treated fairly?

Side b

There are four dimensions of justice in a work place including:

- distributive justice related to determining fair share (e.g. equity, equality, need)
- procedural justice related to implementing how fairly people are treated and generating unbiased decisions
- informational justice related to the timelines, specificity, and truthfulness explanations given
- interpersonal justice related to the treatment received, providing explanations for decisions, showing sensitivity, dignity, courtesy and respect

Caring workplaces offer: a support person in challenging conversations, or managerial meetings, fair and available complaint-handling procedures, privacy and confidentiality, trainings for managers for empathy & how to avoid blame/criticism.

Here is a suggestion: Offer a work culture which focuses on learning, and growth and provide the above possibilities.



### Recommendations for employer Card 6

Side a

Have your employees been experiencing (more) conflict amongst each other?

Side b

Could this be a result of unmanageable workload, lack of resources, overtiredness?

If the answer is possibly....

- invest in workshops training democratic leaders
- promote physical and mental well-being by delivering campaigns/workshops
- promote open communication amongst all employees and leaders
- promote the idea that disagreements and different opinions are highly valued and respected if presented respectfully and suggestions on improvements
- express gratitude to your employees in forms of bonuses, trainings, vouchers, thank you cards etc.
- hire an on-site psychologist, coach or counselor/mediator that employees have someone to talk and get support if bringing forward challenging issues

Such support will create a difference,,,



### Recommendations for employer Card 7

Side a

Do your employees have flexible working time arrangements?

Side b

Flexible work arrangements such as:

- working from home, on-site vs on-line options
- alternating schedules with flexible hours of employment will give your employees more control over their own schedules
- better balance of their work and personal lives

Increase this flexibility as it lowers employees' stress levels and increases their job satisfaction.

Happy employees=Happy boss ☺



### Recommendations for employer Card 8

Side a

Are you overloading or underloading your employees?

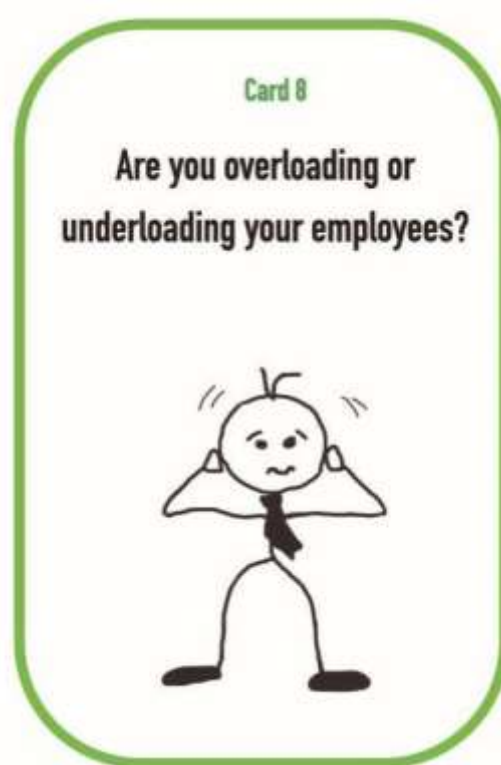
Side b

Workload refers to the level of effort that is required over time. Workload may include:

- the volume of work that needs to be done on a shift (e.g. the number of boxes that need to be unpacked)
- the difficulty of the work: (e.g. size and weight of each box).
- the intensity of the work: (how quickly it needs to be done).
- the pace of the work: (e.g. do you get breaks or work continuously?)
- the number of hours worked in a day (e.g. 8 ) or a week (40, 50)

Both work underload and overload may be stressful and increase negative emotions.

Can you talk to your employees and identify what feels more balanced?



### Recommendations for employer Card 9

Side a

Are all the roles clarified within your organization or working environment?

Side b

If the roles are clarified effectively within the organization/working environment, employees feel more satisfied which lowers the staff turnover.

Some recommendations:

- guide and coordinate employees' work activities
- set task-oriented objectives in work groups (check blue card no.3)
- direct employees towards performance of duties and responsibilities
- encourage searches for efficient ways of working
- reward the innovative/effective/productive nature of employees
- facilitate evaluations of performance by providing a benchmark against which it is compared
- keep positive track of employees' progress from previous evaluation

Remember that having identified clear roles for your employees and offering a positive environment makes them feel more accomplished, less burned out and wanting to stay....



### Recommendations for employer Card 10

#### Side a

Are you giving your employees autonomy and control over their own work?

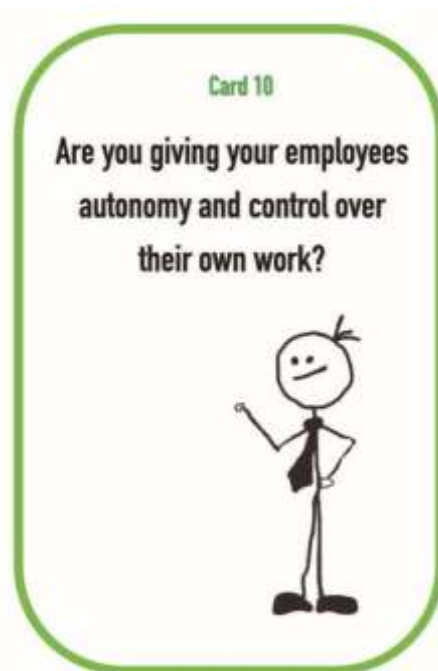
#### Side b

Job autonomy and control is related to flexibility and control over how the work gets done. Increased sense of autonomy and control increases work satisfaction and decreases occurrence of burnout.

How can this be achieved?

- place performance metrics and expectations within employees' control
- track their success (check green card no.9)
- during regular one-on-one conversations explain how your employees are doing, present their improvements and offer incentives if there is something to be thankful about
- provide quiet peaceful working environment with reduced distractions
- have a flexible culture that allows employees to choose where and when they will work
- provide natural lighting in the offices -as they promote calmness, and positive emotions
- provide spaces where employees can connect.

The more someone feels autonomous and in control the more they feel the sense of freedom...



