THE IMPACT OF TECHNO-INVASION AND SOCIAL SUPPORT ON EMPLOYEE WELLBEING: THE MEDIATION OF EMOTIONAL EXHAUSTION AND THE MODERATION OF YOGA

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ABSTRACT

THE IMPACT OF TECHNO-INVASION AND SOCIAL SUPPORT ON EMPLOYEE WELLBEING: THE MEDIATION OF EMOTIONAL EXHAUSTION AND THE MODERATION OF YOGA

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This research aims to investigate the conditional indirect effect of techno-invasion as a job demand, supervisor support and co-worker support as job resources on physical and psychological wellbeing through emotional exhaustion whereby yoga is assessed as a moderator. In order to test the hypotheses proposed, survey data were collected from 353 employees working in various sectors including both yoga practitioners and non-practitioners and analyzed by using path analysis in SPSS AMOS. Based on the results, techno-invasion was positively related to emotional exhaustion and negatively related to physical wellbeing. The negative effect of supervisor support on emotional exhaustion was supported. Besides, the positive effects of supervisor support and co-worker support on physical and psychological wellbeing were supported, as well. The indirect effects of techno-invasion and supervisor support on physical and psychological wellbeing through emotional exhaustion were significant, whereas the indirect effect of co-worker support on physical and psychological wellbeing through emotional exhaustion was insignificant. The overall moderated mediation models testing the conditional indirect effect of techno-invasion on physical and psychological wellbeing were not supported, however they were found to be significant in the opposite direction of the proposed hypotheses. Yoga was found to strengthen the positive effect of techno-invasion on emotional exhaustion. Still, up to a certain level of techno-invasion, emotional exhaustion levels of yoga practitioners were lower than the emotional exhaustion levels of non-practitioners. Consequently, the present study provides several insightful results regarding emotional exhaustion and its relationships with its antecedents and consequences.

Keywords: Burnout, Emotional Exhaustion, Techno-invasion, Social Support, Yoga

ÖZ

TEKNO-İŞGALİN VE SOSYAL DESTEĞİN
ÇALIŞAN İYİ OLUŞU ÜZERİNE ETKİSİ: DUYGUSAL TÜKENMİŞLİĞİN
ARACI ETKİSİ VE YOGANIN DÜZENLEYİCİ ROLÜ

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Bu araştırma; tekno-istilanın iş talebi, yönetici ve çalışma arkadaşları desteğinin iş kaynakları olarak fiziksel ve psikolojik iyi oluş üzerinde duygusal tükenmişlik yoluyla koşullu dolaylı etkilerini ve yoganın düzenleyici rolünü araştırmayı amaçlamaktadır. Önerilen hipotezleri test etmek için farklı sektörlerde çalışan, ya düzenli olarak yoga uygulayan ya da uygulamayan 353 çalışanın anket verileri kullanılmış ve SPSS AMOS programında yol analizi ile analiz edilmiştir. Sonuçlara göre, tekno-istila, duygusal tükenişlik ile pozitif, fiziksel iyi oluş ile anlamlı şekilde negatif ilişkilidir. Yönetici desteğinin duygusal tükenmişlik üzerindeki negatif etkisi desteklenmiştir. Ayrıca yönetici desteği ve çalışma arkadaşları desteğinin fiziksel ve psikolojik iyi oluş üzerindeki pozitif etkileri de desteklenmiştir. Tekno-istila ve yönetici desteğinin duygusal tükenmişlik aracılığıyla fiziksel ve psikolojik iyi oluş üzerindeki dolaylı etkileri anlamlıyken, çalışma arkadaşları desteğinin duygusal tükenmişlik yoluyla fiziksel ve psikolojik iyi oluş üzerindeki dolaylı etkisi önemsizdi. Tekno-istilanın fiziksel ve psikolojik iyi oluş üzerindeki negatif koşullu dolaylı etkisi desteklenmedi, ancak önerilen hipotezin tersi yönünde etkileşimin anlamlı olduğu bulundu. Yoganın, tekno-istilanın duygusal tükenmişlik üzerindeki olumlu etkisini güçlendirdiği bulundu. Yine de, belirli bir tekno-istila düzeyine kadar, yoga uygulayıcılarının duygusal tükenmişlik seviyeleri, yoga uygulamayanların duygusal tükenmişlik seviyelerinden daha düşüktü. Sonuç olarak, bu çalışma, duygusal tükenmişlik ve duygusal tükenmişliğin öncülleri ve sonuçları ile olan ilişkileri hakkında anlamlı sonuçlar sunmaktadır.

Anahtar Kelimeler: Burnout, Duygusal Tükenmişlik, Tekno-istila, Sosyal Destek, Yoga

To the whole

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LIST OF ABBREVIATIONS

JD-R: Job Demands-Resources

COR: Conservation of Resources

EE: Emotional Exhaustion

TI: Techno-invasion

SS: Perceived Supervisor Support

CS: Perceived Coworker Support

ICT: Information and Communication Technologies

CHAPTER 1

INTRODUCTION

Wellbeing defines a condition full of positive feelings and points out the fulfilment of one's own full potential in this world (Simons & Baldwin, 2021). In current times, workplaces play a crucial role on individuals' wellbeing since work constitutes a central part of meaning for contemporary human beings (Litchfield, Cooper, Hancock & Watt, 2016; Thompson & Bates, 2009). In a rapidly changing and fast-paced workplaces, however, sustaining employee wellbeing is one of the important challenges for all parties involved. Accordingly, there is an increasing attention and emphasis on employee wellbeing by several stakeholders such as employees, managers, organizations, and scholars. A growing body of evidence indicates that poor wellbeing has obviously some negative consequences for the individual but also significant negative effects on the organizations such as reduced productivity, higher absenteeism, higher turnover of staff, and higher workplace conflicts (Thompson & Bates, 2009). Thus, wellbeing is not an issue concerning only employees. Organizations suffer from the negative effects of poor wellbeing too. It is apparent that people bring results to the organizations and they are the ones providing organizations with competitive advantage (Kowalski & Loretto, 2017). Solely focusing on outcome measures as a work strategy and neglecting employee wellbeing is likely to create unhappy and unhealthy workplaces leading to burnout (Litchfield et al., 2016).

One of the biggest concerns of current workplaces threatening employee wellbeing is burnout (Maslach et al., 2001; Schaufeli et al., 2008). Burnout is an increasing workplace phenomenon detrimental to employees' wellbeing. It leads to emotional exhaustion, cynicism towards one's job, and professional inefficacy which constitute its components (Maslach & Jackson, 1984). It is defined as the state of physical, mental, and emotional exhaustion due to sustained exposure to work stress draining one's energy and resources. Burnout has some serious outcomes for the individuals such as depression, anxiety, and physical illnesses, and in turn, considerable costs for the organizations (Ahola & Hakanen, 2014). Thereby, scholars consistently emphasized clarifying the burnout development process further and taking some preventive measures for the syndrome over the years (Leiter, Bakker & Maslach, 2014). Lately, also World Health Organization (2020) included burnout in the 11th revision of the International Disease Classification as a work-related syndrome.

To alleviate the negative effects of burnout, it is important to understand its development process. According to the Job Demands-Resources (JD-R) model which is a widely accepted theoretical model explaining burnout, burnout occurs in two processes. Firstly, high job demands lead to emotional exhaustion. Secondly, lack of job resources to compensate for the loss of valued resources due to high demands contributes to this experience and leads to withdrawal behavior or reduced motivation (Demerouti et al., 2001). Based on the revised JD-R model, emotional exhaustion mediates the positive indirect relationship between job demands and health problems. Thereby, emotional exhaustion as the principal component of burnout is directly and negatively associated with health problems (Schaufeli & Taris, 2014). Accordingly, reducing the negative effects of emotional exhaustion might be an effective way to prevent burnout (Gaines & Jermier, 1983; Alarcon, 2011). Additionally, based on the Conservation of Resources (COR) theory, losing valued resources due to high job demands leads to strain and without being able to replenish those resources, employees feel increased stress (Kim, Park, & Niu, 2017).

To this respect, the antecedents of emotional exhaustion are high job demands and inadequate job resources addressing the needs of the relevant conditions or stressors (Demerouti et al., 2001). Although many studies have explored the relationship between several job demands and job resources with emotional exhaustion, relatively little research investigated the indirect effects of newly emerging job demands due to the changes in the workplaces such as technology-related demands on individuals' wellbeing through emotional exhaustion. However, the technology significantly affected the way individuals work. Due to technology, employees acquired flexibility in their work place and working time. Additionally, information technologies provided new ways of communication for work-related issues such as e-mails, smartphones, and video conferences (Steenbergen, Van der Ven, Peeters & Taris, 2018). Despite the advantages of technology, all these changes blur the boundaries between the work and personal lives of employees. Employees feel required to be always connected for work-related issues which is called techno-invasion in the technostress literature (Köffer, Anlauf, Ortbach & Niehaves, 2015). As one of the important technostress creators, techno-invasion is a predominant job demand in contemporary jobs and its prevalence increased even further with the increasing trend of remote working accelerated by the covid-19 pandemic requirements (Bauwens, Denissen, Beurden & Coun, 2021). Thereby, it is becoming more important to investigate its potential for causing burnout and thus its negative effects on employee wellbeing.

Several studies demonstrated the positive effects of techno-invasion on emotional exhaustion and burnout (Schaufeli et al., 1995). Additionally, studies showed that techno-invasion as a job demand activates the stress reactions in the body and thus, causes harm to individuals' wellbeing (Knardahl & Ursin, 1985). Thereby, individuals and organizations need to find ways to manage the invasion of technology into their personal lives in order to weaken its negative effects.

First of all, based on the JD-R model and COR theory, job resources can weaken the negative effects of job demands such as emotional exhaustion (Schaufeli & Bakker, 2004; Hobfoll, 2002). Social support as a job resource showed its effectiveness over the years in reducing the negative effects of stress. Social support from relevant sources to the current needs of the individual indicated a negative association with emotional exhaustion (Poulsen et al., 2016). In the work context, supervisor support and co-worker support demonstrated significant negative impacts on emotional exhaustion (Bakker et al., 2005; Hall, 2007). Thereby, a supportive and positive work environment can be a significant asset to reduce the negative impacts of high job demands.

Additionally, Schaufeli and Enzmann (1998) indicated that individual-based coping strategies effectively reduced emotional exhaustion. One of the individual coping strategies which demonstrated its effectiveness for burnout is yoga as a physical activity. Yoga demonstrated a positive association with an equal or higher strength with health improvements than other physical exercises (Ross, Friedmann, Bevans & Thomas, 2012). Furthermore, a growing body of research suggests that yoga as an intervention reduces burnout and emotional exhaustion for various types of jobs (Roeser et al., 2013; Alexander et al., 2015). Thereby, it might be an effective buffering intervention for emotional exhaustion as a result of techno-invasion. Additionally, the framework proposed by Gard et al. (2014) regarding yoga suggests that yoga can enhance self-regulation and self-awareness through parasympathetic control. The increased awareness enables the individual to be aware of one's own situation with objectivity without any personal judgments and one might clearly notice the resources of support in the environment and also change one's appraisal of the stressor in a positive way. Accordingly, individual's coping capacity with stress can enhance and weaken emotional exhaustion.

1.1. Research Objectives and Research Questions

Altogether, the main objective of this research is to investigate the moderating effect of yoga on the indirect relationship of techno-invasion, supervisor support, and co-worker support on physical and psychological wellbeing through emotional exhaustion. Additionally, the direct and indirect effects of techno-invasion, supervisor support, and co-worker support on physical and psychological wellbeing through emotional exhaustion will be assessed.

Thereby, the present research tries to answer the following research questions:

1. To what extent do techno-invasion as a job demand and supervisor support and co-worker support as job resources influence emotional exhaustion, physical wellbeing, and psychological wellbeing?

2. To what extent are the associations from techno-invasion, supervisor support and co-worker support to physical wellbeing and psychological wellbeing mediated through emotional exhaustion?

3. To what extent are these possible indirect effects moderated by yoga?

1.2. Significance of the Research

The current study aims to examine the moderating effect of yoga on the indirect effects of techno-invasion as a job demand and supervisor support and co-worker support as job resources on physical wellbeing and psychological wellbeing through emotional exhaustion, taking mainly the JD-R model as a base. Thus, this research aims to contribute to the JD-R model in several ways. First of all, the present study will examine the health impairment process of the model by additionally including the indirect effect of job resources on health outcomes through emotional exhaustion and yoga as an intervention method moderating the path of job demands and job resources with emotional exhaustion. Another contribution to the JD-R model is the assessment of the mediating role of emotional exhaustion between the positive association from supervisor support and co-worker support as job resources to physical and psychological wellbeing. In the revised JD-R model, this mediating path is not emphasized, however job resources might have an enhancing effect on wellbeing through emotional exhaustion considering the JD-R model.

Besides, there is relatively little research assessing the effects of technostressors as job demands based on the JD-R model. Thereby, the present study will contribute to the JD-R model and technostress literature by exploring the indirect effect of techno-invasion as a job demand on physical wellbeing and psychological wellbeing through emotional exhaustion. In addition, most of the studies investigating technostressors assess the technostress variable as a whole and there is a need to understand the effects of the single components of technostress to further understand the topic. Accordingly, this research will present some important insights into the single effects of techno-invasion including its direct effect on emotional exhaustion and its indirect effect on physical and psychological wellbeing.

Furthermore, this study will provide information concerning the effects of different sources of social support (i.e., supervisor and co-worker) on emotional exhaustion, physical wellbeing and psychological wellbeing in the presence of techno-invasion. Consequently, the present study aims to contribute to COR theory as well by assessing the association of job resources with emotional exhaustion and physical and psychological wellbeing.

So, to assess all these associations, a comprehensive path model will be tested. As another contribution, the present study will investigate a moderated mediation model with three independent variables and additional control variables using path analysis in SPSS AMOS. Thereby, this study will provide an example for a method which is used relatively limited to the researcher's knowledge.

CHAPTER 2

LITERATURE REVIEW AND HYPOTHESES

This chapter provides a review of the relevant literature for this research by starting with the concept of burnout. After presenting the JD-R model of burnout, the fundamental theory of this research, and the Conservation of Resources theory, emotional exhaustion will be reviewed as the core component of burnout. Antecedents and consequences of emotional exhaustion will be discussed. Afterward, the job demands and resources which will be examined in this research will be introduced, namely techno-invasion as a job demand and supervisor and co-worker support as job resources. Physical and psychological wellbeing will be investigated as consequences of emotional exhaustion and yoga will be reviewed as a possible moderator of the indirect relationship between job demands, job resources, and wellbeing through emotional exhaustion. Hypotheses will be presented throughout the chapter.

2.1. Burnout

Burnout is on the rise year by year with its serious impacts on both individuals and organizations. With the increasing challenges of current times, the risk of burnout has risen more and reached a two-year high in 2020 (Farrow, Kitto & Knudsen, 2021). Several studies conducted in different regions of the world showed almost 50% of employees experience high levels of work-related stress (International Labour Organization, 2016; American Psychological Association, 2021). Inevitably, these experiences come with potential outcomes. Consequences of burnout include both deteriorations in the physical and psychological health of the individuals such as fatigue, anxiety, and depression and in organizational outcomes such as reduction in the quality of service, task performance, and job satisfaction and increase in absenteeism (Maslach & Jackson, 1981; Lizano & Barak, 2015; Lewig, Xanthopoulou, Bakker, Dollard & Metzer, 2007). Relatedly, there is a substantial cost of burnout to organizations and individuals and thus, attention on burnout is increasing among both researchers, healthcare professionals, and managers. It is becoming crucial to understand the concept in-depth and find ways to improve the course of events to retain the workforce, create an effective, sustainable work environment, and attain a competitive advantage.

First of all, it is important to understand the exact definition of burnout. Freudenberger (1974) introduced the burnout concept in the literature as an experience of both physical exhaustion and mental, behavioral signs such as difficulty in managing one's emotions, being stuck in negativity, depression, and being cynic due to one's work. The symptoms of burnout are identified as various depending on the individual case. Maslach and Jackson (1981) identified burnout as a psychological syndrome consisting of emotional exhaustion, depersonalization, and decreased personal accomplishment experienced by individuals who do people work of any kind. So, at first, burnout was associated only with jobs serving people. Emotional exhaustion in this definition is identified as the feelings of lack of energy and emotional resources (Maslach & Jackson, 1984). Depersonalization is clarified as distancing oneself from or behaving in an uncaring attitude towards the people encountered at work. Reduced personal accomplishment is defined as the decrease in individuals' perception of their work accomplishment (Alarcon, Eschleman & Bowling, 2009). By the late 1980s, the fact that burnout can be experienced in various sectors in addition to human services was also recognized by the scholars leading to a modification in its definition. The revised, generalized definition stated that burnout is being emotionally exhausted with a feeling of cynicism about the value of one's job and having doubts regarding one's personal achievement (Maslach et al., 1996). Depersonalization, mainly relevant to human services, is modified as cynicism, a more general term for distancing oneself from work-related issues (Maslach & Leiter, 2016). Recently, with a similar definition, the World Health Organization (2020) included burnout in the 11th revision of the International Disease Classification as a syndrome related to chronic workplace stress which is not managed successfully. So, it is widely accepted that burnout comprises three main subscales: emotional exhaustion, cynicism towards one's job, and professional inefficacy. Among these, emotional exhaustion is regarded as the principal component of burnout and as having a high predictive power of stress results (Bakker, Demerouti, & Verbeke, 2004; Maslach, Schaufeli & Leiter, 2001; Maslach & Leiter, 2016; Shirom, 2003) and thus, it will be examined in this research.

To understand the nature of burnout and its components, several theoretical models have been developed in the literature such as the JD-R model and the Conservation of Resources theory (Dewe, O'Driscoll & Cooper, 2012). Among all these models, one thing in common is the definition of stress as an experience occurring due to sustained exposure to certain job demands as stressors draining employees' energy in the absence of resources to compensate for the energy loss (Bakker & Demerouti, 2007). Among these models, the JD-R model is regarded as one of the leading job stress models and it is widely accepted. It is flexible in terms of application and it is generalizable to all possible job demands and resources providing a wide scope (Schaufeli & Taris, 2014). Thereby, JD-R model will be taken as a base to understand the development of emotional exhaustion for this research.

2.1.1. JD-R Model

The JD-R model is a highly popular theory explaining burnout and its antecedents (Schaufeli & Taris, 2014). According to the JD-R model, even though each job has its own necessities, resources, and stressors, these job characteristics can be categorized into two general components: job demands and job resources (Bakker, Demerouti & Euwema, 2005). Job demands are defined by Demerouti, Bakker, Nachreiner, & Schaufeli (2001) as all of the requirements of the job entailing long-term physical and mental involvement of the employee which lead to physiological and/or psychological costs. Several job demands have been analyzed in the literature such as physical environment, workload, time and work pressure, role ambiguity, role conflict, abusive leadership, and technology (Demerouti et al., 2001; Landy & Conte, 2007; Bakker & Demerouti, 2017; Karasek, 1979; Molino et al., 2020; Dolce, Vayre, Molino & Ghislieri, 2020). These are the qualities of the job requiring effort and therefore, job demands are related to high costs for the individual (Schaufeli & Bakker, 2004).

Besides the job demands, in the JD-R model, there are physical, psychological, social, or organizational features of the job that are useful either to achieve goals, reduce the job demands and the costs associated with these or reinforce personal growth and learning which are defined as job resources (Bakker & Demerouti, 2017). Some examples of job resources are job control, autonomy, support from the environment, skill variety, feedback, rewards, job security, and participation in decision making (Demerouti et al., 2001; Bakker & Demerouti, 2017).