### Recommendations for team in a work environment Card 1

#### Side a

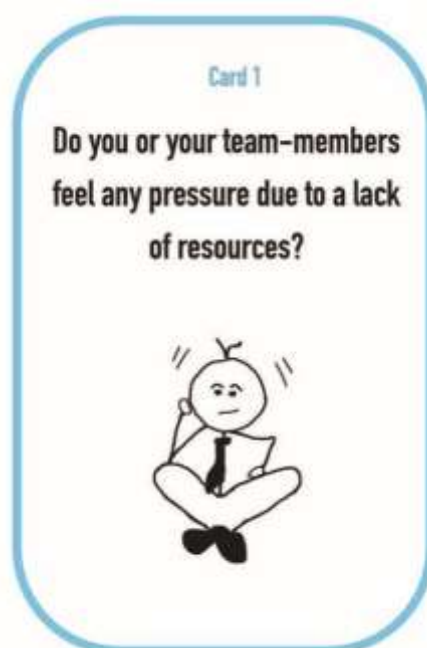
Do you or your team-members feel any pressure due to a lack of resources?

#### Side b

If possibly....Redefine the team's way of working

- which systems or processes work well?
- keep the ones that are still beneficial
- which systems or processes do not work well?
- something needs to change...
- can the non-beneficial systems be automated, better documented or dropped all together?
- communicate with your team members/colleagues if there are unrealistic timelines/resources/budgets/workload
- apply 25% extra time for each deadline to reduce the pressure

Still struggling? Get an organizational coach or psychologist to assess the work environment and provide suggestions for more effective/supportive collegial cooperation





## Recommendations for team in a work environment Card 2

Side a

Do you or your colleagues easily ask for help?

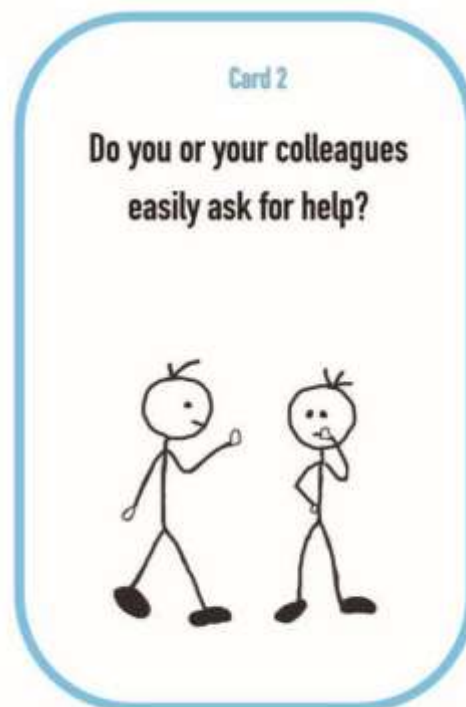
Side b

Sometimes life/work feels too overwhelming. Create an environment where it's easy to ask for help, more time or extra resources. Open communication, may show where there is a struggle that can be resolved with offering extra mentoring, support, or resources.

Here is an example of how to ask: "I feel lately....(e.g. overwhelmed) about (name the situation) and I was hoping that (express the need).

If someone asks, which part of what that person just asked for can you agree with?

Remember it takes a lot of courage to ask for help. This courage needs to be somewhat rewarded.



### Recommendations for team in a work environment Card 3

#### Side a

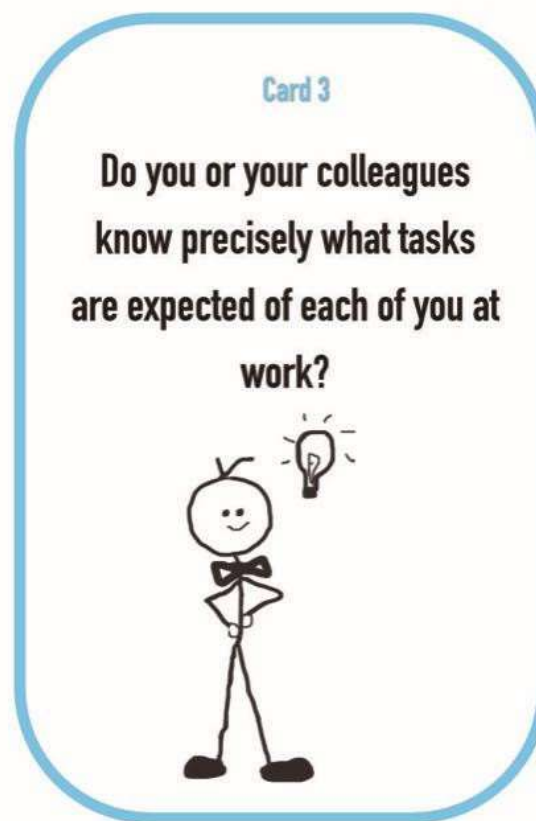
Do you or your colleagues know precisely what tasks are expected of each of you at work?

#### Side b

Stress or burnout may be more prevalent if there is an ambiguity or a lack of clear expectations related to the tasks.

- have an open communication with your team leader/supervisor/colleagues about specifics, and expectations related to your work.
- ask questions, specify dead-lines, priorities, provide examples, offer mentoring, help to set up mini-goals, re-check on clarity (Check also green card no.9).

Only that way will no-one's efforts be wasted.....



### Recommendations for team in a work environment Card 4

Side a

Do you or your colleagues get your needs met?

Side b

Humans feel more depleted of energy if they try to satisfy others and sacrifice their own needs and wants.

- anyone can recognize it by feeling hurt, physically uncomfortable, resentful or angry
- especially after talking or doing something with someone else
- organize a workshop for your team where you can learn to read your own body's sensations, identify (physical, emotional, mental boundaries) and signal if these get crossed

Basic needs that everyone has are: food, water, shelter, energy, education, resources, protection, opportunity, sense of freedom, participation, creation, understanding, affection, leisure...

What is it that you need today more of?



### Recommendations for team in a work environment Card 5

#### Side a

Does imperfection frustrate you or your colleagues?

#### Side b

Having perfectionistic tendencies increases anxiety, burnout, the inner critical voice and makes people feel “not good enough”. What if I told you....

- that there is more effectiveness in a “good enough approach”
- offer a workshop to increase awareness of such tendencies, to identify the progress or the positives related to anyone’s work
- observe which smaller goals were already achieved and what was learnt through the process
- redirect the focus on the meaning/purpose or the process of work or learning rather than perfection
- train yourself and others to do things immediately, as a rough draft and then work your way towards improvements rather than procrastinating because of wanting things perfect

“The pursuit of perfection often impedes improvement” (George Will).



### Recommendations for team in a work environment Card 6

#### Side a

Have you or your colleagues been growing, transforming or learning anything new?

#### Side b

Learning new things or mentally demanding skills improves:

- cognitive functioning, slows down aging, improves memory and decreases boredom
- personal growth/learning boosts general well-being, and gives a sense of happiness and satisfaction

If you or your colleagues could start learning something new...what would it be? Get everyone's input and mutually choose what you as a group may benefit from.



### Recommendations for team in a work environment Card 7

Side a

Have you or your colleagues been doing extra hours of the signed contract?

Side b

Are you having a culture within your team where you may be silently “expected to answer the phone during the free time, on the off days, sick leave or on vacation? Are you staying longer at work just because most of your colleagues do it too?”

This cannot become a norm and you need to be compensated by getting extra bonuses, financial or free time compensation.

Otherwise, something needs to change...



### Recommendations for team in a work environment Card 8

Side a

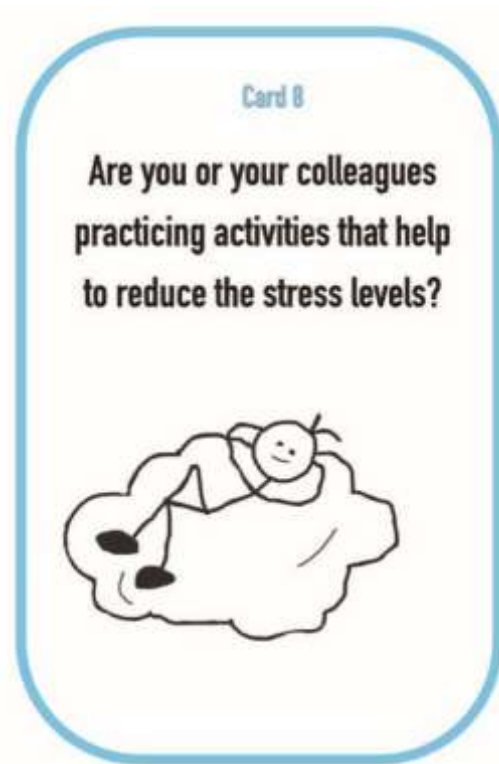
Are you or your colleagues practicing activities that help to reduce the stress levels?

Side b

You may do this on your own, or with your colleagues. Check out the stress reducers from the list below. They do not sound familiar? Then it is time to book a workshop/training for your team to learn about self-care, burnout/chronical stress awareness and stress reduction techniques:

- breathing exercises
- guided meditation
- hypnosis
- muscle-tension relaxation technique
- mindfulness
- aromatherapy diffusers in the office space
- massage chairs, or gift vouchers for massage, self-care products

Try any of these and pick what feels good for you...



### Recommendations for team in a work environment Card 9

#### Side a

Have you or your colleagues already sent a positive message to another team member today?

#### Side b

It could be a simple thank you, or any words of appreciation to a different colleague each day.

Perhaps you are not sure what to write...

- how about finding something inspiring about that person
- what did that person teach you?
- how did this person help you?
- how did they make your day more pleasant?

Such kind words of appreciation increase a sense of happiness, positivity and strengthen social connections within your team. Let it become a habit of your days.





### Recommendations for team in a work environment Card 10

#### Side a

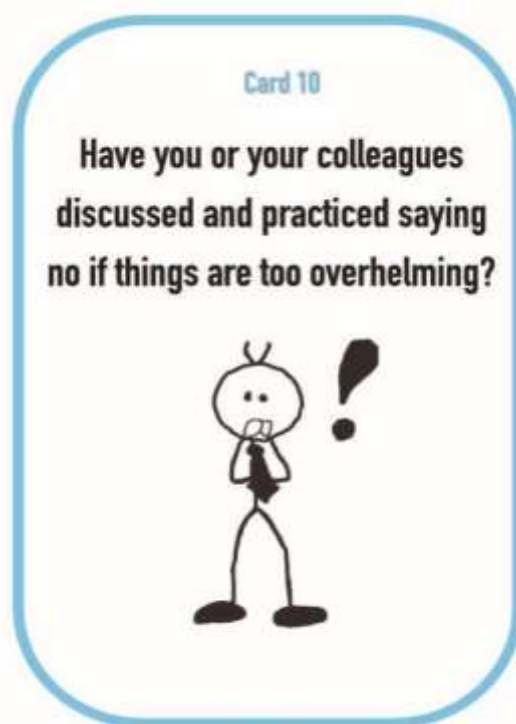
Have you or your colleagues discussed and practiced saying no if things are too overwhelming?

#### Side b

Saying yes when it's not meant, results in crossing own personal boundaries. The outcome of that is feeling exhausted, stressed or even burnout.

- create a culture in your team that allows pausing before saying yes immediately
- let each team member check whether the task is doable or too overwhelming, and at the cost of sacrificing own needs or well-being
- teach the team, that practicing saying "I am not sure if I can do it...let me check and I get back to you within an hour" may reduce the pressure and keep everyone in check of their own needs

"Just because you don't understand it doesn't mean it isn't so" (Lemony Snicket).



### Recommendations for team in a work environment Card 11

#### Side a

Are you or your colleagues able to stand up for yourselves and your beliefs?

#### Side b

Practicing assertiveness is an important ingredient for protecting your own boundaries.

- offer your team members training or one on one sessions with an organizational coach
- have workshops on awareness of your own personal boundaries, the optimal workload, increased effectiveness while practicing regular self-care etc.
- start practicing with the smaller less challenging steps (e.g. on a colleague whom you feel the most comfortable with)
- such knowledge will increase open communication amongst team members, help to keep the workload in check, and allow everyone express their own opinions, beliefs and thoughts

Can you imagine how much this would reduce work stress?



### Recommendations for team in a work environment Card 12

#### Side a

Do you and your team members promote a culture of health and exercise?