As the definition suggests, job demands require employees' energy, and high job demands lead to additional effort to achieve goals (Schaufeli & Taris, 2014). Thus, job demands are primary predictors of exhaustion or burnout due to sustained overburden and in turn, it is associated with health problems (Demerouti et al., 2001; Schaufeli & Taris, 2014). According to the JD-R model, the imbalance between high job demands and inadequate job resources leads to burnout and emotional exhaustion at the first step, regardless of the job type (Schaufeli, 2017). The JD-R model suggests that the development of burnout consists of two processes. At first, available job demands put high burdens on the employee leading to emotional exhaustion. In the second step, the inadequacy of job resources to deal with the existing job demands leads to withdrawal behavior or a decrease in motivation, and in the long term to disengagement (Demerouti et al., 2001). On contrary, in the presence of sufficient job resources, the negative impacts of job demands can be buffered by increasing the motivation and work engagement of the employee (Lewig et al., 2007). In other words, high job demands can be managed by appropriate levels of job resources (Bakker et al., 2005) and the impacts of negative consequences of job demands such as emotional exhaustion can be weakened (Bakker & Demerouti, 2017). In a study conducted with employees of a higher education institute by Bakker et al. (2005), job resources enhanced work engagement and acted as a buffer for emotional exhaustion and cynicism experienced as a result of high job demands.

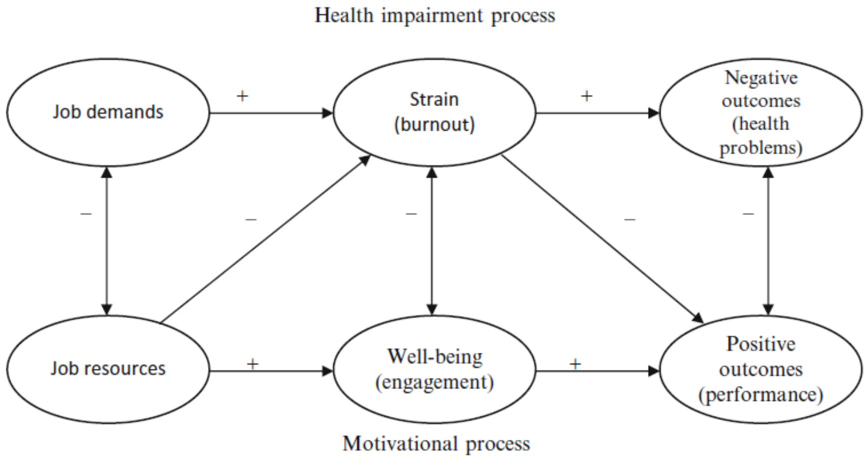

Figure 1: The revised Job Demands-Resources Model

Additionally, a revised version of the JD-R model (Figure 1) by Schaufeli and Bakker (2004) suggested that burnout mediates the relationship between job demands and health deterioration, which is called the health impairment process. Longitudinal evidence demonstrated this mediation effect. A study conducted among dentists (Hakanen, Schaufeli, & Ahola, 2008) showed that job demands such as quantitative workload and physical work environment predicted burnout over time leading to depression in the future. Another study with managers indicated similar results (Schaufeli, Bakker, & Van Rhenen, 2009). Thereby, the interaction between job demands and job resources also has a long-term impact on burnout causing negative outcomes for the wellbeing of the employee (Schaufeli & Taris, 2014).

These findings are consistent irrespective of the job type. JD-R model has been applied to various types of jobs in the literature such as dentists, teachers, volunteer ambulance officers, psychiatrists, students, and customer services, production, and insurance company employees (Bakker & Demerouti, 2017; Bakker, Demerouti & Schaufeli., 2003; Bakker et al., 2007, Schaufeli & Bakker, 2004; Hakanen, Bakker & Demerouti, 2005; Lewig et al., 2007; Maslach & Leiter, 2016). In spite of the wide range of the job types, research results were steady with the findings of the JD-R model. For instance, the study with nutrition production employees pointed that job demands, in particular workload and problems with the reorganization, were positively related to the exhaustion and cynicism levels of employees. Emotional exhaustion was more strongly related than cynicism to the job demands (Bakker et al., 2003). According to another study with call center employees of a telecom company, work pressure, emotional demands, computer problems, and changes in tasks, which are regarded as job demands, were positively related to health problems of the employees (Bakker & Demerouti, 2007). Similarly, the research findings of Hakanen, Bakker and Schaufeli (2006) revealed that job demands of teachers such as pupil misbehavior and physical work environment predicted health problems by impacting teachers' burnout levels. Besides, a study conducted among home care employees showed that high job demands namely physical demands and patient harassment in the absence of high job resources, in particular high feedback or high autonomy, led to higher emotional exhaustion (Xanthopoulou et al., 2007). Furthermore, according to the findings of the research conducted with volunteer ambulance officers, employees' wellbeing decreased as levels of time pressure and work-home interference increased. Besides, burnt-out ambulance officers experienced depression and strain as their job demands increased (Lewig et al., 2007). Thereby, the JD-R model provides a widely relevant theoretical framework for burnout which is applicable to different occupational settings and to a wide range of employee types (Bakker & Demerouti, 2017). Additionally, a significant body of research found that burnout is a mediating variable between job demands and health problems. In most of these studies, emotional exhaustion showed a stronger association than the other components of burnout with both job demands, job resources, and health deterioration (Jackson, Schwab & Schuler, 1986; Hakanen et al., 2006; Schaufeli & Bakker, 2004; Ahola, 2007).

2.1.2. Conservation of Resources (COR) Theory

COR theory is another theory aiming to conceptualize stress and suggests that individuals act in a way that they try to maintain their current level of resources or enhance them. Resources, here, mean "those objects, personal characteristics, conditions, or energies that are valued by the individual." (Hobfoll, 1989, p. 516). The COR theory suggests that people will experience stress when their resources are threatened with loss, when they actually lose resources, or when they cannot have adequate resource gain. Accordingly, individual's perception of decreasing or lacking resources leads to emotional exhaustion (Mulki et al., 2006; Hobfoll, 2001). Building on the first principle of COR theory, which states that people are more reactive to resource loss, experiencing emotional exhaustion will have a significantly greater impact on individuals than resource gain. Besides, the second principle of the theory indicates that in order to be protected from the negative impacts of resource loss, one must gain sufficient resources. In addition to that, having a resource is linked with having others, which is also valid for the absence of the resources. In other words, resources aggregate (Hobfoll, 2001). Taking COR theory into consideration, continuous loss of valued resources due to high job demands without being able to gain any resources, the downward spiral of energy loss will lead to emotional exhaustion (Cole et al., 2010). So, high job demands are expected to be positively related with emotional exhaustion and negatively related with job resources, also based on the COR theory.

2.2. Emotional Exhaustion

Emotional exhaustion is defined as "the feeling of being emotionally overextended and exhausted" (Maslach & Jackson, 1981, p. 101) and specified with low energy and chronic fatigue (Maslach, Jackson, & Leiter, 1996; Pines & Aronson, 1988). The literature review shows that it is the core dimension of burnout (Maslach, 1982b; Shirom, 1989). Besides, emotional exhaustion is regarded as being the first phase of the burnout development process and thus, an important stage for interventions (Gaines & Jermier, 1983; Alarcon, 2011). Due to its significant impacts both on employees' wellbeing and organizational functioning, managing emotional exhaustion is an important topic for both scholars and managers. Prior research indicated that emotional exhaustion predicts physical illnesses such as somatic difficulties, sleep disturbances, pain in several parts of the body, and psychological problems such as depression considering the individual. Through individuals, it also has significant organizational consequences such as turnover intentions, counterproductive work behavior, and a decrease in work commitment, job involvement, job satisfaction, and job performance (Lee & Ashforth, 1996; Wright & Cropanzano, 1998).

Based on the JD-R model, the main antecedents of emotional exhaustion are high or unfavorable job demands that are putting a steady burden on the individual and inadequate job resources for compensating for the existing high job demands. A significant body of studies in the literature demonstrated that job demands have a positive correlation with emotional exhaustion. Over time, several job demands are analyzed and validated this correlation with emotional exhaustion such as coworker incivility (Hur, Kim & Park, 2015), abusive supervision (Wu & Hu, 2009), workload, role conflict, role ambiguity (Alarcon, 2011), the total number of hours worked (Rupert, Miller & Dorociak, 2015) and emotional demands (Azharudeen & Arulrajah, 2018). Job resources, on the other hand, showed a negative relation with emotional exhaustion in accordance with the JD-R model (Van Ruysseveldt, Verboon & Smulders, 2011). Job resources such as control, autonomy (Alarcon, 2011), supervisory support, training, and empowerment (Babakus, Yavas & Karatepe, 2008) showed a buffering effect on emotional exhaustion in the previous studies.

Furthermore, in most studies, emotional exhaustion had the strongest correlation positively with job demands and negatively with job resources when compared to the other components of burnout. For instance, a study among teachers by Jackson et al. (1986) showed that role conflict as a job demand has a stronger relation with emotional exhaustion than depersonalization and lack of personal accomplishment. Besides, emotional exhaustion predicted stronger negative relations with job resources such as participation in decision making, autonomy, and social support from colleagues and principal. Another study among teachers indicated that emotional exhaustion has a stronger positive correlation with the job demand of workload and a stronger negative correlation with job control as a job resource (Hakanen et al., 2006). Additionally, there are studies proving that emotional exhaustion has a stronger association with the negative outcomes of burnout such as physical and psychological wellbeing. According to the same study conducted by Hakanen et al. (2006) stronger negative correlation between emotional exhaustion and self-rated health is found among teachers than the correlation between cynicism and self-rated health. According to Ahola (2007), exhaustion was more strongly correlated with any form of depressive disorder than cynicism and professional efficacy for both mild and severe levels. The same study indicated that emotional exhaustion predicts a higher prevalence of musculoskeletal disorders than the other two components of burnout. Additionally, in the study of Schaufeli and Bakker (2004), emotional exhaustion is found to be the most strongly related component of burnout with health problems.

Considering these findings, the emotional exhaustion will be investigated in this research as the primary component of burnout together with its antecedents, consequences, and a potential intervention method which will be explained comprehensively in the following sections. Techno-invasion will be explored as a job demand and supervisor and co-worker support will be assessed as job resources in relation to emotional exhaustion. Physical and psychological wellbeing will be analyzed as the outcomes of emotional exhaustion. Finally, yoga will be assessed as a potential intervention and moderator of the relationship between emotional exhaustion and its antecedents. Although previous literature has examined various kinds of job demands, job resources, and consequences in relation to emotional exhaustion for different kinds of jobs specifically, there is little research examining the concept holistically with the moderating effect of an intervention method. This study aims to offer a comprehensive model including all these relationships considering employees from various kinds of jobs. Thus, relevant job demands and job resources are selected.

2.3. Techno-invasion as a Job Demand

As work conditions are changing, new job demands are emerging in the workplace which are relevant to almost all jobs and relatively new in the literature, thus, required to be explored more for detailed understanding such as techno-invasion. Techno-invasion is regarded as a subcomponent of technostress and nowadays, it is highly relevant to most jobs (Tarafdar et al., 2007). The covid-19 pandemic increased this relevance even further since it boosted the use of technology for work purposes due to the necessity of remote working. During that period, most of the companies switched to remote working and flexible work hours (Molino et al., 2020; Marino & Capone, 2021). Furthermore, there is a significant number of companies that aim to maintain remote working for the future (Molino et al., 2020) increasing the possibility of techno-stress. Even before the pandemic, several studies indicated that the way individuals work is changing (Ten brummelhuis et al., 2012; Coenen & Kok, 2014; Brunia, Been & Voordt, 2016). Key characteristics of these new ways of working are stated as flexible work timings, workplaces (office, home, or hybrid), and the availability of new information technologies for work communication such as emails, smartphones, and video conferences (Baarne et al., 2010). All of these are leading to the blurring of the boundaries between work and private life (Köffer, Anlauf, Ortbach & Niehaves, 2015). Besides, as remote working, also referred to as telecommuting or telework in the literature, is becoming widespread, the negative impacts of this blurring due to increased technology use can be experienced more frequently (Van Steenbergen, Van der Ven, Peeters & Taris, 2018; Gajendran & Harrison, 2007; Ter Hoeven, Van Zoonen, and Fonner, 2016).

Even though technology has some benefits for individuals, it created new stressors for the employees including techno-overload, techno-invasion, information overload, job insecurity, frequent interruptions during work, and expectation of constant availability leading to psychological and behavioral strain when not managed effectively and to the deterioration of individual's physical and psychological health (Molino et al., 2020; Spagnoli et al., 2020; Ninaus et al., 2015; Derks et al., 2014; Ter Hoeven, van Zoonen & Fonner, 2016). The theoretical concept of technostress developed by Tarafdar et al. (2007) provides five main technology-related stressors, namely techno-overload, techno-invasion, techno-complexity, techno-insecurity, and techno-uncertainty. Techno-overload defines the fact that with the help of information and communication technologies (ICTs), employees can work faster and longer. Techno-invasion identifies the situations where employees feel required to be reached anytime, anywhere through ICTs for work-related issues. They cannot feel free of technology and they perceive losing the boundaries between their private lives and work causing stress. Techno-complexity explains individuals' feelings of inadequacy in terms of their skills on ICTs and the need to spend time and energy on learning and understanding the unknown aspects of ICTs. Techno-insecurity describes the situations where individuals feel insecure about losing their jobs due to the fact that ICTs or other people having more knowledge about technology may replace them.

Last but not least, techno-uncertainty is associated with situations where users experience uncertainty due to the constant changes and upgrades in ICTs leading to the requirement of constant learning. Accordingly, technostress is defined as the stress experienced as a result of one's inability to use technology in a healthy manner (Molino et al., 2020). It can negatively affect the attitudes, thoughts, behaviors, or physical body of the individual (Fischer & Riedl, 2015). Technostressors are the requirements of the job which drain the energy of the employee and may lead to psychological or physiological costs for them in the long run and thereby, technostressors can be defined as job demands based on the JD-R model.

Technostressors are frequent job demands for the employees in the current times. Through ICTs such as internet, smartphones, tablets, and laptops, it is possible to be connected anytime and anywhere for any purpose including work. This reinforces the expectation of constant availability and instant responding for the employees (Garbarino & Costa 2014). Today, work invades the personal lives of employees much easier through technology. A study among knowledge workers indicated that constant connectivity causes blurring of the boundary between private and work lives which is regarded as one of the major causes of stress (Waizenegger et al., 2016). According to another study conducted by Molino et al. (2020), during the covid-19 remote working period, the techno-invasion component of technostress showed a positive association with work-family conflict leading to behavioral stress. Employees lose their autonomy because of the fact that they feel obliged to be continuously connected and to respond to work-related calls even during their personal time. They get conditioned to constantly check their technological devices for updates in an anxious feeling of not to miss anything related to work. Consequently, being constantly available for work becomes a regular work culture which can result in significant negative outcomes for employees' wellbeing (Raisiene & Jonusauskas, 2013; Hoeven, Zoonen & Fonner, 2016; Perlow, 2012).

In the absence of work-life boundaries, employees' life quality reduces and they start experiencing emotional exhaustion due to sustained job demands. Spending personal time on work leads to insufficient recovery from work both physically and psychologically (Raisiene & Jonusauskas, 2013). Unable to psychologically detach from the work causes harm to the wellbeing of the employees (Derks & Bakker, 2014;

Derks et al., 2014; Derks et al., 2012; Meijman and Mulder, 1998). Additionally, low levels of psychological detachment were found to be associated with emotional exhaustion (Sonnentag, Kuttler & Fritz, 2010). According to Wilk and Moynihan (2005), taking the Conservation of Resources (COR) theory into consideration, when individuals continuously use their valued resources without being able to invest in resource gain, they are likely to experience a downward spiral of energy loss leading to emotional exhaustion (Cole et al., 2010). So, COR theory supports that sustained exposure to technology, meaning techno-invasion can lead to emotional exhaustion without being able to gain additional resources. There are studies proving this relationship. According to a study, extended time spent with screens, tablets, and smart devices boosts stress and anxiety (Mheidly et al., 2020). Excessive use of e-mails for work purposes is regarded as a possible antecedent of burnout using the JD-R model as a conceptual framework (Estévez-Mujica & Quintane, 2018). Another study showed that a high number of e-mails predicts emotional exhaustion (Brown et al. 2014). According to Schaufeli et al. (1995), overly use of technology is associated with the emotional exhaustion component of burnout. Similarly, Derks et al. (2014) showed that work-related smartphone use leads to emotional exhaustion through reduced psychological detachment from work.

The revised JD-R model of Schaufeli and Bakker (2004) confirms that job demands are positively associated with emotional exhaustion and with physical and psychological health problems via emotional exhaustion. They also stated that burnout process can be explained compatibly with Hockey's state regulation model of compensatory control. According to Hockey (1997), individuals adapt one of the two coping strategies under stress: active coping response which is putting additional effort to keep the performance stable leading to extra costs and passive coping mode which is decreasing the performance target and keeping the effort same. Both of these are associated with increased sympathetic activity affecting the individuals physiologically and psychologically. As job demands such as techno-invasion cause sustained activation of sympathetic activity, deteriorations in wellbeing occur (Knardahl & Ursin, 1985).

So, constant connectivity, in other words, techno-invasion may lead to both emotional exhaustion and reduced physical and psychological health through continuous resource loss of the employee as suggested by the theories. Also, building on the JD-R model, techno-invasion can be an important job demand in the era of increased technology use for all sectors which is positively associated with emotional exhaustion. As the new ways of working get more widespread, for all kinds of jobs using any kind of technology, techno-invasion becomes more relevant (Gaudioso, Turel & Galimberti, 2016). Accordingly, the negative spillover between work and personal life, and negative outcomes of techno-invasion may be increasingly experienced. Besides, there is a need in the literature for investigating the individual impacts of technostressors such as techno-invasion for a deeper understanding of the technostress experience (Ragu-Nathanet al., 2008). For now, there is little research examining techno-invasion separately (Mahapatra & Pati, 2018). In addition to that, there is a small number of research examining technostressors based on the JD-R model. Thereby, this research aims to fill this gap and will examine techno-invasion as a job demand in relation to emotional exhaustion and employee's physical and psychological wellbeing. Thus, taking the relationships of JD-R model into consideration, techno-invasion as a job demand is expected to be positively correlated with emotional exhaustion. Additionally, as stated above, a negative correlation is expected between techno-invasion and physical and psychological wellbeing. Thus, the first three hypotheses of this study are:

Hypothesis 1a: Techno-invasion is positively related to emotional exhaustion.

Hypothesis 1b: Techno-invasion is negatively related to physical wellbeing.

Hypothesis 1c: Techno-invasion is negatively related to psychological wellbeing.

Due to these significant outcomes of techno-invasion, the importance to investigate the ways to reduce the negative impacts of technostressors was highlighted by the scholars (Tarafdar et al., 2020). In accordance with the JD-R model, the impacts of job demands on employee's wellbeing and emotional exhaustion can be weakened when one is equipped with adequate job resources. Empirical evidences show that job resources are negatively associated with burnout. In the presence of resources, the impact of job demands reduces (Schaufeli & Bakker, 2004).

2.4. Supervisor and Co-worker Support as Job Resources

According to COR theory, individuals' resources play an important role in overcoming the negative effects of job demands (Hobfoll, 2002). Additionally, the theory states that resources are valuable both for their own value and for their capability of acquiring additional resources. Thus, resources such as social support can be valuable in its own right and for providing a strong resource gain capability (Hobfoll, 2001). In this study, social support will be examined as a job resource considering its established and wiely accepted effectiveness as a resource in the literature (Feeney & Collins, 2015; Poulsen et al., 2016).