#### Side b

Exercise at least 4 times per week for a minimum of 30 min per session, any form of aerobic exercise:

- reduces stress, improves mood due to increased serotonin production, increases cognitive abilities, strengthens immune system, and overall physical and mental health.

If you are not used to exercising or started feeling symptoms of burnout:

- take small steps starting with little efforts, then slowly and gradually increase the exercise
- discuss the type, frequency and intensity with a physiotherapist
- create gym space at work or offer gym membership vouchers to support your employees

All because exercise is a natural serotonin booster....there goes my prescription ☺



### Recommendations for team in a work environment Card 13

Side a

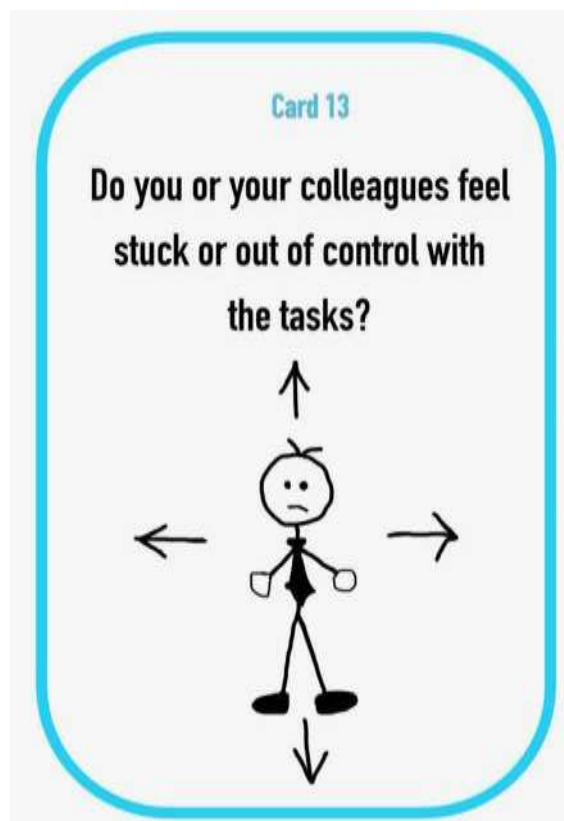
Do you or your colleagues feel stuck or out of control with the tasks?

Side b

We human beings like to have things under the control. There are two ways of coping.  
Approaching vs avoiding.

- approaching is more effective. By approaching the tasks, breaking them into smaller more achievable sub-tasks will give a sense of more control. Ask “can anything influence or control this situation? (e.g. extra time for deadline, more resources, a consult with an expert). If yes, do it.
- if not, as frustrating as it is, sometimes accepting the situation and moving your focus onto other tasks that can still be influenced is more productive, accept it.

Remember, avoidance is also a choice that too shall bring with it certain consequences.....Isn't it better to have some control over your decisions?



### Recommendations for team in a work environment Card 14

#### Side a

Do you and your colleagues conduct activities aligned with your personal ethics, morals and values?

#### Side b

Doing things that are true to own values, may feel like using a navigator and having a smoother ride to the destination.

- aligned values (e.g. doing the tasks with a purpose/mission that resonates strongly with own personal beliefs), motivate, lead to a fuller and accomplishing life and decrease stress and burnout
- nonaligned personal core values with actions may increase internal pressures, the lack of integrity and confusion.

“Values are like fingertips. Nobody’s are the same, but you leave them all over everything you do” (Elvis Presley).



### Recommendations for team in a work environment Card 15

#### Side a

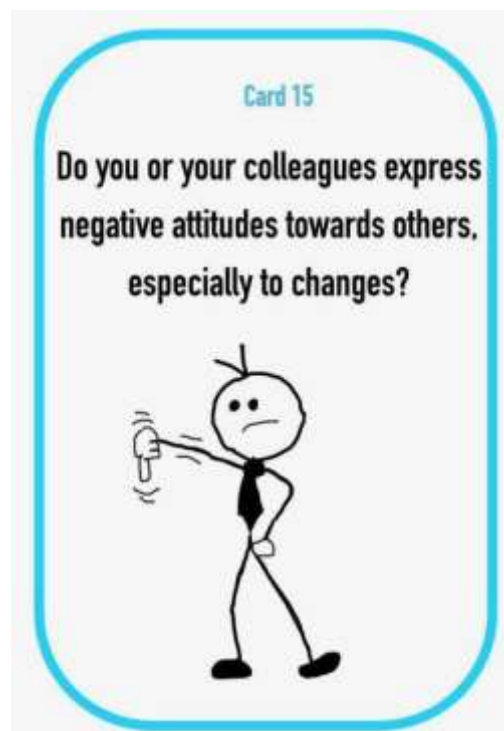
Do you or your colleagues express negative attitudes towards others, especially to changes?

#### Side b

Some examples of negative attitudes include:

- self-defeating talk, apply antidote: use an encouraging self-talk
- critical assumptions, apply antidote: stick to the facts, evaluate both the positive and negative sides objectively, what have you learnt from this process?
- undermining comparison with others, apply antidote: check only own progress from the point or time when you started
- rumination about the past, apply antidote: ask: “can I do anything about it?” If yes, go and do it. If not, practice acceptance. Preserve your energy for things that you can still change
- blaming yourself repeatedly, apply antidote: mistakes happen, what did this journey taught me?
- fear of failure, apply antidote: each set back increases own psychological immunity and resilience. Each trial taught you something new, and increased your efficacy for the future.

What helped you to survive your challenging moments? Are not these the evidence of your own resilience and growth?



### Recommendations for an individual (employee) Card 1

Side a

Are you experiencing prolonged unrestful or insufficient sleep?

Side b

“I want to sleep but my brain won’t stop talking to itself” (Anonymous).

Sounds familiar?

- get up every morning 15 min before your usual time, even if you went to bed late
- start your day with a short relaxation technique (check card no.29)
- then do at least 30 min of strenuous physical exercise 4-5 times per week
- prepare your room for sleep (no light, a bit colder temperature)
- no heavy food before bed
- use lavender oils or shower gels, or bath salts before sleep
- write down things that worry you or you do not want to forget
- while sipping chamomile, valerian or lavender tea
- do a breathing, or meditation just before you fall asleep

Breathe in the peace breathe out the worries.....



## Recommendations for an individual (employee) Card 2

Side a

Are you going through life with the flow or continuously depleting yourself?

Side b

The term flow was introduced by a professor of psychology, Dr Mihaly Csikszentmihalyi in the 1970's. Describing that as an optimal state of being. Immersed, open consciously attentive to the stream of life when interacting with the environment. The opposite of a flow is depleting oneself. Check in the table below which one describes you?

### **Two attitudes to work (based on Sonja van Zweden's work)**

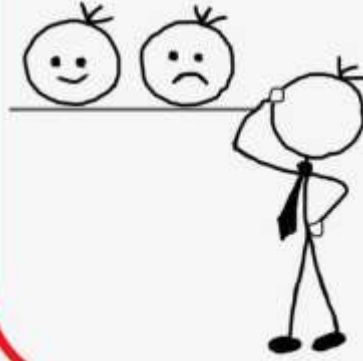
	FLOW	DEPLETING YOURSELF
Orientation	Quality, the work is going well	Quantity and result are foremost, the work needs to be finished
Result	Process	Product
Compass	Internal Personal tempo Personal rhythm Personal organisation Variety	External Pressure Commands/control Adapting/forcing oneself Continuing for too long
Energy	Providing	Demanding
Concentration	Fully	Disturbed
Motivation	Willingness, enjoying, appreciating. It comes from yourself	Feeling forced or compelled, doing because others want you to; recognition from others
Experience	Creative	Monotonous
Recovery	Completely	Partly
Limits	Own happiness and well-being	It needs to be finished; continuing until you drop

Image adopted from: <http://www.carienkarsten.nl/wp-content/uploads/2017/02/Overcoming-burnout.pdf>



**Card 2**

**Are you going through life with  
the flow or continuously  
depleting yourself?**



### Recommendations for an individual (employee) Card 3

Side a

Are you too busy to take a break?

Side b

Our brains operate on two modes: a focused mode is mostly used for learning, working, writing etc. and a diffused mode that is related to a relaxed or dreamy state.

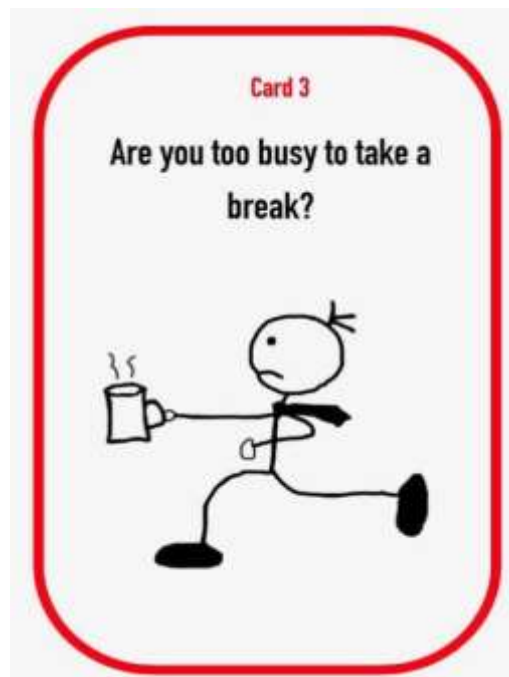
Guess when many breakthroughs appear out of nowhere? Absolutely! They are often a product of a diffused brain mode.

When you take a break....

- it gives you valuable insights
- it recharges you to get back to a productivity zone, refocus, and improve mood
- it encourages you to stay mindful on objectives and think globally

Now go out there and try to work 90 min and then take a 20 min break, which is our basic rate activity cycle.

Are you noticing the difference?



### Recommendations for an individual (employee) Card 4

Side a

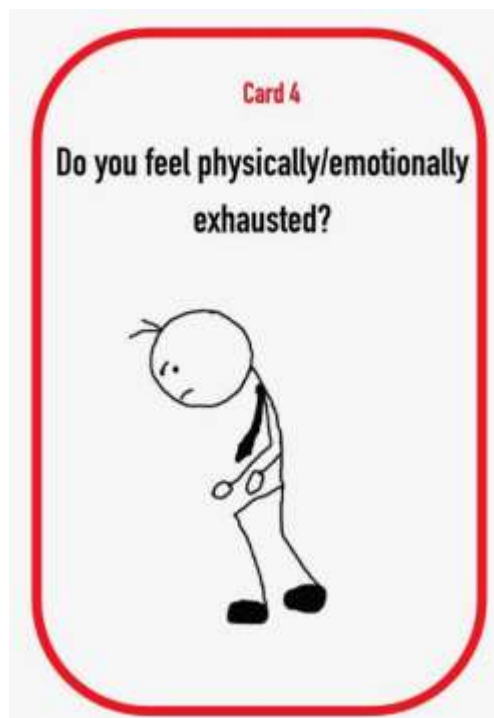
Do you feel physically/emotionally exhausted?

Side b

Remove or at least minimize any stressors (check blue card no.8)

- clear your schedule
- make a date with yourself for an hour in your calendar each day if you are too busy to take a break
- plan or extend vacation
- leave physically your office for lunch break
- spend time on fresh air and sun
- let others spoil you

Exhaustion is temporary.....



### Recommendations for an individual (employee) Card 5

#### Side a

Have you been suffering from more pains (head/neck/back pains) or illnesses (e.g. colds) lately?

#### Side b

Chronic stress and burnout may increase muscle tensions, thus increase pains.

- talk to your general practitioner (due to the stress you may have a shortage of vitamins and minerals e.g. magnesium, calcium, vit.D & C)
- schedule an appointment with a physiotherapist for an exercise regime and support
- set up a session with a therapist or a coach to whom you can talk about it in depth
- ice and warm baths to ease muscle pains (if recommended by a physiotherapist)
- journal your stressors
- practice relaxation (check blue card no. 8)

“Just when you feel you have no time to relax, know that this is the moment you most need to make time to relax” (Matt Haig).



### Recommendations for an individual (employee) Card 6

#### Side a

Have you noticed that you stopped laughing or enjoying most of the activities?

#### Side b

A good laugh exercises the muscles, boosts immunity, increases blood flow, decreases the blood pressure, helps to sleep better and decreases stress hormones.