For many years now, as the theories suggest, researches in the literature demonstrated that, individuals seek social support, especially in the presence of stress (Carver et al., 1989; Lazarus & Folkman, 1984). Social support is one of the most frequently researched and most important job resources in the literature (Gorgievski et al., 2011; Kerksieck, Bauer & Brauchli, 2019; Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2007; Feeney & Collins, 2015). It is defined as the support that an individual perceives from one's social environment such as supervisors, co-workers, families, or friends (Poulsen et al., 2016, Lee & Ashforth, 1996). There are several theories supporting the positive impact of social support on wellbeing or its reducing effects on emotional exhaustion or burnout. With regards to the JD-R model, social support as a job resource can enhance individual's dedication and motivation for work and accordingly, weaken the negative effects of high job demands such as emotional exhaustion (Poulsen et al., 2016). According to the stress and coping perspective theory, social support protects individuals from the negative effects of strain and in turn, enhances wellbeing (Lakey & Cohen, 2000). With reference to one of the principal models of social support, namely the main effect of the support model, social support increases wellbeing regardless of the level of support received (Hartley & Coffee, 2019; Cohen & Wills, 1985). Besides, the stress-buffering model indicates that perceived social support can buffer the outcomes of stress such as emotional exhaustion by affecting the appraisal of the individual regarding a stressor in a positive way (Cohen & Wills, 1985).

Social support can be identified by six main expressions in the workplace which are listening attentively, supporting and challenging professionally, supporting emotionally, and sharing a worldview (Pines et al., 1981). Social support can be informational, emotional, appraisal, and instrumental in nature (Poulsen et al., 2016). Regardless of its form, social support showed a positive contribution to the engagement of the individual (Maslach & Leiter, 2008). Previous studies also demonstrated that social support can reduce or even prevent burnout (Fineman, 1985; Pines, 1982). Bakker et al. (2005) indicated that emotional exhaustion can be prevented thanks to a quality relationship with supervisor or co-worker support. According to another study, nurses with higher levels of supervisor support experienced less occupational stress (Hall, 2007). Besides, as study among therapists demonstrated that emotional exhaustion decreased with high levels of perceived supervisor support (Gibson, Grey & Hasting, 2009). Similar relationship seems to hold true also for the emotional exhaustion due to techno-stressors. A number of studies confirmed the similar buffering impact of social support on emotional exhaustion or burnout. According to Zhao, Wang, Wu and Dong (2021), administration support had a significant negative association with techno-stress among university students. Another study among teachers indicated that support is significantly negatively related to technostress (Özgür H., 2020). Weinert, Maier, Laumer & Weitzel (2021) showed that social support decreased technology-related exhaustion. All these findings are in line with the revised JD-R model stating that job resources are negatively related to emotional exhaustion, since resources have a diminishing effect on job demands (Schaufeli & Bakker, 2004).

However, in the literature, it is highlighted that in order to have the reducing effect of social support on emotional exhaustion, relevant source of social support should be available in relation to the available job demands (Shumaker & Brownell, 1984). In other words, the source of support is a meaningful component of social support for its effectiveness (Barrera, 2000). The source of social support may be various such as a partner, family, relative, friend, supervisor, or coworker (Allen et al., 2002). For work-related demands, social support from co-workers and supervisors might be more relevant and effective in reducing demands at work than the others (Halbesleben, 2006). For instance, according to Lazarus & Folkman (1984), in the availability of co-worker and supervisor support, employees' appraisal of job demands can be more favorable and thus, emotional exhaustion due to high job demands can be weakened. Halbesleben (2006) found that co-worker and supervisor support due to being directly influential on work demands are more strongly and negatively associated with emotional exhaustion experienced due to job demands.

Accordingly, this study will examine supervisor and co-worker support as job resources in relation to emotional exhaustion. As the above-mentioned findings and theories suggest, supervisor and coworker support as job resources are expected to have a negative relation to emotional exhaustion and positive relation to physical and psychological wellbeing. Thus, the following hypotheses are proposed in this study:

Hypothesis 2a: Supervisor support is negatively related to emotional exhaustion.

Hypothesis 2b: Supervisor support is positively related to physical wellbeing.

Hypothesis 2c: Supervisor support is positively related to psychological wellbeing.

Hypothesis 3a: Co-worker support is negatively related to emotional exhaustion.

Hypothesis 3b: Co-worker support is positively related to physical wellbeing.

Hypothesis 3c: Co-worker support is positively related to psychological wellbeing.

2.5. Physical and Psychological Wellbeing as Consequences of Emotional Exhaustion

According to the revised JD-R model, burnout, thus emotional exhaustion acts as a full mediator between job demands and employees' health problems considering both physical and psychological wellbeing. In this study, physical and psychological wellbeing as consequences of emotional exhaustion will be investigated. The mediating role of emotional exhaustion on the relationships between the job demands, job resources and physical and psychological wellbeing will be assessed separately.

Employee wellbeing is an important concept to investigate since health deterioration of the employee results in significant costs for the organizations through organizational outcomes such as long-term sickness, lower job satisfaction, reduced performance, and increased turnover intention (Van Jaarsweld et al., 2010; Banks et al., 2012; Anagnostopoulos & Niakas, 2010; Maslach & Jackson 1981; Hagen, 1989; Hassard, Teoh, Visockaite, Dewe & Cox, 2017). Wright and Bonett (2007) demonstrated that turnover intention was strongly higher when employee wellbeing was low in a 2-year field study. Additionally, Bakker et al. (2003) showed that burnout predicted longer duration of sickness absences among production employees. Another study indicated that burnt-out individuals reported long stress-related sickness absences (Hallsten et al., 2002). On the other hand, psychologically well employees are found to be more productive and less vulnerable to stress (Wright, 2006). According to a systematic review regarding work-related stress, productivity related costs constituted at least 70% of the total estimated cost of work-related stress. The study also demonstrated a significant financial burden due to work stress on society (Hassard et al., 2017). Thus, fostering physical and psychological wellbeing by managing work stress and burnout effectively is beneficial for both individuals and organizations.

Health is defined by the World Health Organization (2014) as “a state of complete physical, mental, and social wellbeing and not merely the absence of disease or infirmity.” Stress is damaging this wholeness of the individual, especially when it is a continuous experience, and may lead to health deterioration as suggested in the revised JD-R model (Schaufeli & Taris, 2014). Under the stimulation of stress, the body goes through various processes as a reaction to stress such as releasing the stress hormone, cortisol, increasing heart and breathing rates, and higher blood pressure. Stressors activate specific cognitive and affective processes in the body. Continuous activation of these processes unconsciously through sympathetic nervous system can result in the dysregulation, cause damage to the physical body and to the psychological wellbeing (Yaribeygi, Panahi, Sahraei, Johnston & Sahebkar, 2017; Hayes & Ross, 1986; Riedl et al., 2012).

Previous studies demonstrated that emotional exhaustion and burnout have negative impacts on the physical and psychological health of the individual (Melamed et al., 2006). There are evidences that burnout may lead to various physical illnesses such as neck, shoulder, and back pain, colds, and flu, myocardial infarction (heart attack), musculoskeletal pain, type 2 diabetes and hypercholesterolemia (Salvagioni et al., 2017; Kahill, 1988). Due to the exposure to stress, individual's immune system is suppressed and individuals become more vulnerable to infectious diseases (Schat et al., 2005). According to a study, the classical risk factors of cardiovascular diseases such as age, smoking, and lipid levels have a similar or lower risk level with the related risk of burnout and exhaustion (Melamed et al., 2006). Early studies showed that exhaustion increased the risk of heart attack at least to double (Nicolson & Diest, 2000). The study of Kim et al. (2011) showed that social workers with higher initial burnout levels proclaim more complaints regarding their physical health considering a one-year period, mainly about sleep disturbances, headaches, respiratory infections, and gastrointestinal infections. According to Nicolson and Diest (2000), exhaustion is positively related to daily persistent fatigue. An analysis of the literature on stress and burnout among teachers showed that job stress and burnout is strongly related to health problems regardless of the type of the teacher (Guglielmi & Tatrow, 1998). Another study including participants from various occupations such as nurses, psychologists, administrators, and teachers demonstrated that emotional exhaustion is positively associated with neck and back pain (Peterson et al., 2008). Moreover, vital exhaustion is found to be significantly related to sleep complaints, daytime sleepiness, and insomnia (Van Diest, 1990).

In addition to the physical health outcomes of burnout and emotional exhaustion, emotionally exhausted individuals also suffer from psychological consequences. Some relevant examples are depression, depressive symptoms, antidepressant treatment, and anxiety (Salvagioni et al., 2017; Peterson et al., 2008; Gaines & Jermier, 1983). Furthermore, physical and psychological symptoms are found to be nurturing each other. A study indicated that physical health indications are significantly related to psychological health (Schat et al., 2005). A considerable body of studies indicates the negative relation between emotional exhaustion and psychological health. For instance, a study demonstrated that increases in burnout levels cause emotional distress which may result in depression. Over an eight-year period, individuals going through this experience took more psychotropic medication (Leiter et al., 2012). According to Ahola (2007), among the burnt-out individuals, there was an increased prevalence of depressive and anxiety disorders. Additionally, another study indicated that all three burnout dimensions are positively correlated with anxiety (Lindblom et al., 2006). Thus, in this study, similar relationships between emotional exhaustion and physical and psychological wellbeing will be assessed:

Hypothesis 4a. Emotional exhaustion is negatively related to physical wellbeing.

Hypothesis 4b. Emotional exhaustion is negatively related to psychological wellbeing.

2.6. Emotional Exhaustion as a Mediator between Job Demands, Job Resources and Physical and Psychological Wellbeing

As stated before, the revised JD-R model suggests that emotional exhaustion fully mediates the indirect relationship between job demands and physical and psychological health problems. Accordingly, high job demands consume valued resources of the employee and lead to emotional exhaustion which in turn, leads to deterioration in the physical and psychological wellbeing due to sustained activation of stress response in the body (Schaufeli & Bakker, 2004). Several studies demonstrated this relationship in the literature. Huang, Du, Chen, Yang and Huang (2011) demonstrated that emotional exhaustion is an important mediator between job demands and mental health. Another study showed that emotional exhaustion mediated the indirect relationship between job demands and mental and physical health (Baka, 2015).

Even though there are limited studies regarding the health implications of technostressors, some studies in the literature investigated the wellbeing outcomes of technostress proving similar relations. Some scholars stated that the small stressors due to technology might have a significant cumulative impact on physical and psychological health. Studies demonstrated considerable effects of technostress creators on health problems through psychophysiological stress activations (Riedl et al., 2012). Riedl et al. (2012) demonstrated that the cortisol level of individuals experiencing technostress is increasing. Another study conducted by Mark et al. (2012) showed that individuals who have constant access to their emails experienced higher levels of stress than the ones whose email access is temporarily interrupted. In this study, stress indicator was the variability in the heart rate. A longitudinal study indicated that high technology-related demands were associated with higher cognitive complaints (Stenfors et al., 2013). Taking all these into consideration and building on the JD-R model, it is expected that technostressors trigger stress reactions leading to emotional exhaustion which in turn may cause deterioration in the physical and psychological health. Thus, emotional exhaustion might act as a mediator between techno-invasion as a major technostress creator and physical and psychological wellbeing and the following hypotheses are proposed in this research:

Hypothesis 5a. Emotional exhaustion mediates the negative relationship between techno-invasion and physical wellbeing.

Hypothesis 5b. Emotional exhaustion mediates the negative relationship between techno-invasion and psychological wellbeing.

A similar mediating effect of emotional exhaustion can exist on the indirect relationship between job resources and physical and psychological wellbeing. According to the revised JD-R model, job resources are negatively related to emotional exhaustion and emotional exhaustion is positively related to health problems. For instance, study of Huang et al. (2011) supported the mediating effect of emotional exhaustion on the positive relationship between job control as a resource and mental health. So, job resources as an asset increase the valued sources of the employee and thus, decrease the negative effects of job demands such as emotional exhaustion according to COR theory. In this way, stress reactions in the body may not be triggered thanks to the positive appraisal of the individual regarding the job demands which is supposed by the stress-buffering model of support. Another possible mechanism for this relationship available in the literature stated that social support can be positively related to physical wellbeing through emotionally stimulated effects on the relevant systems such as neuroendocrine system of the body reducing emotional exhaustion (Cohen & Wills, 1985). Hence, as the sixth and seventh hypotheses, following relations are proposed in this research:

Hypothesis 6a. Emotional exhaustion mediates the positive relationship between supervisor support and physical wellbeing.

Hypothesis 6b. Emotional exhaustion mediates the positive relationship between supervisor support and psychological wellbeing.

Hypothesis 7a. Emotional exhaustion mediates the positive relationship between co-worker support and physical wellbeing.

Hypothesis 7b. Emotional exhaustion mediates the positive relationship between co-worker support and psychological wellbeing.

2.7. Yoga as an Intervention for Emotional Exhaustion

In the light of these findings, it is obvious that emotional exhaustion can have multidimensional, serious impacts on employee's wellbeing and lead to significant costs for the organization. Considering both physical, psychological, and organizational consequences of emotional exhaustion, finding an appropriate coping method or an improving intervention may lead to healthy, productive individuals and organizations. That's why researchers and practitioners have also been interested in finding such mechanisms. Previous literature stated that there are three levels of interventions for burnout individual, organizational, and mixed approach. Schaufeli and Enzmann (1998) revealed that individual based coping strategies were found to reduce burnout, especially emotional exhaustion. Intervention methods aiming at the individual can be defined as methods to increase individual's capacity to cope with stress and reduce the negative outcomes by changing stress reactions irrespective of the situation (Schaufeli & Enzmann, 1998).

One of the effective, individual based coping method to reduce the negative effects of stress on health is found to be regularly engaging in physical activity. There is a significant body of research proving the positive relationship between physical activity and overall wellbeing for individuals of all ages (Brown & Sieges, 1988; Klaperski, Dawans, Heinrichs & Fuchs, 2013; Maugeri et al., 2020). Studies suggest that physical activity has a buffering role on stress by enabling a decrease in physiological stress reactions and faster recovery (Fuchs & Hahn, 1992). In other words, physical activity acts as a moderator of the relationship between stress and health and weakens the negative effects of stress on physical and psychological health. Several previous pieces of research proposed the Cross-Stressor Adaptation (C-SA) hypothesis as an underlying mechanism for the buffering effect of physical activity. In regard to the C-SA hypothesis, regular physical exercise results in biological adaptations which lead to a reduction in the physiological reactions of the body (through the sympathetic nervous system and hypothalamic-pituitary-adrenal axis) to stress. Thus, faster recovery from stress can be experienced (Klaperski, Dawans, Heinrichs & Fuchs, 2013).

2.7.1. Yoga as a Moderator of the Relation between Emotional Exhaustion and Its Antecedents

Building on all these, in this research, yoga practice will be investigated as a moderator of the indirect relationships between job demands, job resources and wellbeing through emotional exhaustion. While physical activities such as aerobic exercise are found to be a positive contributor to wellbeing, several studies comparing physical exercise to yoga showed that yoga is equally or more strongly associated with improvements in health outcomes (Ross, Friedmann, Bevans & Thomas, 2012; Patel & North, 1975). A suggested mechanism explaining this effectiveness of yoga is the possible presence of a direct vagal stimulation leading to downregulation of the Hypothalamic-Pituitary-Adrenal axis and the Sympathetic Nervous System (Ross et al., 2012). Besides, even though yoga practice has similarities with physical exercises, it involves more than just physical movements. It is often referred to as "meditation in motion" due to its requirement of attentive and focused attention during physical movements (Gard, Noggle, Park, Vago & Wilson, 2014). It differentiates itself in emphasizing breath and moment awareness and mindfulness during practice (Govindaraj, Karmani, Varambally & Gangadhar, 2016). Solely mindfulness itself, which is becoming popular in recent years, is suggested as a mechanism to effectively alleviate stress, decrease emotional exhaustion, and enhance employee wellbeing (Ioannou, 2018). Additionally, according to Schaufeli and Enzmann (1998), physical exercise as a way to promote a healthy lifestyle aims to prevent burnout in the primary stage, whereas yoga practice conducted with physical postures aims at both the identification of the burnout experience by increasing self-awareness and primary and secondary prevention of it. Accordingly, yoga as a wholesome practice can act as a useful intervention for enhancing employee wellbeing (Ross et al., 2012). Besides, yoga is found to be an effective emotion-focused coping strategy for reducing workplace stress (Giacalone & Jurkiewicz, 2003). Furthermore, despite the recent popularity of the topic, there is little research that comprehensively investigates workplace stress relations considering the relation between job demands and resources and employee wellbeing in relation to yoga as an intervention method. This study also aims to offer a comprehensive understanding of workplace stress with respect to yoga intervention.

Yoga means "union" and refers to the union of body, mind, heart, and actions (Kirk et al., 2005). Classical Yoga is a wholeness of scientific practices consisting of eight limbs including internal and external behavioral principles, physical postures called asanas, breathing and concentration exercises, internalization of the senses, and meditation practice for the aim of realizing one's true potential. Its ultimate purpose is to completely transcend ordinary states of consciousness and related superficial values (Davis, 2004). It is a system providing practices that demonstrated their effectiveness by many practitioners with direct experience. Some of its effective outcomes are reported as improved health, strength, flexibility, relaxation, alertness, steadiness of mind and body, emotional stability, voluntary control of autonomic functions, and expanded levels of consciousness (Arpita J., 2009). It boosts the immune functioning (Ross & Thomas, 2010). Additionally, it reduces the level of stress by reducing the cortisol which is the stress hormone (Granath et al., 2006; West et al., 2004). Thanks to its multiple significant positive effects, the proposed way of living by yoga philosophy has also become the interest of modern humanity who is suffering from significant levels of stress due to unnatural living conditions. Accordingly, there is a significant body of studies in the literature proving the effective outcomes of yoga, particularly of hatha yoga which is the third limb of the whole eight practices of yoga. In modern times, hatha yoga is one of the most commonly practiced way of yoga (Gard et al., 2014). Hatha yoga consists of a series of physical postures called as asanas aiming to unify body, mind, and soul (Kirk et al., 2005). Hatha yoga is not only a physical practice but it also requires wholesome involvement of the practitioner. The postures should be performed with breath-awareness, alertness and relaxation for experiencing its constructive results such as increasing control over one's body and mind, balance, strength, and flexibility (Betûl, 2011; Brown, 2002).

There exists a considerable body of research providing evidence for the positive impact of yoga. According to a study conducted among students, the group practiced hatha yoga for six weeks showed a significant improvement in flexibility, body metabolic rate, red blood cells and experienced a decrease in heart rate which signals an improvement in physical health (Arpita J., 2009). Another study revealed that the group of educators participated in a program including a gentle yoga and mindfulness practices for 16 weeks, benefited significantly in terms of improvements in their physical health, blood pressure, distress tolerance, and classroom management (Harris et al., 2016). Similarly, teachers who participated in an intervention program of yoga reported decrease in their stress, burnout, and anxiety levels, and reported increased self-compassion and attention (Roeser et al., 2013). According to another yoga intervention program continued for eight weeks, participants consisting of nurses reported less emotional exhaustion (Alexander et al., 2015). Cramer et al. (2018) studied the effects of hatha yoga on the physical and psychological wellbeing of the individual and showed that hatha yoga practice effectively reduced depression and anxiety symptoms. A meta-analysis conducted by Shin (2021) indicated that elder individuals practicing yoga experienced improved overall wellbeing including physical health such as strength, flexibility, and balance and also reduced stress and anxiety.

Thanks to these benefits of yoga, its effective outcomes are not only therapeutical but also preventative for stress. In other words, regular yoga practitioners strengthen their integrity leading to increasing willpower, self-regulation, and self-awareness, thus avoiding some potential negative results of their experiences. According to the self-regulatory mechanism of yoga proposed by Gard et al. (2014), focusing one's attention inward, being able to control attention and concentrate activate several processes in the brain enabling self-awareness. As literature suggests, the distinguishing feature of hatha yoga leading to healing is the clear awareness of oneself including one's physical body, thoughts, emotions, sensations, and the vital energy. Being consciously aware might be explained as noticing "the experience without judging it or modifying it." It is also identified as witness consciousness. Through self-awareness, self-regulation develops which can be explained as managing one's emotions and behavioral response through cognitively reappraising the experience and through a mechanism of non-appraisal with solely clear awareness. The framework proposed by Gard et al. (2014) states that through parasympathetic control partly by physiologically decreasing continuous emotional reactivity and resulting autonomic responses, yoga can enhance self-regulation. This might affect the stress reaction of a person in a positive way according to the stress and coping theory of Lazarus and Folkman (1984). The stress and coping theory suggests that stress occurs when one appraises the demands so high that one's resources cannot compensate for the burden. So, non-appraisal or positive reappraisal enhanced by yoga can reduce the effects of stress and emotional stability can be developed (Gard et al., 2014). Besides, there exist findings showing that physiological changes occur thanks to physical activities including hatha yoga. The prefrontal cortex of the brain making the body and mind more resilient to stress gets activated thanks to hatha yoga postures leading to neuroprotective effects meaning the recovery or regeneration of the nervous system (Gothe et al., 2019). Thus, there are cognitive, emotional, behavioral, and autonomic mechanisms supporting the positive effect of yoga on stress.

Considering all these, yoga might be a moderator between job demands, job resources and emotional exhaustion. Accordingly, in the context of this study, yoga is proposed to moderate and weaken the negative indirect relation between techno-invasion and physical and psychological wellbeing through emotional exhaustion. Additionally, yoga is proposed to moderate and enhance the positive indirect relation between supervisor and co-worker support and physical and psychological wellbeing through emotional exhaustion. Thereafter, the next hypotheses of this study state that:

Hypothesis 8a. Yoga moderates the negative indirect relation between techno-invasion and physical wellbeing through emotional exhaustion such that yoga weakens the positive relation between techno-invasion and emotional exhaustion.

Hypothesis 8b. Yoga moderates the negative indirect relation between techno-invasion and psychological wellbeing through emotional exhaustion such that yoga weakens the positive relation between techno-invasion and emotional exhaustion.

Hypothesis 9a. Yoga moderates the positive indirect relation between supervisor support and physical wellbeing through emotional exhaustion such that yoga enhances the negative relation between supervisor support and emotional exhaustion.

Hypothesis 9b. Yoga moderates the positive indirect relation between supervisor support and psychological wellbeing through emotional exhaustion such that yoga enhances the negative relation between supervisor support and emotional exhaustion.

Hypothesis 10a. Yoga moderates the positive indirect relation between co-worker support and physical wellbeing through emotional exhaustion such that yoga enhances the negative relation between co-worker support and emotional exhaustion.

Hypothesis 10b. Yoga moderates the positive indirect relation between co-worker support and psychological wellbeing through emotional exhaustion such that yoga enhances the negative relation between co-worker support and emotional exhaustion.

2.8. Conceptual Model

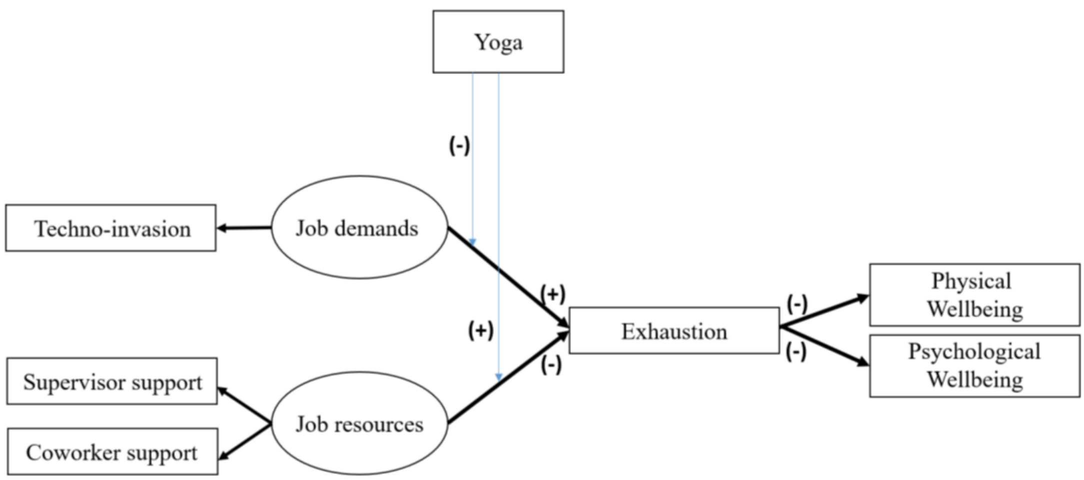

Figure 2: The Conceptual Model

CHAPTER 3

METHODOLOGY

This chapter gives information about the overall research design, sampling and data collection procedures, measures, and data analysis procedure in order to test the proposed hypotheses. Under the data analysis section, data screening, data cleaning, assumptions check for the regressions, and testing procedure will be explained.

3.1. Research Design

This study aims to analyze the conditional indirect relationships of techno-invasion, supervisor support and co-worker support on physical and psychological wellbeing through emotional exhaustion as a mediator. Additionally, the moderating effect of yoga on the relationships between techno-invasion, supervisor support and co-worker support and emotional exhaustion will be examined in the overall model. To statistically analyze these relationships, the quantitative correlational research design is used which serves to investigate whether, and to what degree, a statistical relationship exists between two or more variables, without random assignment and any form of manipulation and/or control (Tabachnick & Fidell, 2007).

3.2. Sampling and Data Collection Procedures

For this purpose, survey as a primary data collection method was used. The target population of this study consisted of two groups of people who are actively working in various types of jobs: the ones who regularly practice yoga and the ones who do not practice yoga. The data was collected mainly through an online questionnaire distributed via e-mail and social platforms. The first plan was to collect all data through an online questionnaire, however, due to the small number of respondents for the group of yoga practitioners, new ways of data collecting specifically for yoga practitioners were planned. 15 yoga centers were contacted via phone and only three of them accepted to distribute the questionnaire to their students. Two of them wanted paper-pencil questionnaire forms, thus, in these two yoga centers located in Ankara, data were collected through paper-pencil questionnaire forms. The forms were given to the yoga centers and after two weeks, 23 completed forms in total were taken back. Additionally, several yoga teachers and yoga centers were contacted via social platforms in order to increase the number of respondents for the group of yoga practitioners and close the gap between the two groups of the study.

The questionnaire consisted of 9 sub-sections and 69 questions as a base and additional six multiple-choice questions were asked to yoga practitioners regarding the details of their practice. 10 questions were asked for the demographic information of participants. All information was collected anonymously and brief information about the research purpose was given to the respondents in both online and paper-pencil form of the questionnaire. All questions in the online questionnaire were adjusted so that they are mandatory to answer to continue. The questionnaire was in Turkish language and has been approved by the METU Human Subjects Ethics Committee before distributing (See Appendix A).

A total of 637 people opened the questionnaire. 372 of them answered all of the questions. The ones who did not complete the questionnaire were removed from the data. One respondent stated that he is not actively working and thus excluded from the data. 371 survey results were included in the data analysis procedure.

3.3. Measures

In the questionnaire, techno-invasion, perceived supervisor and co-worker support, emotional exhaustion, physical wellbeing and psychological wellbeing variables were measured. The questionnaire was created with validated and reliable scales developed by other scholars. Likert scale was used as a measurement and for 5 sub-sections, a scale from 1-5 was applied and for only the physical wellbeing variable, a scale from 1-7 was applied. The exploratory factor analyses were conducted using SPSS software program ver.28. The measures used in this study are presented in the following sections.

3.3.1. Techno-invasion Scale

The scale of techno-invasion was a sub-component of the original technostress scale developed by Tarafdar et al. (2007). Techno-invasion scale consisted of four questions. The scale extended from 1-5 with 1 being referred to as "strongly disagree" and 5 as "strongly agree". Thus, higher scores suggest higher levels of techno-invasion. The techno-invasion score was calculated by taking the average of all items with equal weight. The scale has a one-factor structure and it is accounted for 51.99% of the total variance. The internal consistency reliability of the scale was found to be 0.69 for this study. Sample items from the scale were "I spend less time with my family due to technology.", "I have to be in touch with my work even during my vacation due to technology." The Turkish version of the scale could be found in **Appendix C**.

3.3.2. Perceived Supervisor Support Scale

The perceived supervisor support scale was adapted to Turkish by Giray and Şahin (2012) by selecting questions from several original scales developed by Gant, Nagda, Brabson, Jayaratne, Chess & Singh (1993), Gillen, Baltz, Gassel, Kirsch and Vaccaro

(2002), Jiang and Klein (2000), and Liden and Maslyn (1998). The scale consisted of 11 questions and it was a 5-point Likert rated questionnaire with 1= "strongly disagree" to 5= "strongly agree". The final score representing perceived supervisor support was calculated by taking the average of all item scores with equal weight. One factor structure explained 66.84% of the total variance. The internal consistency reliability of the scale was found to be 0.95 for this study. Sample items from perceived supervisor support scale were "*My supervisor helps me to do my job*", "My supervisor appreciates me when I do my job well*"*. The Turkish version of the scale could be found in **Appendix D**.

3.3.3. Perceived Coworker Support Scale

The scale used in this research to measure the perceived co-worker support was adapted to Turkish by Giray and Şahin (2012) by selecting questions from the scales developed by Gant, Nagda, Brabson, Jayaratne, Chess and Singh (1993), Gillen, Baltz, Gassel, Kirsch and Vaccaro (2002), and Yoon and Lim (1999). The scale consisted of 9 questions and it was a 5-point Likert rated questionnaire with 1= "strongly disagree" to 5= "strongly agree". Question 7 is reversed in the scoring. Similar to other scales, perceived co-worker score was calculated as the mean of all item scores with equal weight. The internal consistency reliability of the scale was found to be 0.93 for this study. One factor structure explained 64.75% of the total variance. Sample items for perceived co-worker support were "*My co-workers act close and understanding when I have trouble*", "*My co-workers are always willing to listen my work-related problems*". The Turkish version of the scale could be found in **Appendix E**.

3.3.4. Emotional Exhaustion Scale

The emotional exhaustion dimension of the original Maslach Burnout Inventory (MBI)-General Survey (Schaufeli, Leiter, Maslach, & Jackson, 1996) was used in this study which consisted of five questions. The MBI-General Survey was developed to adapt the original MBI questions also for the use of jobs outside the human services. Considering the diversity of jobs of the current sample, the general version of the scale was used in this study. The emotional exhaustion scale was a 5-point Likert rated questionnaire with 1= "never" to 5= "always". The average of all five items with equal weight was calculated for determining the emotional exhaustion score. One factor structure explained 77.47% of the total variance. The internal consistency reliability of the scale was reported to be 0.93 for this sample. A sample item for emotional exhaustion was "*I feel used up at the end of the workday*." Sample questions from the Turkish version of the scale could be found in **Appendix F**.

3.3.5. Checklist Individual Strength Scale

In this research, to measure physical wellbeing, the checklist individual strength scale was used. The original scale was developed by Vercoulen et al. (1994) and the Turkish version was adapted by Ergin (2009). The scale constituted of 20 questions and it was a 7-point Likert rated questionnaire with 1= "yes, true" to 7= "no, not true". The internal consistency reliability of the scale was found to be 0.92 for this study. One factor structure explained 44.81% of the total variance. In this study, a single physical wellbeing score was taken into the model. A composite physical wellbeing score was obtained by summing all items and taking the average of all with equal weight. Questions 2, 5, 6, 7, 8, 11, 12, 15, and 20 were reversed when calculating the end score for physical wellbeing. Higher scores from the scale indicate good physical health (Ergin, 2009). Sample items from checklist individual strength scale were "*Physically I feel exhausted*.", *"Physically, I feel I am in bad condition." Sample* questions from the Turkish version of the scale could be found in **Appendix G**.

3.3.6. Flourishing Scale

The psychological wellbeing of respondents was measured by the Flourishing Scale developed by Diener et al. (2009) and adapted to Turkish by Telef (2013). The name of the scale was previously called Psychological Wellbeing Scale, then it was renamed to Flourishing Scale (Diener et al., 2010). The scale extended from 1-5 with 1 being referred to as “strongly disagree” and 5 as “strongly agree”. There were 8 questions in the scale asking about the core aspects of human functioning such as living meaningfully and purposely or having positive relationships and the scale provided a single psychological wellbeing score. The final score was calculated by taking the average of all item scores with equal weight. The one-factor structure of the scale accounted for 54.69% of the total variance. The internal consistency reliability of the scale was found to be 0.87 for this study. A sample item for psychological wellbeing was “*I lead a purposeful and meaningful life.*” The Turkish version of the scale could be found in **Appendix H**.

3.3.7. Demographic Information Form

A demographic information form was prepared by the researcher asking the respondents about their age, gender, education level, occupation, city of work, sector of work, organization tenure, total tenure, job level, and working style. Besides, respondents were asked whether they are regularly practicing yoga or not. Accordingly, six additional questions were asked to those respondents practicing yoga about the qualities of their yoga practice such as the total time and frequency of the practice, the type of yoga, and the method of practice.

Previous studies investigated emotional exhaustion or wellbeing showed the significance of age, gender, education level, tenure, city, and sector as control variables of emotional exhaustion or wellbeing (Zheng, Molineux, Mirshekary & Scarparo, 2015). Accordingly, in this study, information regarding these variables were collected. The demographic information form could be found in **Appendix I.**

3.4. Data Analysis

The data were analyzed using both the Statistical Package for the Social Sciences (SPSS) ver. 28 and SPSS AMOS ver. 26 for the path analysis.

3.4.1. Missing Data Analysis

Before the analysis, the data were checked for any missing values and out-of-range values. Univariate descriptive statistics were examined. All continuous variables were within range. From the entries of paper-pencil questionnaire forms, there were 6 different questions from different cases without answers. So, the total missing value was 0.03% of the total data. Accordingly, missing values are replaced with series mean. Since mean imputation is a method effective when the percentage of missing values is low (Pratama, Permanasari, Ardiyanto & Indrayani, 2016), it was acceptable for this study.

3.4.2. Data Cleaning and Assumption Check

After this step, the data screening was performed in order to check the univariate and multivariate outliers. Multivariate outliers were checked based on the Mahalanobis distance method ($p < .001$). 20 cases were detected as multivariate outliers. In addition, univariate outliers (< -3.29, > +3.29) were checked after calculating the standard z-scores. 10 cases of additional univariate outliers were detected. These outliers were investigated in a detailed way individually to understand the underlying cause of the significant deviation as suggested by Tabachnick and Fidell (2007). For some respondents, their answers to the reverse coded questions contradicted the responses to the other questions of the relevant scale. Accordingly, only 18 cases that were detected as careless respondents were excluded from the data. In the end, 353 data were used for the rest of the analysis.

Next, the other assumptions for the regression analysis were checked. To check the multicollinearity assumption, Variance Inflation Factor (VIF) values were calculated. According to the results, VIF values ranged between 1.00 and 1.30. Since VIF values were less than 2.5, no variables were found to have multicollinearity (Johnston, Jones & Manley, 2018).

Besides, normality and independence of residuals, linearity, and homoscedasticity assumptions were checked. Mediation and moderation analyses were broken down into simple and multiple regressions and each relationship was assessed for these assumptions. First, a Shapiro-Wilk test, which is reported as the most powerful normality test, was conducted to determine whether the errors are normally distributed or not (Razali & Wah, 2011). The results of the Shapiro-Wilk test were significant for the errors of all the models, $p = <0.05$, indicating that normality cannot be assumed. However, according to the Central Limit Theorem, when the sample size is large enough (>30-40), the residuals will be approximately normally distributed (Lumley, Diehr, Emerson & Chen, 2009). In regards to this research, the sample size is large enough (353>30-40), hence the normality assumption can be disregarded.

Next, the independence of errors was investigated based on the Durbin-Watson coefficient test. According to Tabachnick and Fidell (2013), the Durbin-Watson coefficient value needs to be between 1.50 and 2.50 for the assumption of independence of errors. Durbin-Watson coefficient values of all regressions were within this range. Thus, the assumption of independence of errors is acceptable for this study.

In order to check linearity and homoscedasticity, the regression of standardized residuals against the regression of standardized predicted values was plotted and investigated. All relevant relationships seemed to be linear based on the fact that the Loess curve closely centers to zero along the x-axis of the scatter plot. Additionally, P-P plots for the variables were checked and the linearity assumption seemed to hold for this study. Loess strategy is used to fit a non-parametric curve to empirical data which represents the relationships between variables and it is a useful tool for data screening (Jacoby, 2000). Besides, the shapes of the scatter plots did not funnel out or curve significantly, so the assumption of homoscedasticity seemed to be acceptable for each regression.

3.4.3. Hypotheses Analysis

Before the hypotheses testing, all variables have been mean-centered meaning that the means of the variables were subtracted from the input values for each data. Accordingly, the mean of the centered variables are zero and the units remain as the original. Based on the literature, mean centering will allow improved interpretability of regression coefficients, even in the presence of the moderation effect (Schielzeth, 2010).

Hierarchical regression analyses were conducted using SPSS. These analyses were carried out for two dependent variables (i.e., physical wellbeing and psychological wellbeing) separately with all of the independent variables (i.e., techno-invasion, supervisor support, and co-worker support) and the control variables (i.e., total tenure, education level, and working in a big city). In the first step, only the control variables were included in the equation and in the second step additionally, all independent variables were included and tested. If the p-value for the estimated coefficients were less than .05, then the relevant relationship was supported.

Next, to conduct the path analysis which is a specific type of sequential equation modelling, the assessment of the fit of the hypothesized structural model to the sample data was carried out, by checking several model fit indices in AMOS such as model chi square ($\chi 2$), comparative fit index (CFI), Goodness-of-fit statistic (GFI), root mean square error of approximation (RMSEA), and standardized root mean square residual (SRMR) (Byrne, 2016; Hooper, Couglan & Mullen, 2008). Additionally, before the model analysis, in order to detect any misspecification in the model, the modification indices and the standardized residual covariances were checked from the relevant tables in the results. Finally, the hypothesized model (See Appendix J) and the relationships among variables were tested utilizing path analysis in SPSS AMOS (Kline, 2016; Schumacker & Lomax, 2010).

Mediation hypotheses were tested to investigate whether emotional exhaustion mediates the relationships between techno-invasion as a job demand, supervisor support and co-worker support as job resources and physical and psychological wellbeing. Physical and psychological wellbeing were the dependent variables in separate regression analyses. Techno-invasion, supervisor support, and co-worker support were the independent variables in both analyses. Emotional exhaustion, on the other hand, was both a dependent variable and an independent variable according to the tested relation. When the mediation effect was tested, emotional exhaustion was an independent variable in the equation. For the rest of the analysis all determined control variables were included in the model. Before testing mediation effect, analyses were conducted to test all paths available in the mediation model presented in Figure 3. First, emotional exhaustion was regressed on techno-invasion, supervisor support, and co-worker support (i.e., hypotheses 1a, 2a, and 3a). Secondly, the regression results of the relationships between physical wellbeing and psychological wellbeing as dependent variables and all independent variables were checked (i.e., hypotheses 1b, 1c, 2b, 2c, 3b, and 3c). As the third step, physical wellbeing and psychological wellbeing were regressed on both the independent variables and emotional exhaustion as a mediator (i.e., 4a, 4b, 5a, 5b, 6a, 6b, 7a, and 7b). As Hayes (2022) suggested the inference of mediation effect was done based on the significance of the product term of a path and b path which represent the proper estimate of the indirect effect (See Figure 3). To test the mediation effect, path analysis was conducted and the indirect effects of the independent variables on the dependent variables through emotional exhaustion were created as a user-defined estimands in order to be checked for significance. Non-parametric bootstrapping approach (n=10,000) was preferred for the significance test. According to this approach, if the absolute zero falls outside the lower and the upper limit of the 95% confidence interval, then the mediating effect is supported. Bootstrapping method is chosen in this study because it does not require normality assumption for the indirect effect. Besides, it is more likely to give accurate results according to Hayes (2022). This method calculates the mediating effect ten thousand times and creates an empirical representation of the sampling distribution of the mediating effect from the study sample. Consequently, a confidence interval is generated and checked whether it includes absolute zero or not to determine the mediating effect (Hayes, 2022).