- spend time with those who make you laugh
- watch a funny movie or a stand-up comedy etc.
- take some time to rest (check blue card no.8)

What would it take for you to laugh a bit more today?



### Recommendations for an individual (employee) Card 7

Side a

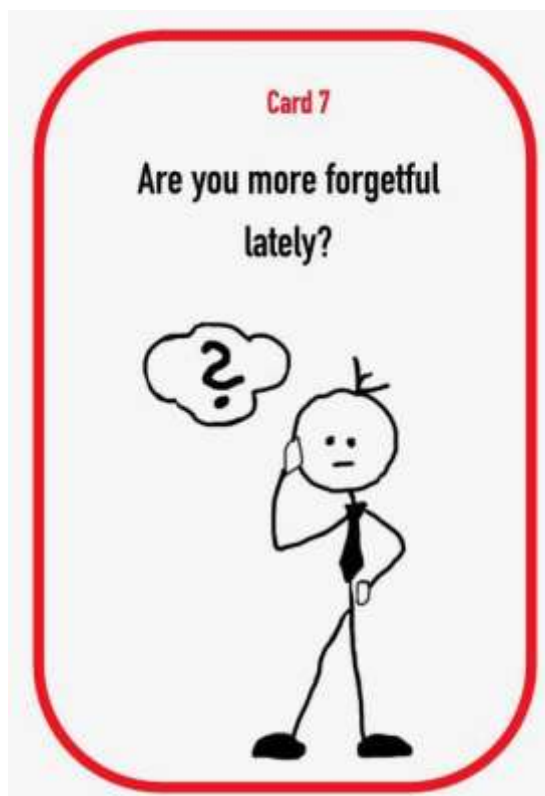
Are you more forgetful lately?

Side b

How to combat forgetfulness.....(e.g. of appointments, or tasks)?

- speak to your doctor to rule out any physical symptoms
- rest, practice relaxation (check blue card no.8)
- exercise regularly
- sleep more
- carry a notebook
- write things down
- link the desired information with a relevant image that you can remember easier
- organize to do lists based on priorities

“The only thing faster than the speed of thought is the speed of forgetfulness. Good thing we have other people to help us remember” (Vera Nazarian).



### Recommendations for an individual (employee) Card 8

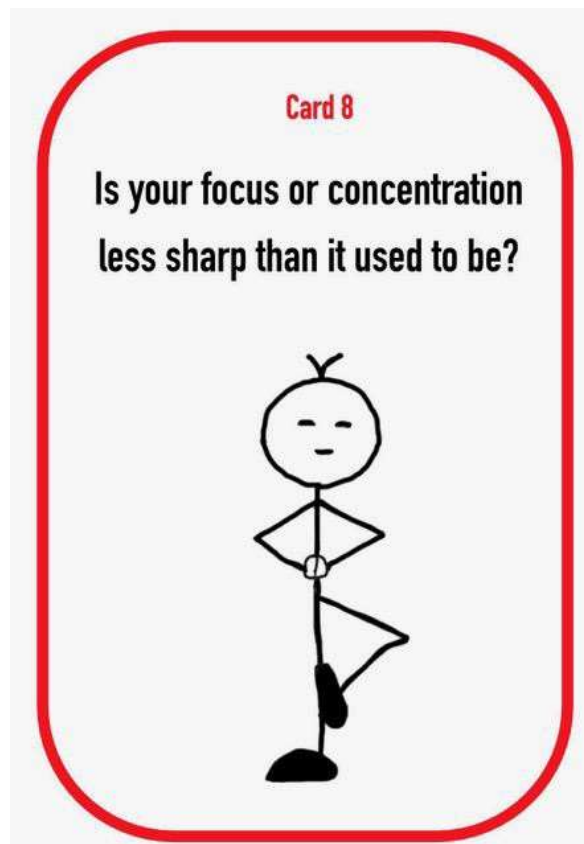
Side a

Is your focus or concentration less sharp than it used to be?

Side b

- speak to your doctor to rule out any physical symptoms
- eliminate distractions
- avoid multitasking and focus on one task at the time
- practice mindfulness (check red card no. 9)
- have regular short breaks
- break big tasks into smaller
- exercise (check blue card no.12)
- every day train mental focus by practicing short term and long-term memory (e.g. play problem solving games, brain stimulating videos, memory cards, puzzles etc).

Do some of these suggestions for at least 31 days...Are you marking an improvement?



### Recommendations for an individual (employee) Card 9

Side a

Have you done any tasks consciously or mindfully today?

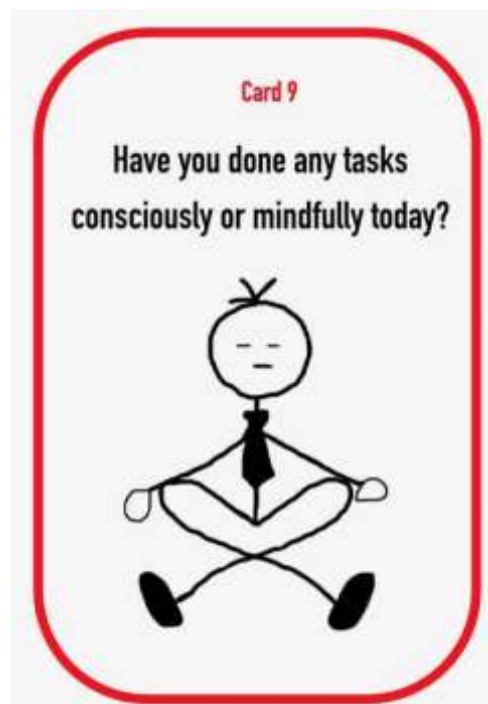
Side b

Practice of mindfulness increases our immunity, decreases anxiety, stress levels, burnout and uplifts our mood

Practice involves:

- letting go of any judgements. Life isn't only black and white. ...right or wrong...
- sitting in patience and observing inside and out.
- getting in touch with right here, right now by truly seeing, feeling, hearing, smelling, tasting, experiencing....
- if you cannot change something what would it take to accept it?. ...

Breathe and visualize that your worry is blown into a balloon with your breath in and with your breath out release it and see it fly far away....