To conduct the path analysis, structural models for each dependent variable were created according to the hypothesized moderated mediation models (i.e., 8a, 8b, 9a, 9b, 10a, and 10b) using SPSS AMOS. A bootstrapping approach was used in order to calculate the significance of the mediation effects at different categories of the moderator (Hayes, 2022). Techno-invasion, supervisor support, and co-worker support were the predictor variables and emotional exhaustion was the mediator variable. The outcome variables were physical and psychological wellbeing separately and yoga as a categorical variable was the proposed moderator. Moderated mediation analysis tests the conditional indirect effect of the moderator variable on the relationship between the predictor and outcome variable via potential mediators. Bias-corrected 95% confidence intervals (n=10,000) method was used in order to assess the significance of the indirect effects moderated by the yoga categorical variable. The created structural equation model tests the moderating effect on the predictor to mediator path (i.e., path a in Figure 3). For the moderation part of the model, interaction terms were calculated and drawn in the path model as independent variables with a connection to emotional exhaustion (i.e., e_path in Appendix J) based on the moderator model explained by Baron and Kenny (1986). Since there are three predictor variables, three interaction terms were created by multiplying the relevant independent variable score with yoga variable. An index of moderated mediation was used to test the significance of the moderated mediation, in other words, the difference of the indirect effects across categories of the moderator which were yoga practitioners and non-practitioners (Hayes, 2022). Significant effects are supported by the absence of absolute zero within the confidence intervals. User-defined estimands were created in order to check the significance of the index of moderated mediation which was calculated as the product of e path and b path for each of the independent variable (See Appendix J). Additionally, conditional indirect effects of the independent variables on the dependent variables at the presence of yoga practice were calculated for both of the moderated mediation model (i.e., at_path*b_path + et_path*b_path in Appendix J) and the moderation part of the model (i.e., at_path + et_path in Appendix J). As stated above, according to the significance of these user-defined estimands based on the alpha level of .05, it is decided whether the relevant hypotheses were supported or not.

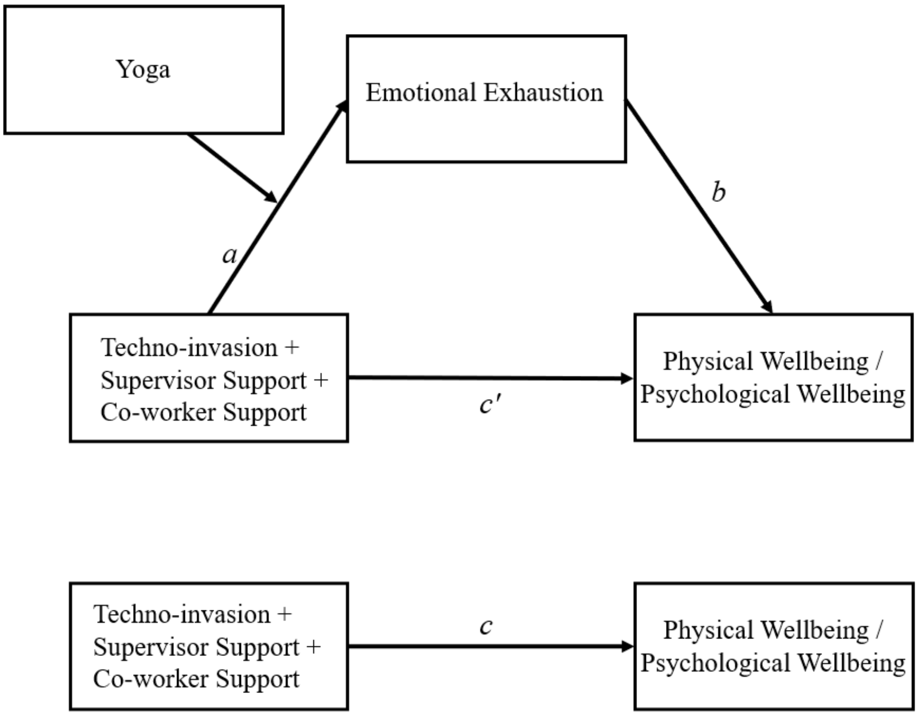

Figure 3. Hypothesized Conceptual Moderated Mediation Model

CHAPTER 4

RESULTS

In this chapter, the research analysis results are presented in four sections. In the first section, sampling demographics were explained. Next, the descriptive statistics including means, standard deviations, and bivariate correlations of the research variables were presented. Following, the determination procedure of control variables was explained. Afterward, the results of hypotheses testing were provided in different sections for the mediation and moderated mediation analyses for both physical wellbeing and psychological wellbeing separately.

4.1. Sampling Demographics

Information regarding the demographic characteristics of the participants is presented in Table 1. The results reveal that the average age of the respondents was 37.7 years. 62.6% of the respondents were under the age of 39 constituting the majority of the sample. 63.2% of the respondents were female, whereas 36.0% were male. Considering the education level of the respondents, 51% received a bachelor's degree, 33.7% acquired a master's degree and 6.2% received a doctoral degree. In regards to the organizational tenure, the average organizational tenure was 7.7 years. Most of the respondents (57.8%) have been working for less than or equal to 5 years in their current company. Next, 19.8% of the respondents have a work experience between 6 to 10 years in their current company. Additionally, in regards to the total work experience in the profession, 44.2% and 24.9% of the respondents have been working for less than ten years and 10-19 years in their profession respectively. The average total work experience of the sample was around 14.4 years. Concerning the sector of work, the sample data is fairly distributed among various sectors with the leading one as education (18.1%), followed by health (12.7%), science and engineering (9.9%), and information and communication technologies (9.7%) sectors. Besides, a higher portion of the sample with 70.5% stated that they are not managers in their companies. In the matter of working style of the respondents, most of the respondents seem to work either fully from the office or mostly from the office with percentages of 30.9 and 25.2 respectively. However, the proportions of working fully from home (15.3%) and mostly from home (16.7%) are also considerably present in the sample. Additionally, most of the respondents stated that they are working in Ankara (54.7%), İstanbul (22.9%), and İzmir (4.8%). The rest of the sample works in different cities of Turkey and there are also a few respondents working from abroad.

Table 1. *Demographic Characteristics of the Sample*

Characteristics	Category	Frequency	Percentage (%)
Gender	Female	223	63.2
	Male	127	36.0
	Not specified	3	0.8
Age	20-29	107	30,3
	30-39	114	32,3
	40-49	53	15,0
	50-59	74	21,0
	60-69	5	1,4
Education	High school	12	3.4
	Foundation Degree	20	5.7
	Bachelor's Degree (4 years)	180	51.0
	Master's Degree	119	33.7
	Doctoral Degree	22	6.2

Table 1 (continued). *Demographic Characteristics of the Sample*

Organization Tenure	0-5	204	57,8
	6-10	70	19,8
	11-15	29	8,2
	16-20	20	5,7
	>20	30	8,5
Total Professional Tenure	<10	156	44,2
	10-19	88	24,9
	20-29	56	15,9
	>29	53	15,0
Sector of Work	Justice & Security	10	2.8
	ICT	34	9.7
	Science and Engineering	35	10.0
	Education	64	18.2
	Law, Finance	18	5.1
	Health	45	12.8
	Tourism, Accommodation, Food & Drink Services	12	3.4
	Manufacturing	33	9.4
	Management, Consultancy	26	7.4
	Other	74	21.1
Job Level	Manager	104	29.5
	Not Manager	249	70.5
Working Style	Fully from home	54	15.3
	Mostly from home	59	16.7
	From home and office equally	42	11.9
	Mostly from office	89	25.2
	Fully from office	109	30.9
City of Work	Ankara	193	54.7
	İstanbul	81	22.9
	İzmir	17	4.8
	Others	62	17.6

The data included two different groups: yoga practitioners and non-practitioners. In the final sample, there were 105 yoga practitioners and 248 non-practitioners (See Table 2). Respondents of both groups were averagely around 37 years of age. Gender distribution notably differs between the groups. Of yoga practitioners, 84.8% were female and 15.2% were male, whereas of the ones not practicing yoga, 54.0% were female and 44.8% were male. For the other control variables, the proportions between groups did not differ considerably.

According to the answers to the questions regarding the qualities of the yoga practice, almost half of the yoga practitioners (42.86%) practice yoga at least 3 times a week or more, followed by the ones practicing yoga 2 or 3 times a week with 29.52% and the ones practicing yoga less than 2 with 27.62%. Most of the yoga practitioners (79.05%) have been practicing yoga for more than a year. 13.33% of the yoga group has been practicing yoga for more than 6 months and less than a year. Besides, 62.8% of all respondents stated that they regularly do any kind of physical activity each week other than yoga.

Table 2. *Demographic Characteristics of the Yoga Group*

Characteristics	Category	Frequency	Percentage (%)
Yoga practitioner	Yes	105	29.7
	No	248	70.3
Practicing yoga	less than one a week	7	6.67
	once a week	22	20.95
	2-3 times a week	31	29.52
	more than 3 times a week	45	42.86
	for less than 6 months	8	7.62
	for 6 months-1 year	14	13.33
	for more than a year	83	79.05

4.2. Descriptive Statistics

Descriptive statistics of the main study variables are provided in Table 3.

Table 3. *Descriptive Statistics of Study Variables*

	TI	SS	CS	EE	PhyW	PsyW	Yoga
Mean	3.44	3.51	3.82	2.62	4.60	3.84	-
Std. Deviation	0.77	0.83	0.69	0.99	1.15	0.60	-
Min.	1.00	1.00	1.78	1.00	1.55	1.25	0.00
Max	5.00	5.00	3.22	5.00	5.45	3.75	1.00
Variance	0.60	0.69	0.47	0.99	1.32	0.36	-

Note: N=353, Techno-invasion (TI), Supervisor Support (SS), Co-worker Support (CS), Emotional Exhaustion (EE), Physical Wellbeing (PhyW), Psychological Wellbeing (PsyW)

Accordingly, the level of techno-invasion, supervisor support, co-worker support, physical wellbeing, and psychological wellbeing were moderate to high based on the mean values of the sample indicating a higher score than the midpoint of the relevant scale. On the other hand, the average level of emotional exhaustion, which is 2.62, is relatively lower than the other mean scores indicating a low to moderate level. Standard deviations of the variables vary between .60 and 1.15.

Additionally, Pearson's correlation analysis was conducted to analyze the correlations between study variables. As seen in Table 4, techno-invasion is significantly positively related to emotional exhaustion (r=.30, p<0.01) and negatively to physical wellbeing (r=-.14, p<0.01). Techno-invasion does not seem to be significantly correlated to psychological wellbeing. Besides, supervisor support seems to be significantly positively related to co-worker support (r=.39, p<0.01), physical wellbeing (r=.20, p<0.01), and psychological wellbeing (r=.38, p<0.01). Supervisor support is strongly and significantly negatively associated with emotional exhaustion (r=-.48, p<0.01).

Table 4. *Bivariate (Pearson) Correlations of Study Variables*

	TI	SS	CS	EE	PhyW	PsyW	Yoga	Age	Gender	EL	TT	JL	WS
Techno-invasion (TI)													
Supervisor Support (SS)	-.11*												
Co-worker Support (CS)	-.08	.39**											
Emotional Exhaustion (EE)	.30**	-.48**	-.26**										
Physical Wellbeing (PhyW)	-.14**	.20**	.19**	-.39**									
Psychological Wellbeing (PsyW)	-.09	.38**	.27**	-.36**	.30**								
Yoga	-.06	.09	.01	-.10	.11*	.10							
Age	.09	-.12*	-.03	-.19**	.20**	.19**	.01						
Gender	-.13*	.00	.03	.09	.00	.00	.26**	-.14*					
Education Level (EL)	.07	-.02	-.01	.01	.14*	.10	-.04	.12*	.05				
Total Professional Tenure (TT)	.07	-.13*	-.04	-.20**	.16**	.15**	.01	.98**	-.14**	.07			
Job Level (JL)	.01	.09	.02	-.15**	.19**	.20**	.11*	.42**	-.19**	.08	.40**		
Working Style (WS)	-.04	-.19**	-.02	.16**	-.07	-.14*	-.16**	.03	-.05	-.06	.06	.09	
Living in Big Cities (BC)	.02	.01	.02	.01	-.11*	-.08	.06	-.10	-.01	-.01	-.08	-.01	.01

Notes: N:353

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

***. Correlation is significant at the 0.01 level (2-tailed).*

Similarly, co-worker support is significantly and negatively related to emotional exhaustion with a lower strength (r=-.26, p<0.01) and positively related to physical wellbeing (r=.19, p<0.01) and psychological wellbeing (r=0.27, p<0.01). Emotional exhaustion is significantly and negatively related to physical wellbeing (r=-.39, p<0.01) and psychological wellbeing (r=-.36, p<0.01). Besides, the yoga variable seems to be not correlated to any main variables of the study except physical wellbeing which confirms the assumption of moderation analysis stating that the moderator variable should be uncorrelated to the independent and dependent variables for a clear interpretable interaction term (Baron & Kenny, 1986). Considering this study, yoga should be uncorrelated to techno-invasion, supervisor and co-worker support, and emotional exhaustion. Based on Pearson's correlation values, this assumption holds for this study.

Furthermore, considering the potential control variables, age (r=-.19, p<0.01), total tenure (r=-.20, p<0.01), and job level showing whether one is manager or not (r=-.15, p<0.01) are significantly and negatively related to emotional exhaustion. Living in big cities is negatively related to physical wellbeing (r=-.11, p<0.05). Age (r=.20, p<0.01), education level (r=.14, p<0.05), total tenure (r=.16, p<0.01), and job level (r=.19, p<0.01) are significantly and positively related to physical wellbeing. Age (r=.19, p<0.01), total tenure (r=.15, p<0.01), and job level (r=.20, p<0.01) are significantly and positively related to psychological wellbeing, whereas working style (r=-.14, p<0.05) is significantly and negatively related to psychological wellbeing.

4.3. Determination of Control Variables

In order to identify the control variables which have significant association with the dependent variables and the mediator before testing the study hypotheses, multiple regression analyses were conducted to check the effects of the potential control variables on the dependent variables which were physical and psychological wellbeing and the mediator which is emotional exhaustion. The potential control variables were age, gender, education level, work sector, organizational tenure, total professional tenure, job level, working style, and city of work. Physical and psychological wellbeing and emotional exhaustion were dependent variables in the analyses.

Before the analysis, correlations among control variables were checked. Based on the results, age ($r=.92$, $p<0.01$) and organizational tenure ($r=.61$, $p<0.01$) were highly correlated to total professional tenure in the profession. Hence previous studies indicated that total professional tenure significantly predicts emotional exhaustion rather than age, only total professional tenure was taken from these variables in the regression equation to avoid any multicollinearity (Zheng, Molineux, Mirshekary & Scarparo, 2015). Besides, in order to check the moderation assumption, correlations between control variables and yoga variable were checked. Results revealed that working style ($r=-.16$, $p<0.01$) and job level ($r=.11$, $p<0.05$) were significantly correlated to the yoga variable. Thus, these variables were also excluded from the regression analysis of potential control variables for moderating analysis. In the final analysis, gender, education level, total professional tenure, work sector, and city of work were included in the regression equation. Definitions of these control variables are given in Table 5. Results of the multiple regression analysis are presented in Table 6.

According to the results, total professional tenure significantly predicted emotional exhaustion ($\beta = -.02$), physical wellbeing ($\beta = .02$), and psychological wellbeing ($\beta = .01$). Education level was found to be significant in predicting physical wellbeing ($\beta = .27$). Additionally, city of work indicating whether one is working in one of the big three cities or Turkey (i.e., İstanbul, Ankara, İzmir) or not significantly predicted physical wellbeing ($\beta = -.34$). Hereby, total professional tenure, education level, and city of work variables were included as control variables in the hypotheses testing.

Table 5. *Definitions of Potential Control Variables*

Variable	**Definition**
Gender	0=male, 1=female
Education Level	1=high school, 2=college degree, 3=graduate degree
Total Profession Tenure	Number of years worked in the profession

Table 5 (continued). *Definitions of Potential Control Variables*

Work Sector	1=education, 2=health, 3=Information and Communication Technologies, 4=Manufacturing, 5=Science and Engineering, 6=Management, 7=Consultancy, 8=Construction, 9=Tourism, 10=Law, 11=Justice and Security, 12=Others
City of Work	0=other cities, 1=working in one of the big cities of Turkey (İstanbul, Ankara, İzmir)

Table 6. *Standardized Regression Coefficients of the Control Variables*

Variables	**Emotional Exhaustion**	**Physical Wellbeing**	**Psychological Wellbeing**
Gender	.12	.04	.02
Education Level	.04	.27*	.10
Total Professional Tenure	-.02*	.02**	.01*
Work Sector	.00	.03	-.01
City of work	-.01	-.34*	-.09

Notes:
** Correlation is significant at the 0.05 level (2-tailed).*
*** Correlation is significant at the 0.01 level (2-tailed).*

4.4. Hypotheses Testing

To test all hypotheses for the mediation and moderated mediation models presented in the research, regression analyses using SPSS and path analysis using AMOS were conducted. Results are presented in the following sections.

4.4.1. Overall Model Fit for Physical Wellbeing

Firstly, the overall moderated mediation path model was assessed using several model fit indices. The summary table of model fit statistics for the moderated mediation model with physical wellbeing which was the dependent variable is given in Table 7.

According to the results, hypothesized moderated mediation model showed a good model fit based on all of the model fit indices. Chi-square statistic was insignificant with a p-value of higher than 0.05 indicating a good model fit. χ^2/df ratio was found to be less than 3 showing a good fit. Additionally, GFI and CFI statistics were higher than 0.90 which is a generally accepted threshold for well-fitting models. SRMR statistic also indicated a good model fit with a value lower than 0.05. Finally, RMSEA statistic also supported a good fit for the model with a value less than 0.07.

Table 7. *Summary of Model Fit Statistics for the Hypothesized Model with Physical Wellbeing*

	$\chi 2$	df	χ^2/df	GFI	CFI	SRMR	RMSEA
Hypothesized Model	6.47	4	1.62	0.997	0.997	0.012	0.04

Next, modification indices and the standardized residual covariances were checked to detect any possible misspecification to be improved in the initial model. No item was found in the modification indices table for regression weights for the model regressing physical wellbeing. Besides, no values in the standardized residual covariances table indicated a value higher than 2.58 which is suggested as a threshold for possible modification needs in the model (Jöreskog & Sörbom, 1993). Thus, the initial model was tested for the hypotheses with no modifications.

4.4.2. Mediation Effect Testing for Physical Wellbeing

The results of the mediation analysis of emotional exhaustion on the relationship between techno-invasion, supervisor support, co-worker support and physical wellbeing along with the results of the relevant regression analysis showing the direct effects of the independent variables on physical wellbeing in the absence of the mediator are presented on the statistical diagram presented in 4. Based on the results, techno-invasion (β_{at} = .27) and supervisor support (β_{as} = -.55) were found to be significantly positively and negatively associated with emotional exhaustion respectively. Thereby, hypotheses 1a and 2a of the research were supported. On the other hand, hypothesis 3a was not supported. Although co-worker support showed a negative association with emotional exhaustion, it was insignificant.

Besides, regression results verified that techno-invasion, supervisor support and co-worker support were significantly related to physical wellbeing. Techno-invasion was negatively related to physical wellbeing (β_{ct} = -.21), thus hypothesis 1b was supported. Supervisor support was positively related to physical wellbeing (β_{cs} = .23), thus hypothesis 2b was supported. Co-worker support was positively related to physical wellbeing (β_{cc} = .21), thereby hypothesis 3b was also supported. Emotional exhaustion was significantly and negatively related to physical wellbeing (β_{b} = -.37), hence hypothesis 4a was also found to be significant.

Next, the significance of the mediating effects of emotional exhaustion on the relationship between techno-invasion, supervisor support, co-worker support and physical wellbeing were checked from the results of bootstrap confidence intervals. Bootstrap results are presented in Table 8. The indirect effects of each independent variable were defined manually as an equation into AMOS by the researcher according to the calculations suggested by Hayes (2022). So, based on the results of user-defined estimands, emotional exhaustion was found to be a significant mediator of the negative relationship between techno-invasion and physical wellbeing with the effect of -.10 (95% CI = -0.170; -0.050, p-value = .000). Additionally, results indicated that emotional exhaustion significantly mediated the positive relationship between supervisor support and physical wellbeing with the effect of 0.21 (95% CI = 0.124; 0.3090, p-value = .000). Thereby, hypotheses 5a and 6a were supported. However, as it can be seen from the Table 8, absolute zero is included in the confidence interval of the indirect effect of co-worker support on physical wellbeing through emotional exhaustion. This indicates that the indirect effect of co-worker support on physical wellbeing through emotional exhaustion was not significant and therefore, hypothesis 7a was not supported.

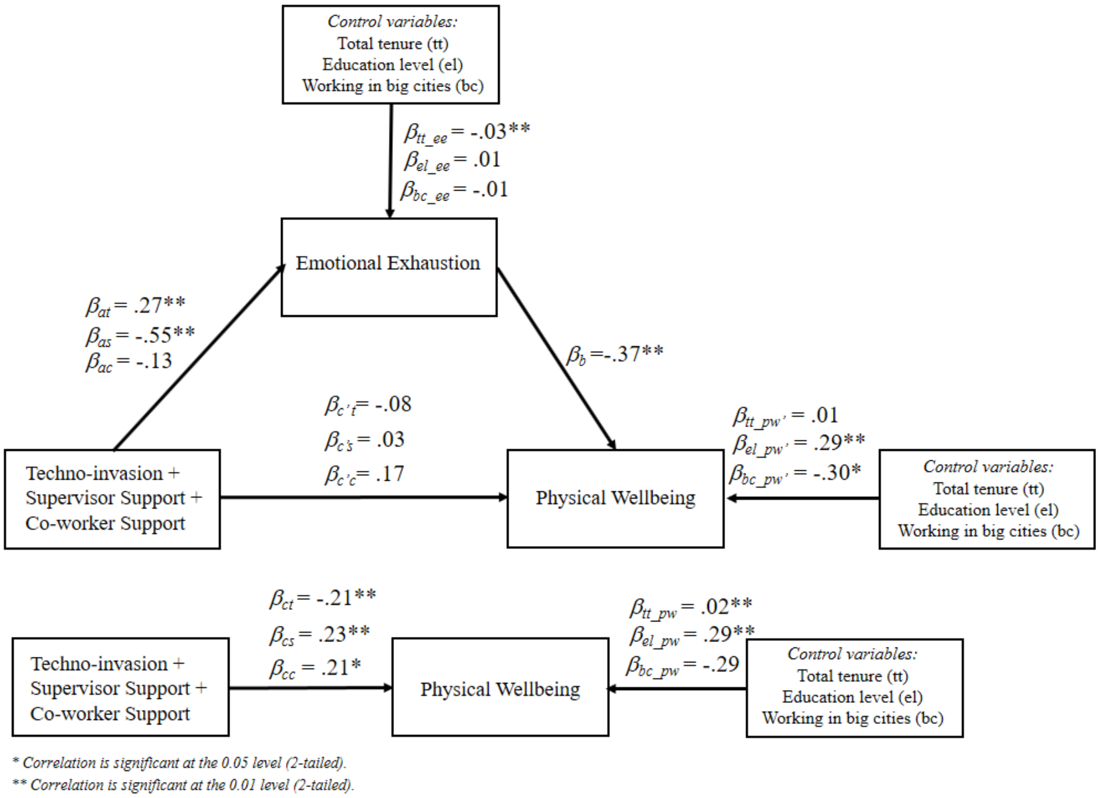

Figure 4. *Statistical diagram of the simple mediation model with physical wellbeing showing unstandardized estimates*

Table 8. *Bootstrap results for indirect effect of the independent variables on physical wellbeing through emotional exhaustion*

Independent Variable	Effect	Lower Level CI	Upper Level CI	p-value
Techno-invasion	-.10	-.170	-.050	.000
Supervisor support	.21	.124	.309	.000
Co-worker support	-.05	-.015	.132	.134

4.4.3. Moderated Mediation Effect Testing for Physical Wellbeing

The hypothesized moderated mediation models were tested using path analysis. The test assessed the moderating role of yoga on the relationship between the independent variables which are techno-invasion, supervisor support, and co-worker support and the mediator variable (i.e., emotional exhaustion). In other words, the moderated mediation model was tested where the moderator effected path a (See Figure 3). Based on the results, the inclusion of the moderating effect (i.e., interaction term of techno-invasion, supervisor support, co-worker support and yoga) increased the R^2 value for emotional exhaustion from 37.6% to 38.3% indicating an increase of less than 1%.

According to the results showing the significance of the conditional indirect effect of techno-invasion on physical wellbeing through emotional exhaustion, the overall moderated mediation model was supported with the index of moderated mediation = -.08 (95% CI = -.186; -.002, p-value = .04). The fact that absolute zero is not within the confidence interval proves the significant moderating effect of yoga on the indirect effect from techno-invasion to physical wellbeing via emotional exhaustion (Hayes, 2022). However, the direction was found to be the opposite of the hypothesized direction in the hypothesis 8a of the study. In other words, the conditional indirect effect of techno-invasion on physical wellbeing through emotional exhaustion was strongest in those practicing yoga (effect of yoga practitioners = -.18, 95% CI = -.29; -.10, p-value = .00) and weakest in those not practicing yoga (effect = -.10, 95% CI = -.17; -.05, p-value = .00). The results are given in Table 9.

Table 9: *Conditional indirect effect of techno-invasion on physical wellbeing through emotional exhaustion*

Moderator (Yoga)	Effect	Boot LL 95% CI	Boot UL 95% CI	p-value
not practicing yoga (0)	-.10	-.170	-.050	.000
practicing yoga (1)	-.18	-.291	-.104	.000

Further, the slope analysis presented in the Figure 5 reveals that the slope of the line belonging to the individuals practicing yoga is much higher. Accordingly, for the group practicing yoga, the positive impact of techno-invasion on emotional exhaustion is much stronger in comparison to the group which is not practicing yoga. Similarly, based on the path analysis results, the moderating effect of yoga on the indirect effect of techno-invasion on physical wellbeing through emotional exhaustion was found to be significant such that yoga strengthens the positive relationship between techno-invasion and emotional exhaustion as it can be seen in Table 10. The conditional positive effect of techno-invasion on emotional exhaustion was strongest for those practicing yoga (effect of yoga practitioners = .49, 95% CI = .31; .70, p-value = .000) and weakest for those not practicing yoga (effect = .27, 95% CI = .14; .40, p-value = .000). Thereby, hypothesis 8a was not supported. However, as it can be seen from the graph indicating the effect of techno-invasion and yoga interaction on emotional exhaustion, until some level of techno-invasion above the average, the emotional exhaustion level of the ones practicing yoga is less than the emotional exhaustion levels of the ones who are not practicing yoga and only after that point, at higher levels of techno-invasion, the emotional exhaustion levels of the yoga practitioners are greater than the emotional exhaustion levels of the ones not practicing yoga. Additionally, f^2 effect size of the moderation was calculated as 0.01 meaning that there is a medium moderating effect based on the proposition of Kenny (2018).

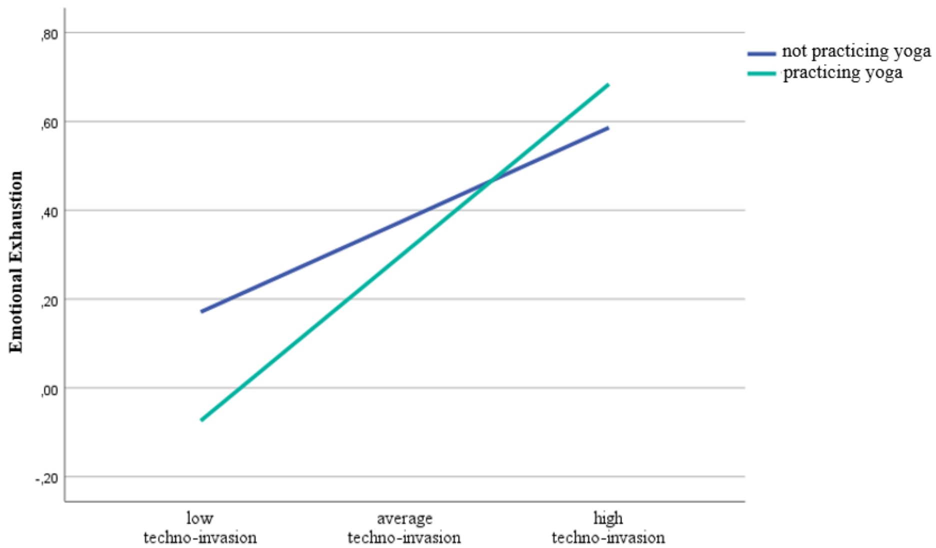

Figure 5: *Techno*-invasion *and Yoga Interaction on Emotional Exhaustion*

Table 10: *Conditional effect of techno-invasion on emotional exhaustion*

Moderator (Yoga)	Effect	Boot LL 95% CI	Boot UL 95% CI	p-value
not practicing yoga (0)	.27	.14	.40	.000
practicing yoga (1)	.49	.31	.70	.000

For the conditional indirect effect of supervisor support on physical wellbeing through emotional exhaustion, the overall moderated mediation model was not supported with the index of moderated mediation = -.02 (95% CI = -.12; .07). The overall moderated mediation model testing the conditional indirect effect of co-worker support on physical wellbeing through emotional exhaustion was also not supported with the index of moderated mediation = -.03 (95% CI = -.15; .08). Hereby, there was no moderating impact of yoga on the indirect effect of supervisor support and co-worker support on physical wellbeing, so, hypotheses 9a, and 10a were not supported.

4.4.4. Overall Model Fit for Psychological Wellbeing

The overall moderated mediation structural model with the dependent variable, psychological wellbeing, was also firstly investigated for the model fit. The summary table of model fit statistics for the moderated mediation model with psychological wellbeing, is presented in Table 11.

Results indicated a good model fit for the hypothesized model based on all of the model fit indices. Chi-square statistic was insignificant with a p-value of 0.07 indicating a good model fit. χ^2/df ratio was 2.15 and thus, less than 3 showing a good fit. Furthermore, GFI and CFI statistics were higher than the threshold value of 0.90 indicating a good model fit. SRMR statistic was 0.013 (<0.05) which indicated a good model fit. Finally, RMSEA statistic also supported good fit for the model with a value less than 0.07.

Table 11. *Summary of Model Fit Statistics for the Hypothesized Model with Psychological Wellbeing*

	$\chi2$	df	χ^2/df	GFI	CFI	SRMR	RMSEA
Hypothesized Model	8.58	4	2.15	0.996	0.994	0.013	0.057

Afterward, modification indices and the standardized residual covariances were investigated to detect any possible discrepancy in the model. No item was found in the modification indices table for regression weights. Besides, all values in the standardized residual covariances table were lower than 2.58. Thereby, the initial model was tested for the hypotheses with the dependent variable of psychological wellbeing.

4.4.5. Mediation Effect Testing for Psychological Wellbeing

Similarly, the results of the mediation analysis of the association between techno-invasion, supervisor support, co-worker support and psychological wellbeing along with the results of the relevant regression analysis showing the direct effects of the independent variables on physical wellbeing in the absence of the mediator were checked. Results are given in Figure 6. The parameter estimates between independent variables and emotional exhaustion remained the same as the ones presented in the mediation model with the independent variable, physical wellbeing.

According to the results, supervisor support (β_{cs} = .24) and co-worker support (β_{cc} = .13) were found to be significantly and positively related to psychological wellbeing. Thereby, hypotheses 2c and 3c were supported. Techno-invasion was not significantly related to psychological wellbeing. Emotional exhaustion was significantly and negatively related to psychological wellbeing (β_b = -.10), hence hypothesis 4b was also supported.

Next, the significance of the mediating effects of emotional exhaustion between techno-invasion, supervisor support, and co-worker support and psychological wellbeing were checked using bootstrap confidence intervals. According to the bootstrap results presented in Table 12, the indirect effect of techno-invasion on psychological wellbeing through emotional exhaustion was found to be significant in a negative direction with an effect of -0.03 (95% CI = -0.058; -0.008, p-value = .006). Additionally, results indicated that emotional exhaustion significantly mediated the positive relationship between supervisor support and psychological wellbeing with an effect of 0.06 (95% CI = 0.015; 0.104, p-value = .008). Thereby, hypotheses 5b and 6b were supported. The indirect effect of co-worker support on psychological wellbeing through emotional exhaustion was found to be insignificant, since absolute zero is included in the confidence interval (95% CI = -.002; .047). Thus, hypothesis 7b was not supported.

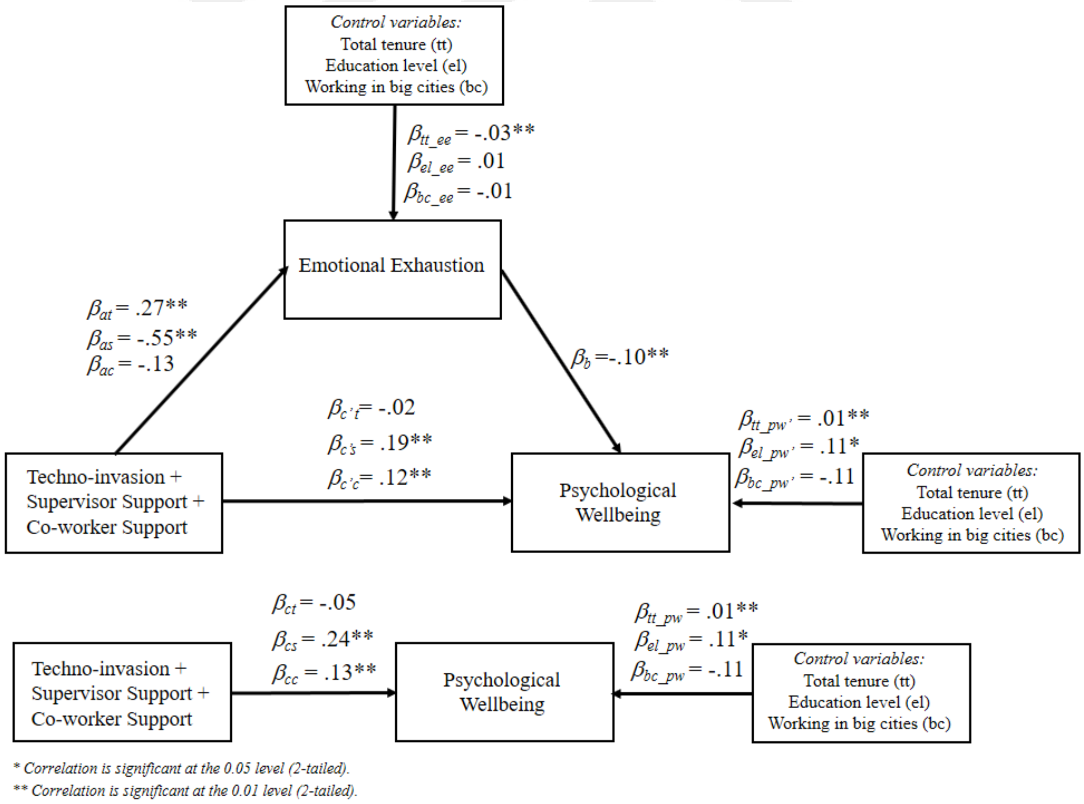

Figure 6. *Statistical diagram of the simple mediation model with psychological wellbeing showing unstandardized estimates*

Table 12. *Bootstrap results for indirect effect of the independent variables on psychological wellbeing through emotional exhaustion*

Independent Variable	Effect	Lower Level CI	Upper Level CI	p-value
Techno-invasion	-.03	-.058	-.008	.006
Supervisor support	.06	.015	.104	.008
Co-worker support	.01	-.002	.047	.099

4.4.6. Moderated Mediation Effect Testing for Psychological Wellbeing

According to the results, the overall moderated mediation model testing the conditional indirect effect of techno-invasion on psychological wellbeing through emotional exhaustion was supported with the index of moderated mediation = -.02 (95% CI = -.064; -.002, p-value = .03). Since absolute zero is not within the confidence interval, the moderating effect of yoga on the indirect effect of techno-invasion on psychological wellbeing via emotional exhaustion was found to be significant (Hayes, 2022). The direction of the moderation effect was the opposite of the hypothesized direction in the hypothesis 8b. In other words, the conditional negative indirect effect of techno-invasion on psychological wellbeing through emotional exhaustion was strongest in those practicing yoga (effect of yoga practitioners = -.05, 95% CI = -.10; -.015, p-value = .00) and weakest in those not practicing yoga (effect = -.03, 95% CI = -.06; -.01, p-value = .006). Results are also provided in Table 13. Slope analysis was already presented in section 4.4.3 for the moderating effect on the same path (i.e., path a in Figure 3). Consequently, hypothesis 8b was not supported.

Table 13: *Conditional indirect effect of techno-invasion on psychological wellbeing through emotional exhaustion*

Moderator (Yoga)	Effect	Boot LL 95% CI	Boot UL 95% CI	p-value
not practicing yoga (0)	-.03	-.058	-.008	.006
practicing yoga (1)	-.05	-.100	-.015	.006

Table 14: *Unstandardized coefficients for the moderated mediation model*

	Consequent			
	EE (Emotional Exhaustion)			
Antecedents	Coeff.	SE	t	p
TI (techno-invasion)	.27	.07	.07	>.001
TI × Y	.22	.12	1.90	.058
SS (supervisor support)	-.55	.06	-8.56	>.001
SS x Y	.05	.12	.40	.688
CS (co-worker support)	-.13	.08	-1.62	.106
CS x Y	.08	.14	.60	.548
Y (yoga)	-.07	.09	-.79	.427
Constant	.38	.22	1.76	.079
	R2 = .383; R^2 change = .01			

Table 15: *Overview of Hypothesis Testing*

Hypothesis	**Result**	**Hypothesis**	**Result**
1a	Supported	*6a*	Supported
1b	Supported	*6b*	Supported
1c	Not supported	*7a*	Not supported
2a	Supported	*7b*	Not supported
2b	Supported	*8a*	Not supported (reverse relationship)
2c	Supported	*8b*	Not supported (reverse relationship)
3a	Not supported	*9a*	Not supported
3b	Supported	*9b*	Not supported
3c	Supported	*10a*	Not supported
4a	Supported	*10b*	Not supported
4b	Supported		
5a	Supported		
5b	Supported		

CHAPTER 5

DISCUSSION

The main purpose of this research was to investigate the possible moderation effect of yoga on the indirect relationships of techno-invasion as a job demand, supervisor support and co-worker support as job resources with the physical and psychological wellbeing through emotional exhaustion as the principal component of burnout. Accordingly, the mediation effect of emotional exhaustion on the relationships between the three independent variables and physical and psychological wellbeing was assessed through path analysis in addition to the hypothesized moderated mediation model whereby yoga was included as a moderator. Control variables such as total professional tenure, education level and living in the big cities were included in the path model. This chapter will provide the discussion on the results of the analysis in seven sections. In the first section, the effects of control variables on emotional exhaustion, physical wellbeing and psychological wellbeing will be discussed. Next, the discussion on the results of the direct effects of independent variables on the dependent variables will be given. In the third section, the mediating role of emotional exhaustion will be presented. In the fourth sections, the moderating role of yoga on the indirect relationships of independent variables on physical and psychological wellbeing through emotional exhaustion will be reviewed. In the last three sections, limitations and contributions of the study, recommendations for future research, and managerial implications will be provided.