### Recommendations for an individual (employee) Card 10

Side a

What thoughts are you noticing today?

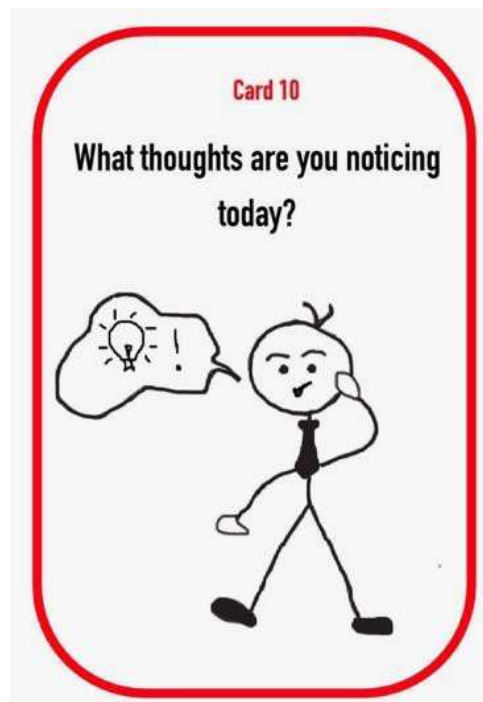
Side b

Our brain is very sensitive to negative messages, thoughts, and stimuli. It is an in-built protective mechanism. With that we may develop certain irrational thoughts or beliefs (for more information check See Bee Tee card deck & book (Gaborova, 2018).

Did you know that the thoughts influence the feelings? Notice while practicing journaling.....

- are your thoughts biased opinions or facts?
- what evidence there is for and against your thinking?
- is that way of thinking helpful to reach your goals?
- does that thought create an unnecessary conflict inside of you?

If you were looking at your thoughts through the pink glasses would you suddenly feel calmer?.....



**Recommendations for an individual (employee) Card 11**

Side a

What have you done for your physical health today?

Side b

To feel better try these:

- healthy diet-no processed foods, Mediterranean diet is a great example
- create a routine of regular sleep time, the best between 10pm-11pm (check red card no.1)
- drink enough liquids (around 3l of water per day)
- have a regular intake of nutrients and vitamins
- have a preventive check up by your general practitioner
- cut out any alcohol or substance use
- exercise regularly 4-5 times per week, min 30 min
- what stress can you minimize? (check blue card no.8)



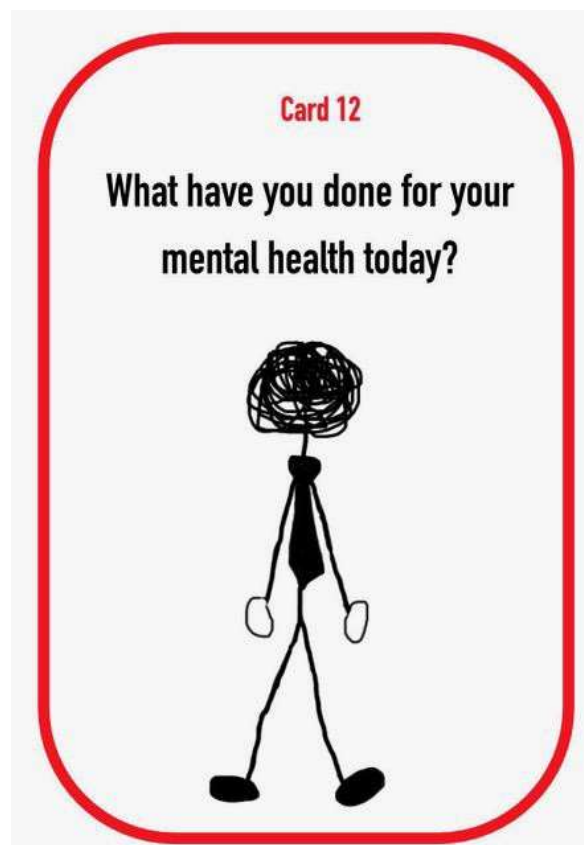
## Recommendations for an individual (employee) Card 12

Side a

What have you done for your mental health today?

Side b

- apply healthy diet (read about gut- brain axis and how it affects our mood)
- keep healthy sleep hygiene
- do regular checks on your feelings. Which ones do you lately feel?...happiness, sadness, stress, admiration, appreciation, amusement, anger, anxiety, awkwardness, boredom, calmness, confusion, craving, disgust, pain, excitement, fear, horror, interest, joy, nostalgia,
- relief, romance, satisfaction, surprise...other?
- talk/vent about your worries
- write 3 positive experiences of your day each evening
- describe one of them for 2 minutes (what you felt, saw, smelled, tasted savor that experience once again)



**Recommendations for an individual (employee) Card 13**

Side a

Do you have a strong inner critic or blame yourself most of the time?

Side b

Practice talking to yourself like you would to a 5 years old child. Would you say the same things as you keep saying right now? If not ....It is time for adjustments.



### Recommendations for an individual (employee) Card 14

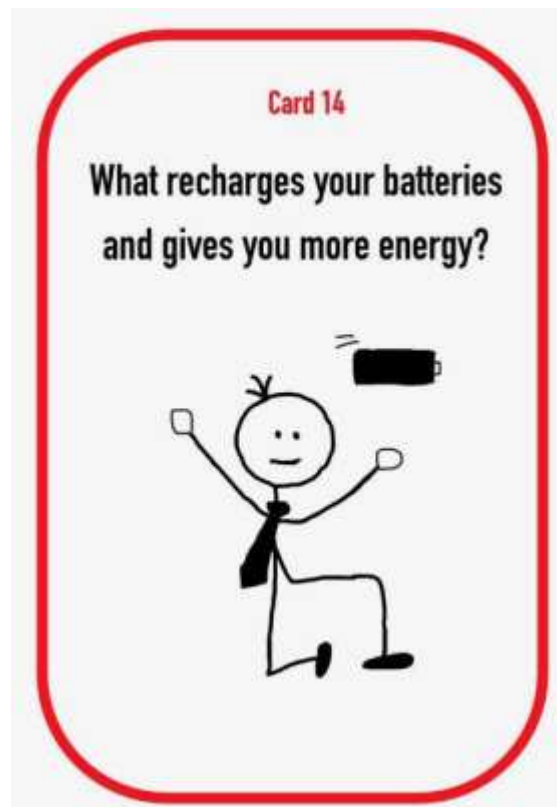
Side a

What recharges your batteries and gives you more energy?