5.1. The Effects of Control Variables on the Study Variables

The effects of control variables on the dependent variables of the study which were found to be significant predictors of the mediator and the dependent variables (i.e., total professional tenure, education level, and working in the big cities) were assessed in the path analysis. Results revealed that total professional tenure was significantly and negatively associated with emotional exhaustion as a control variable. Literature suggests similar association between tenure and emotional exhaustion stating that tenured employees may perceive a reduction in the job demands thanks to their experience in their jobs (Deery, Iverson & Walsh, 2002; Carr, Boyar & Gregory, 2008). There are also studies investigating tenure as a resource to cope with job demands which verified its negative effect on emotional exhaustion. The reason behind this is explained by building on the COR theory and suggesting that tenure acts as a valued resource and hence weakens the negative effects of job demands (Karatepe & Karatepe, 2009). Besides, in line with previous studies, education level was not significant in predicting emotional exhaustion (Pérez-Luño, Piñol & Dolan, 2022). Additionally, working in big cities was not significantly associated with emotional exhaustion.

Furthermore, education level and working in big cities significantly predicted physical wellbeing. Education level was positively related to physical wellbeing, whereas working in big cities was negatively related to physical wellbeing. On another note, total professional tenure and education level were significantly and positively associated with psychological wellbeing. Findings are consistent with other studies in the literature. There are several studies proving the positive association between education level and physical and psychological wellbeing. More educated people seem to be less vulnerable to health problems (Lyons & Yılmazer, 2005). Additionally, previous studies showed that individuals living in the cities are generally more likely to experience wellbeing problems. Explanations include that current city living activates the amygdala which is an important region in the brain for stress response (Lederbogen et al., 2011). For instance, a study conducted by Cai et al. (2017) indicated that long-term exposures to road traffic noise and air pollution present in the big cities are associated with physical diseases as environmental stressors. Based on the stress reaction model, continuous activation of the stress reaction in the body and overly production of stress hormone may lead to deterioration of physical and psychological wellbeing. In this study, only physical wellbeing was negatively associated with living in big cities. However, the negative association between living in big cities and psychological wellbeing was not significant in contrast to the literature findings.

5.2. The Direct Effects of Independent Variables

The direct effects of the independent variables (i.e. techno-invasion, supervisor support, and co-worker support) on emotional exhaustion, and physical and psychological wellbeing were checked in the overall path model. Results of the present study confirm that techno-invasion was positively related to emotional exhaustion, and supervisor support was negatively related to emotional exhaustion. Considering the JD-R model, these relationships were expected and were in line with the hypotheses. Thus, results verified the suggestions of Schaufeli and Bakker (2004) which state that job demands have a positive relationship with emotional exhaustion and job resources have a negative relationship with emotional exhaustion based on the JD-R model. In this study, techno-invasion was assessed as a job demand. Findings were also consistent with what has been found in previous studies of technostress. They have demonstrated that the perception of the companies' expectations of being continuously reachable for work-related requests which is also called techno-invasion can be an important stressor for the employees considering the changing ways of work (Tarafdar et al., 2015; Ghislieri et al., 2017). Several previous studies proved that techno-invasion is positively related to emotional exhaustion as a predominant job demand in contemporary jobs (Bauwens et al., 2021; Gaudioso, Turel & Galimberti, 2017; Kim et al., 2015). Besides, the negative association between supervisor and emotional exhaustion was supported by several study findings in the literature (Bakker et al., 2005; Gibson, Grey & Hasting, 2009; Zhao, Wang, Wu & Dong, 2021; Weinert et al., 2021). Various mechanisms were used in the literature to explain the underlying reason of the reducing effect of support on emotional exhaustion. For instance, according to COR theory, the perception of losing valued resources lead to emotional exhaustion.

So, the presence of resources such as social support which is able to create additional resource gain is negatively associated with emotional exhaustion (Hobfoll, 2002; Hobfoll, 2001). Additionally, the stress-buffering model of social support suggests that social support can reduce the effects of emotional exhaustion and hence, enhance wellbeing (Cohen & Wills, 1985). Accordingly, the findings of the present study were in line with the previous findings and the theories. However, in contrast to the relevant hypothesis, the negative association of co-worker support with emotional exhaustion was not significantly supported. There are some studies showing a similar pattern in the literature with a significant negative effect of supervisor support and non-significant negative effect of co-worker support on emotional exhaustion (Constable & Russell, 1986; Spooner-Lane & Patton, 2007). Possible explanation is provided as the mismatch between the job demand, work environment, and the source of the support. According to Cutrone and Russell (1990), in order to get the effective negative impacts of social support on emotional exhaustion, the available source of support should be able to meet the needs of the current situation. Perhaps, supervisor support is more relevant under the influence of techno-invasion and for the current sampling than co-worker support.

Furthermore, the direct effects of the independent variables on physical and psychological wellbeing in the absence of the mediator were also assessed in this study. Based on the findings, techno-invasion was negatively and significantly related to physical wellbeing, whereas it was not significantly related to psychological wellbeing. The former finding was an anticipated result based on the literature. As a serious stressor, high levels of techno-invasion was found to be positively associated with the deterioration in health (Elizalde, 2021). Researches regarding remote working and the impact of technology on wellbeing increased especially after covid-19 pandemic and these studies proved that technostressors have negative impacts on both physical and psychological wellbeing (Elizalde, 2021; Borle, Reichel, Niebuhr & Voelter-Mahlknecht, 2021; Nisafani, Kiely & Mahony, 2020). The negative effect of techno-invasion on physical wellbeing, thus, was hypothesized in this study and supported based on the results. However, why the negative relation between techno-invasion and psychological wellbeing was insignificant is not clear. Furthermore, in line with the hypotheses, study results indicated that supervisor support and co-worker support were significantly and positively related to physical and psychological wellbeing. This pattern of results is consistent with the previous literature (Turner, 1981; Hämmig, 2017; Swanzy, 2020). Besides, the results of the present study also fit with several theories supporting the positive effect of social support on wellbeing. Based on the JD-R model, supervisor and co-worker support as job resources may enhance work engagement and accordingly weaken the negative effect of techno-invasion and increase wellbeing. Similarly, based on the COR theory social support is not only valuable for its own sake but also for its capability of protecting other resources as a reservoir for resources and accordingly, positively related to wellbeing as an important resource. Additionally, the stress and coping perspective theory supports the positive effect of social support on wellbeing by protecting the individuals from the negative impacts of stressors.

In addition, the direct effects of emotional exhaustion on physical and psychological wellbeing were assessed in the current study. Results support the hypotheses that emotional exhaustion is significantly and negatively associated with physical wellbeing and psychological wellbeing. These results are in line with the claim of the revised JD-R model suggesting that there is a direct positive relationship with emotional exhaustion and negative health outcomes (Schaufeli & Bakker, 2004). The main reason suggested for that association is the continuous activation of stress response in the body through the sympathetic nervous system and hypothalamic-pituitary-adrenal axis leading to dysregulation in the natural balance of the body and thus causing health problems. (Yaribeygi, Panahi, Sahraei, Johnston & Sahebkar, 2017; Hayes & Ross, 1986; Riedl et al., 2012; Melamed et al., 2006). Previous studies also proved a similar negative association between emotional exhaustion and physical and psychological wellbeing (Nicolson & Diest, 2000; Peterson et al., 2008; Van Diest, 1990).

5.3. The Mediating Role of Emotional Exhaustion

The indirect effect of the independent variables (i.e. techno-invasion, supervisor support, and co-worker support) on the dependent variables (i.e. physical wellbeing and psychological wellbeing) through emotional exhaustion as a mediator was investigated in this study. Results provide evidence for the significance of the negative indirect effects of techno-invasion on physical wellbeing and on psychological wellbeing through emotional exhaustion and thereby supported the relevant hypotheses of the current study. Additionally, the results were in line with the revised JD-R model stating that emotional exhaustion is a significant mediator between job demands and health problems which is called the health impairment process of burnout. Over the years, this mediating role of emotional exhaustion has been verified by various studies with other job demands (Huang et al., 2011; Santa Maria et al., 2017). The results of the present study seem to be one of the early contributors supporting the negative indirect relationship of techno-invasion on physical wellbeing and psychological wellbeing through emotional exhaustion based on the JD-R model.

Additionally, the positive indirect effect of supervisor support on physical and psychological wellbeing was found to be significant through emotional exhaustion. The results were in line with the hypotheses. Even though the revised JD-R model emphasizes only the mediating role of emotional exhaustion between job demands and health problems, the negative relationship from job resources to burnout and the relationship from burnout to health problems were also indicated in the model. Thus, it was expected that the positive indirect effect of supervisor support as a job resource on wellbeing actualize through emotional exhaustion. Possible mechanism explaining these associations can be the COR theory. COR theory suggests that job resources decrease the negative impacts of job demands such as emotional exhaustion and in turn, its outcomes such as health problems. Accordingly, as the study results support, emotional exhaustion significantly mediates the positive relationship between supervisor support and physical and psychological wellbeing. However, unexpectedly and in contrast to these explanations, the positive indirect effect of co-worker support on physical and psychological wellbeing through emotional exhaustion was insignificant according to study results. The reason behind this finding is not apparent. The above-mentioned explanation regarding the absence of appropriate match between the assessed job resource and the needs of the situation or present job demand might be a possible explanation.

5.4. The Moderating Role of Yoga in the Moderated Mediation Model

Finally, the moderating effect of yoga on the indirect relationship between the independent variables and dependent variables through emotional exhaustion was explored. Study results indicated that the conditional indirect effects of techno-invasion on physical and psychological wellbeing through emotional exhaustion were significant such that individuals practicing yoga experienced a stronger positive relationship between techno-invasion and emotional exhaustion, in turn, a stronger negative relationship between techno-invasion and physical and psychological wellbeing occurred. Thus, unexpectedly, results revealed a moderating effect contrary to what is predicted and the relevant hypotheses were not supported. Yoga and mindfulness literature coherently suggests the effective reducing effects of yoga on burnout and emotional exhaustion (Alexander et al., 2015; Cocchiara et al., 2019; Lindahl, Tilton, Eickholt & Ferguson-Stegall, 2016; Ioannou, 2018). Thereby, the underlying reason for the contradicting findings of the current research is not clear and there is no similar pattern in the literature to the researcher’s knowledge for providing a definitive explanation. However, several potential explanations will be provided. Firstly, in order to experience the constructive, positive results of physical activity on wellbeing, there are some guidelines available in the literature. For instance, for the effectiveness of physical exercises, one should exercise three to four times a week over 30 to 40 minutes at a medium maximal working capacity according to Ross and Altmaier (1994). Additionally, there are some requirements for the effectiveness of yoga practice such as breath-awareness, alertness and relaxation during practice. It is regarded as a holistic scientific practice effective on individual’s wellbeing as a whole (Betûl, 2011; Brown, 2002). So, the content of the practice might be a possible explanation for the unexpected results of the current study. Besides, results indicated that until higher levels of techno-invasion, yoga practitioners experience lower levels of emotional exhaustion and only after some point, emotional exhaustion levels of the ones practicing yoga exceed the emotional exhaustion levels of the ones not practicing yoga. In regard to this, Bakker and Vries (2021) recently suggested that when there is an increasing and high job demands, employees tend to experience a loss spiral of health impairment due to not being able to adapt effective coping strategies. High job demands lead to attentional narrowing on the job demands and in turn, individuals tend to choose maladaptive coping strategies which lead to worsening emotional exhaustion as a symptom of burnout. Thereby, at higher levels of job demands, employees might need to adjust their coping strategies for stress. Another possible reason for the unexpected findings can root in the small sample size of the yoga group. Besides, literature suggests that in order to get accurate results about yoga interventions, methodologically relevant studies need to be conducted such as experiments with control groups (Cocchiara et al., 2019).

Furthermore, results also demonstrated that the conditional indirect effects of supervisor support and co-worker support on physical wellbeing and psychological wellbeing through emotional exhaustion were found to be insignificant, in contrast to the hypotheses of the present study.

5.5. Limitations and Recommendations for Future Research

While the current research provides some useful findings, there are potential limitations that need to be taken into consideration for future studies. Limitations of this study have its source mainly in the data collection method and the sample.

First of all, the data were collected using self-rated questionnaire which might lead to common method bias. To check this, Harman's single factor test is conducted and the total variance explained by the loaded single factor was 23.6% which is less than 50% indicating that there seems to be no common method bias in the current study. Nevertheless, it would be better to get data from multiple sources to minimize this problem.

Additionally, the questionnaire was completed by 353 employees in total which is relatively a small sample by itself. On top of this, the number of the ones practicing yoga were considerably lower than the other group (105<248) due to some limitations in the data collection procedure. Besides, the female-male ratio of the ones practicing yoga and the ones not practicing yoga were considerably different. Although this difference might be quite representative of the real sample, since yoga is mostly practiced by women (Park, Braun & Siegel, 2015), this might obscure any issues related to gender in the regression analyses. Thereby, the representation power can be improved in the future researches and possible gender effects should be also considered. Besides, the current study had a cross-sectional design, thereby the inferences of this study is rather descriptive and correlational than causative. Therefore, the interpretation of the moderated mediation model is limited to predictive relationships and causation inferences cannot be done.

Furthermore, in terms of future research, it would be useful to conduct an experiment to assess the moderating effect of yoga intervention for improved results. Measuring the accurate effects of yoga merely by the statement of the respondent telling whether one is practicing yoga or not through a questionnaire may be questionable and thus, can be improved in the future research with an experiment. Additionally, to assess the effects of yoga on the indirect path of job demands and resources on individuals' wellbeing through emotional exhaustion, the qualities of yoga practice such as total time of the practice and the frequency of the practice can be included in the assessment with a bigger sample size for yoga group.

Finally, the assessment of physical wellbeing is carried out through the checklist individual strength scale as a proximate measure. Although it is validated as an indicator of good health (Ergin & Yıldırım, 2009), this scale is often used to measure fatigue and thereby might be a limitation for the present study. Future researches can use alternative scales or ways to measure physical wellbeing.

5.6. Contributions

Despite these limitations, the present research contributes to the organization behavior literature in various ways. The first main contribution of this research is providing evidence that substantiate the revised JD-R model considering the health process with one of the predominant job demands of current times which is techno-invasion. Accordingly, this research contributes to a growing body of evidence suggesting that techno-invasion as a technostress creator acts as a job demand leading to emotional exhaustion. On top of that, the significant results of the negative indirect effect of techno-invasion on physical wellbeing and psychological wellbeing through emotional exhaustion are contributions to the organizational behavior literature since there is relatively limited studies indicating this mediating effect of emotional exhaustion. Additionally, this research contributes to the technostress literature by investigating the direct and indirect effects of a single technostress creator, namely techno-invasion, on physical and psychological wellbeing to clarify the issue further.

Another significant contribution of the present study is providing evidence for the significant negative effect of supervisor support on emotional exhaustion in the presence of techno-invasion in the model. Further, the present study provides evidence for the comprehensive model with techno-invasion as a job demand and supervisor support as a job resource in relation to physical and psychological wellbeing through emotional exhaustion. This result contributes to the revised JD-R model by providing evidence for the positive indirect effect of supervisor support as a job resource on physical and psychological wellbeing through emotional exhaustion. So, emotional exhaustion may be a mediator between job resources and health deterioration as well and supervisor support is a significant resource enhancing wellbeing through reducing the negative effects of emotional exhaustion. This research also provides evidence for understanding the effectiveness of different kinds of sources of support in relation to emotional exhaustion, physical wellbeing and psychological wellbeing. Additionally, the present research provides support for the COR theory by offering evidence for the significant negative effects of job resources on emotional exhaustion, physical wellbeing and psychological wellbeing.

Last but not least, this research tried to provide a comprehensive model including job demands, job resources, emotional exhaustion as a mediator and physical and psychological wellbeing as its outcomes and yoga as a potential intervention method. Even though the effects of yoga on the relationship between techno-invasion and emotional exhaustion were in the opposite direction of the expected, this study can stimulate further investigation of this topic.

5.7. Managerial Implications

The findings of the present research suggest a number of useful implications for managers. It is one more time verified that the imbalance between job demands and job resources results in emotional exhaustion having significant physical and psychological wellbeing costs for the individuals. With the awareness of this fact, managers and organizations can engage in several preventive actions for emotional exhaustion as the primary component of burnout. For instance, results showed that techno-invasion is an important job demand leading to emotional exhaustion and supervisor support can buffer the negative effects of techno-invasion. The strength of negative effect of supervisor support on emotional exhaustion seem to be higher than the one of positive effect of techno-invasion on emotional exhaustion, thus, increasing supervisor support can be an effective way to manage the burden of techno-invasion and weaken its negative effects on physical wellbeing and psychological wellbeing. Thus, managers and organizations can foster a supportive culture in the organizations. Managers might continuously communicate their goals and provide directions and support to employees (Breevaart et al., 2014). Additionally, mentoring or management coaching programs can be provided as suggested in previous studies (Baron & Morin, 2010). To reduce the negative effects of techno-invasion, managers and organizations can set up some limits for technology use for work or take some measures to prevent technology invading in employees' private lives by also offering some information about the consequences of overly use of technology.

CHAPTER 6

CONCLUSION

Burnout is one of the increasing workplace phenomenon which may be detrimental to physical and psychological wellbeing of the employees. Emotional exhaustion as its principal component needs to be managed properly to prevent its negative effects both on the employees and the organizations. Thus, the present research aimed to investigate yoga as a potential intervention on the indirect effects of techno-invasion as a job demand, supervisor support and co-worker support as job resources on physical and psychological wellbeing through emotional exhaustion. The sample is composed of two groups: employees working in different kinds of jobs and either practicing yoga or not. Moderated mediation analyses were conducted utilizing path analyses. According to research results, techno-invasion was positively and significantly related to emotional exhaustion. Additionally, techno-invasion was negatively and significantly related to physical wellbeing. The negative association of supervisor support with emotional exhaustion was also supported. Similarly, supervisor support and co-worker support were found to be positively associated with physical and psychological wellbeing. Furthermore, the mediating role of emotional exhaustion between the negative relationship of techno-invasion on physical and psychological wellbeing and the positive relationship of supervisor support on physical and psychological wellbeing were supported. The moderated mediation path including yoga as a moderator of the path between techno-invasion and emotional exhaustion was supported in such a way that yoga strengthened the positive effect of techno-invasion on emotional exhaustion in contrast to the proposed hypothesis. Furthermore, the conditional indirect effects of supervisor support and co-worker support on physical and psychological wellbeing through emotional exhaustion were not supported. Consequently, the present study contributed to the organizational behavior literature in several ways by providing insightful results.

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APPENDICES

A. APPROVAL OF THE METU HUMAN SUBJECTS ETHICS COMMITTEE

UYGULAMALI ETİK ARAŞTIRMA MERKEZİ
APPLIED ETHICS RESEARCH CENTER

ORTA DOĞU TEKNİK ÜNİVERSİTESİ
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Sayı: 28620816 /

23 AĞUSTOS 2021

Konu : Değerlendirme Sonucu

Gönderen: ODTÜ İnsan Araştırmaları Etik Kurulu (İAEK)

İlgi : İnsan Araştırmaları Etik Kurulu Başvurusu

Sayın Feride Pınar ACAR

Danışmanlığını yürüttüğünüz Fatma Ece Demirer'in "Çalışanların duygusal tükenmişlik (burnout) deneyiminde yoga uygulamasının düzenleyici etkisi" başlıklı araştırmanız İnsan Araştırmaları Etik Kurulu tarafından uygun görülmüş ve **347-ODTU-2021** protokol numarası ile onaylanmıştır.