Side b

Have you tested some of these?

- relaxation techniques (breathing exercises, muscle-tension relaxations, mindfulness, hypnosis, meditations)
- spending time with friends or family
- pursuing hobbies, fun, leisure/recreation
- spending time in nature e.g. at the beach, in forest, park
- traveling to new destinations
- acquiring knowledge/information/wisdom/learning
- other?



**Recommendations for an individual (employee) Card 15**

Side a

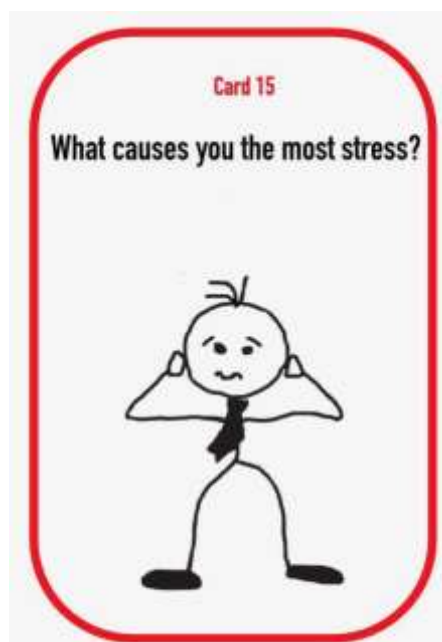
What causes you the most stress?

Side b

Analyze your stress by journaling day, time, situation (see examples below), feelings, and their intensity).

- work, career, study
- colleagues, friends
- family member
- romantic relationship
- hobbies, fun, leisure/recreation
- surroundings /environment
- new experiences
- travels
- finances
- personal growth
- own health
- health of others
- living condition
- other?

Do you recognize any patterns?



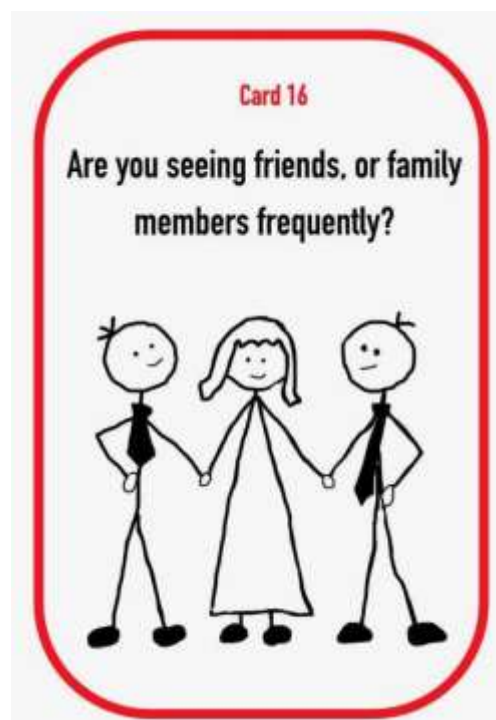
### Recommendations for an individual (employee) Card 16

Side a

Are you seeing friends, or family members frequently?

Side b

Social connections contribute to a sense of happiness, calmness and overall well-being. That even prolong life - a phenomenon known as Roseto effect. Reach out to those who make you feel safe, and whom you can count on. Notice how that makes you feel.



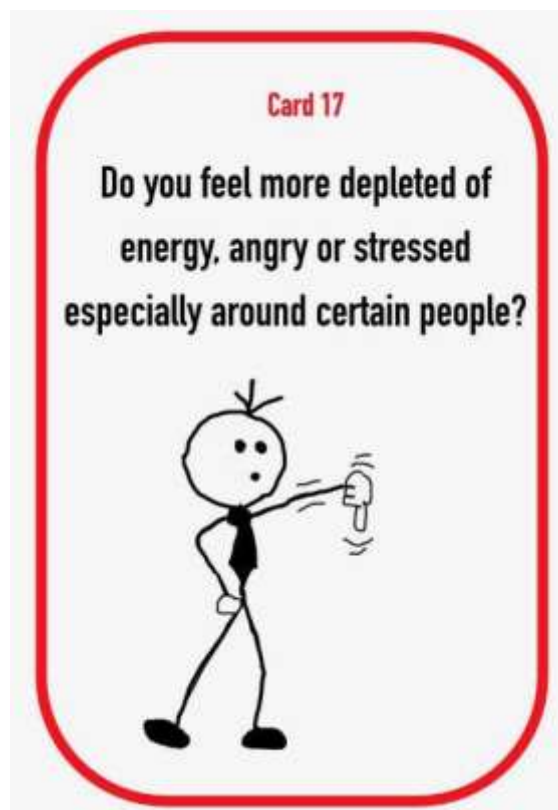
### Recommendations for an individual (employee) Card 17

Side a

Do you feel more depleted of energy, angry or stressed especially around certain people?

Side b

- shield yourself from negativity by visualizing something you love or have to look forward to after stepping into a stressful situation
- take a mental or physical distance from the source of stress by looking at the nature inspired scenes in the room (e.g. a plant, painting on the wall etc.) or see yourself as a detached observer
- talk to person you feel comfortable with to vent
- breathe much slower (recommended less than 12 breaths)
- set clear boundaries
- plan something fun for yourself each day after work





**Recommendations for an individual (employee) Card 18****Side a**

Are you repeatedly feeling “time is too slow” as you want to get out, or fear that “time really flies”, as the pressure interferes to finish your work?

**Side b**

Clock watching may increase stress levels. Building pressure each time you are aware of time passing. Which may add to having less time to do the actual work. Let's do things differently....

- give structure to your work
- make a plan/to do list and prioritize only important matters
- critically evaluate whether that task is really necessary
- throughout the day work, rest, work, rest, work, rest and remove distractions (e.g phone)
- set specific times to deal with emails in one go (you'll be more efficient)
- leave work on time (by setting an alarm 30 min prior to your departure)