Saygılarımızla bilgilerinize sunarız.

Prof.Dr. Mine MISIRLISOY
İAEK Başkan

B. INFORMED CONSENT

Değerli katılımcı,

Bu araştırma, ODTÜ Sosyal Bilimler Enstitüsü İşletme Yüksek Lisans öğrencisi Fatma Ece Demirer tarafından Prof. Dr. Feride Pınar Acar danışmanlığında yüksek lisans tez çalışması kapsamında yürütülmektedir. Bu bölüm, sizi araştırma koşulları hakkında bilgilendirmek için hazırlanmıştır.

Araştırmanın amacı; iş hayatında deneyimlenen stresin nedenlerini ve sonuçlarını incelemektir.

Yaklaşık 10 dakika sürmesi beklenen bu ankette size, eksiksiz ve doğru cevaplamanız beklenen bir dizi soru yöneltilecektir.

Araştırmaya katılımınız tamamen gönüllülük esasına dayalıdır. Ankette, sizden kimlik veya kurum belirleyici hiçbir bilgi istenmemektedir. Cevaplarınız tamamıyla gizli tutulacak, sadece araştırmacılar tarafından değerlendirilecektir. Katılımcılardan elde edilecek bilgiler toplu halde değerlendirilecek ve bilimsel yayımlarda kullanılacaktır.

Anket, genel olarak kişisel rahatsızlık verecek sorular içermemektedir. Ancak, katılım sırasında sorulardan ya da herhangi başka bir nedenden ötürü kendinizi rahatsız hissederseniz anketi sonlandırabilirsiniz.
Bu çalışmaya katıldığınız için şimdiden teşekkür ederiz. Çalışma hakkında daha fazla bilgi almak için ODTÜ İşletme Bölümü öğretim üyelerinden Prof. Dr. Feride Pınar Acar (E-posta:) ya da yüksek lisans öğrencisi Fatma Ece Demirer (E-posta:) ile iletişim kurabilirsiniz.

Yukarıdaki bilgileri okudum ve bu çalışmaya tamamen gönüllü olarak katılıyorum.

☐ Evet ☐Hayır

C. TECHNO-INVASION SCALE

Aşağıda iş hayatında teknoloji kullanımınızla ilgili bazı davranış örnekleri verilmiştir. İş amaçlı teknoloji kullanımınızı düşünerek, lütfen her bir ifadeye ne derece katıldığınızı sunulan ölçek üzerinde belirtiniz.

Sorularda kullanılan teknoloji terimi; internet, bilgisayar, tablet ve cep telefonu gibi bilgi ve iletişim teknolojilerini işaret etmektedir.

1: Kesinlikle katılmıyorum; 2: Katılmıyorum; 3: Biraz katılıyorum; 4: Katılıyorum; 5: Kesinlikle katılıyorum

1	Teknoloji nedeniyle, ailemle daha az vakit geçiriyorum.	1	2	3	4	5
2	Teknoloji nedeniyle, izindeyken bile işimle bağlantıda kalmam gerekiyor.	1	2	3	4	5
3	Yeni teknolojilerle ilgili bilgi sahibi olmaya zaman harcamam gerekiyor.	1	2	3	4	5
4	Özel hayatımın teknoloji tarafından ele geçirildiğini hissediyorum.	1	2	3	4	5

D. PERCEIVED SUPERVISOR SUPPORT SCALE

Aşağıda iş yerinde karşılaşılabilen, yönetici davranışlarına bazı örnekler sunulmaktadır. Doğrudan bağlı olduğunuz yöneticinizi düşünerek, lütfen her bir ifadeye ne derece katıldığınızı sunulan ölçek üzerinde belirtiniz.

1: Kesinlikle katılmıyorum; 2: Katılmıyorum; 3: Biraz katılıyorum; 4: Katılıyorum; 5: Kesinlikle katılıyorum

1	Yöneticim bilmeden bir hata yaptığımda beni kurumdaki diğer kişilere karşı savunur.	1	2	3	4	5
2	Yöneticim işler çıkmaza girdiğinde güvenebileceğim biridir.	1	2	3	4	5
3	Yöneticim işimle ilgili sorunları dinlemeye her zaman için hazırdır.	1	2	3	4	5
4	Yöneticim işimde önemli bir şey başardığımda takdir edilmemi sağlar.	1	2	3	4	5
5	Yöneticim görüşlerimi dikkate alır.	1	2	3	4	5
6	Yöneticim işime yönelik amaç ve isteklerimi öğrenmek için bana zaman ayırır.	1	2	3	4	5
7	Yöneticim bir işi iyi yaptığımda beni takdir eder.	1	2	3	4	5
8	Yöneticim performansımı nasıl geliştireceğim konusunda bana yol gösterir.	1	2	3	4	5
9	Yöneticim işimi yapmamda yardımcı olur.	1	2	3	4	5
10	Yöneticim çalışanlarını başkalarına karşı canla başla savunur.	1	2	3	4	5
11	Yöneticim sağlık, mutluluk gibi genel durumumla ilgilenir.	1	2	3	4	5

E. PERCEIVED CO-WORKER SUPPORT SCALE

Aşağıda iş yerinde karşılaşılabilen, çalışma arkadaşlarınızla ilgili bazı davranış örnekleri sunulmaktadır. Lütfen her bir ifadeye ne derece katıldığınızı sunulan ölçek üzerinde belirtiniz.

1: Kesinlikle katılmıyorum; 2: Katılmıyorum; 3: Biraz katılıyorum; 4: Katılıyorum; 5: Kesinlikle katılıyorum

1	Çalışma arkadaşlarım bir derdim olduğunda yakın ve anlayışlı davranırlar.	1	2	3	4	5
2	Çalışma arkadaşlarım işimle ilgili sorunları dinlemeye her zaman için hazırdırlar.	1	2	3	4	5
3	Çalışma arkadaşlarım işimi yapmamda yardımcı olurlar.	1	2	3	4	5
4	Çalışma arkadaşlarım konuşmaya ihtiyaç duyduğumda beni dinlerler.	1	2	3	4	5
5	Çalışma arkadaşlarım bir işi iyi yaptığımda beni takdir ederler.	1	2	3	4	5
6	Çalışma arkadaşlarım işler çıkmaza girdiğinde güvenebileceğim kişilerdir.	1	2	3	4	5
7	Çalışma arkadaşlarım hayatımı zorlaştırırlar.	1	2	3	4	5
8	Çalışma arkadaşlarım yönetimle bir sorun yaşadığımda bana arka çıkarlar.	1	2	3	4	5
9	Çalışma arkadaşlarım hasta olduğum ve işte olmadığım zamanlarda işlerimi üstlenirler.	1	2	3	4	5

F. SAMPLE ITEMS FROM EMOTIONAL EXHAUSTION SCALE

Aşağıda iş hayatında deneyimlenebilen bazı duygular ifade edilmiştir. Lütfen cümleleri dikkatlice okuyarak söz konusu ifadeyi ne sıklıkla yaşadığınızı sunulan ölçek üzerinde belirtiniz.

1: Hiç;   2: Nadiren;   3: Bazen;   4: Sık sık;   5: Her zaman

1	İşimden soğuduğumu hissediyorum.	1	2	3	4	5
3	Sabah kalktığımda bir gün daha bu işi kaldıramayacağımı hissediyorum.	1	2	3	4	5
5	Yaptığım işten yıldığımı hissediyorum.	1	2	3	4	5

G. SAMPLE ITEMS FROM CHECKLIST INDIVIDUAL STRENGTH SCALE

Bu sayfada 20 ifade bulunmaktadır. Genellikle nasıl hissettiğinizi göz önüne alarak bu ifadelerin ne derece doğru olduğunu sunulan ölçek üzerinde belirtiniz.

1’den 7’ye doğru ifadenin doğruluk oranı azalmaktadır.

1-Evet, doğru. 7-Hayır, doğru değil.							
1. Kendimi yorgun hissederim.	1	2	3	4	5	6	7
2. Kendimi oldukça canlı hissederim.	1	2	3	4	5	6	7
3. Fiziksel olarak bitkin hissederim.	1	2	3	4	5	6	7
4. Zinde hissederim.	1	2	3	4	5	6	7
5. Bir gün içinde oldukça fazla şey yaparım.	1	2	3	4	5	6	7
6. Herhangi bir şey yaparken dikkatimi çok iyi toparlayabilirim.	1	2	3	4	5	6	7
7. Kendimi güçsüz hissederim.	1	2	3	4	5	6	7
8. Kendimi dinlenmiş hissederim.	1	2	3	4	5	6	7
9. Dikkatimi toplamakta zorluk çekerim.	1	2	3	4	5	6	7
10. Fiziksel olarak kendimi kötü hissederim.	1	2	3	4	5	6	7
11. Yaptıklarımdan memnun olmam.	1	2	3	4	5	6	7
12. Fiziksel olarak iyi durumda olduğumu hissederim.	1	2	3	4	5	6	7

H. FLOURISHING SCALE

Aşağıda verilen ifadelere ne derece katıldığınızı sunulan ölçek üzerinde belirtiniz.

1: Kesinlikle katılmıyorum; 2: Katılmıyorum; 3: Biraz katılıyorum; 4: Katılıyorum; 5: Kesinlikle katılıyorum

1. Amacı olan, anlamlı bir yaşam sürerim.	1	2	3	4	5
2. Sosyal ilişkilerim destekleyici ve doyurucudur.	1	2	3	4	5
3. Günlük faaliyetlerimi ilgiyle ve kendimi vererek yaparım.	1	2	3	4	5
4. Başkalarının mutluluk ve iyilik hâllerine aktif olarak katkıda bulunurum.	1	2	3	4	5
5. Benim için önemli olan faaliyetlerde yetkin ve yeterliyimdir.	1	2	3	4	5
6. İyi bir insanım ve iyi bir hayatım var.	1	2	3	4	5
7. Geleceğim hakkında iyimserim.	1	2	3	4	5
8. İnsanlar bana saygı duyar.	1	2	3	4	5

I. DEMOGRAPHIC INFORMATION FORM

Lütfen aşağıdaki soruları sizin için en doğru bilgilerle yanıtlayınız.

1. Yaşınız: ____ (Sayı ile belirtiniz.)
2. Cinsiyetiniz: Kadın____ Erkek ____
3. En son aldığınız eğitim derecesi:
   ☐ İlkokul
   ☐ Ortaokul
   ☐ Lise
   ☐ İki yıllık yüksekokul
   ☐ Üniversite (dört yıllık)
   ☐ Yüksek lisans
   ☐ Doktora
4. Mesleğiniz: ____
5. Şu anda çalıştığınız şehir: ____
6. Şu anda çalıştığınız sektör:

   ☐ Üretim
   ☐ Turizm, Konaklama, Yiyecek-İçecek Hizmetleri
   ☐ Bilim ve Mühendislik
   ☐ Sağlık
   ☐ Eğitim
   ☐ Yönetim
   ☐ Adalet ve Güvenlik
   ☐ Bilgi ve İletişim Teknolojileri
   ☐ Hukuk, Sosyal ve Kültür ile ilgili meslekler
   ☐ Diğer
7. Şu anda çalıştığınız kurumda kaç yıldır çalışmaktasınız? (Örn. 1 yıl 4 ay veya 3 yıl 0 ay):
   ____ yıl ____ ay
8. Toplam kaç yıldır çalışıyorsunuz (şu anda çalıştığınız kurumdaki süre dahil olmak üzere toplam çalışma süreniz)? (Örn. 1 yıl 4 ay veya 3 yıl 0 ay):
   ____ yıl ____ ay
9. Şu anda çalıştığım kurumda
   ☐ Yöneticiyim.
   ☐ Yönetici değilim.

   Yönetici iseniz:
   ☐ Üst düzey yöneticiyim. ☐ Orta düzey yöneticiyim. ☐ Şefim/Amirim.
10. Lütfen pandemi dönemi boyunca çalışma şeklinizi en iyi tanımlayan seçeneği işaretleyiniz.
    ☐ Tamamen evden çalışıyorum.
    ☐ Çoğunlukla evden çalışıyorum.
    ☐ Evde ve iş yerinde çalıştığım süre aynı.
    ☐ Çoğunlukla iş yerinde çalışıyorum.
    ☐ Tamamen iş yerinde çalışıyorum.
    Diğer (Belirtiniz): ___________

J. HYPOTHESIZED MODERATED MEDIATION PATH MODEL FOR PHYSICAL WELLBEING

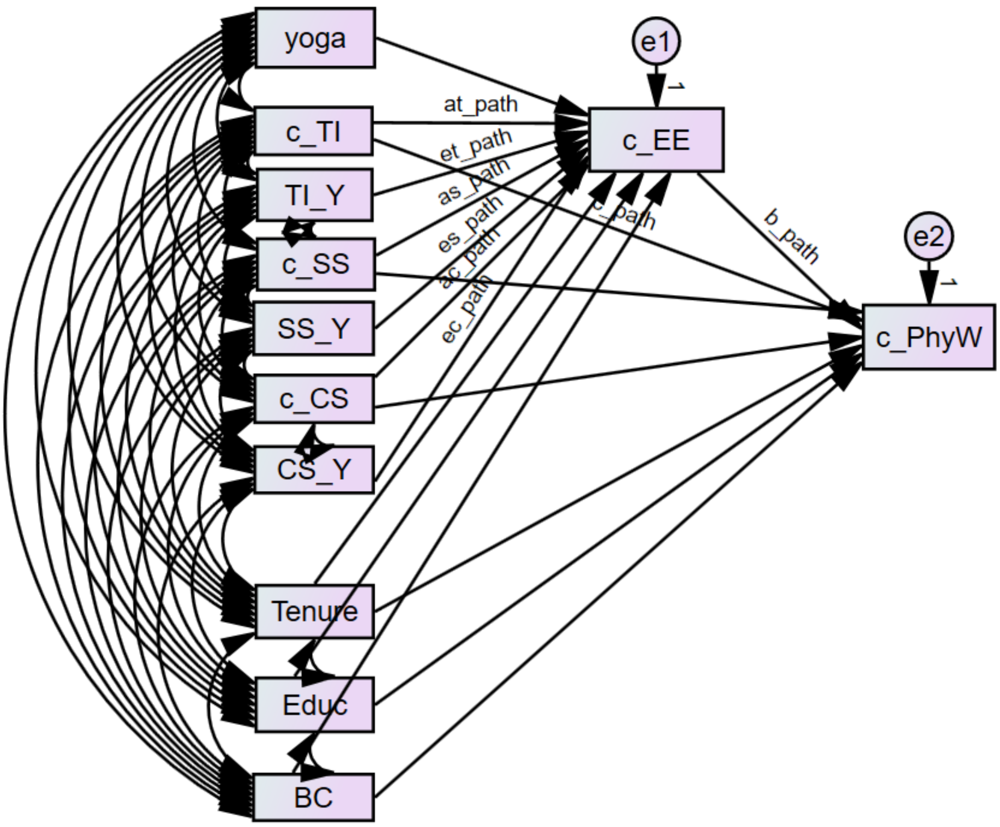

Figure 7. Hypothesized Moderated Mediation Path Model for Physical Wellbeing

Notes:c_TI=Techno-invasion, Y=yoga (1=yes, 0=no), c_SS= Supervisor support, c_CS= Co-worker support, TI_Y= interaction term between yoga and techno-invasion variable, SS_Y= interaction term between yoga and supervisor support variable, CS_Y= interaction term between yoga and co-worker support variable, c_EE=Emotional exhaustion, c_PhyW= Physical wellbeing, Educ=Education level (1=high school, 2=college degree, 3=graduate degree), BC=Working in big cities (1=yes, 0=no)

K. TURKISH SUMMARY / TÜRKÇE ÖZET

İyi oluş, olumlu duygularla dolu bir durumu tanımlar ve kişinin bu dünyadaki tüm potansiyelini gerçekleştirmesine işaret eder (Simons ve Baldwin, 2021). Modern insan için iş, hayatın anlamının önemli bir parçası olduğundan günümüzde işyerleri bireylerin iyi oluşu üzerinde çok önemli bir rol oynamaktadır (Litchfield, Cooper, Hancock & Watt, 2016; Thompson & Bates, 2009). Bununla birlikte, sürekli değişen ve hızlı tempolu iş yerlerinde çalışan iyi oluşunu sürdürmek, ilgili tüm taraflar için önemli zorluklardan biridir. Bu nedenle, çalışanlar, yöneticiler, kuruluşlar ve akademisyenler gibi çeşitli paydaşlar tarafından çalışan iyi oluşuna artan bir ilgi ve vurgu vardır. Giderek artan sayıda araştırma, iyi oluş hâlinde bozulmanın birey için açıkça bazı olumsuz sonuçlar doğurduğunu ve aynı zamanda azalan verimlilik, artan devamsızlık, personel devri ve işyeri çatışmaları gibi firmalar üzerinde de önemli olumsuz etkileri olduğunu göstermektedir (Thompson & Bates, 2009). Dolayısıyla iyi oluş sadece çalışanları ilgilendiren bir konu değil, aynı zamanda firmaları da olumsuz olarak etkileyen bir konudur. Organizasyonlara sonuç getirenin ve rekabet avantajı sağlayanların insanlar olduğu açıktır (Kowalski & Loretto, 2017). Bir iş stratejisi olarak yalnızca sonuç odaklı ölçütlere odaklanmanın ve çalışanların iyi oluşunu ihmal etmenin, mutsuz ve sağlıksız işyerlerine neden olacağı ve duygusal tükenmişliğe yol açacağı muhtemeldir (Litchfield ve diğerleri, 2016).

Günümüzde, işyerlerinde çalışan iyi oluşunu tehdit eden en büyük konulardan biri tükenmişliktir (burnout) (Maslach ve diğerleri, 2001; Schaufeli ve diğerleri, 2008). Tükenmişlik, çalışanların iyi oluşuna zarar veren, giderek artan bir işyeri olgusudur. Duygusal tükenmeye, bireyin kendi işine duyarsızlaşmasına ve mesleki yetersizlik hissine yol açar (Maslach ve Jackson, 1984). Kişinin enerjisini ve kaynaklarını tüketen iş stresine sürekli maruz kalması nedeniyle fiziksel, zihinsel ve duygusal tükenme durumu olarak tanımlanır. Tükenmişliğin bireyler için depresyon, anksiyete, fiziksel hastalıklar gibi ciddi sonuçları ve buna bağlı olarak örgütler için önemli maliyetleri vardır (Ahola ve Hakanen, 2014). Bu nedenle, bilim adamları sürekli olarak tükenmişlik sendromu için önleyici tedbirler almayı vurgulamaktadır (Leiter, Bakker & Maslach, 2014). Tükenmişliğin olumsuz etkilerini hafifletmek için nasıl oluştuğunu anlamak önemlidir. Tükenmişliği açıklayan ve yaygın olarak kabul edilen teorik bir model olan İş Talepleri ve İş Kaynakları modeline göre tükenmişlik iki aşamada gerçekleşmektedir. İlk olarak, yüksek iş talepleri duygusal tükenmişliğe yol açar. İkinci olarak, yüksek talepler nedeniyle oluşan değerli kaynakların kaybını telafi edecek iş kaynaklarının eksikliği bu deneyime katkıda bulunur ve duyarsızlık davranışlarına veya düşük motivasyona yol açar (Demerouti ve diğerleri, 2001). İş Talepleri ve İş Kaynakları modeline göre duygusal tükenmişlik, iş talepleri ile sağlık sorunları arasındaki dolaylı negatif ilişkiye aracılık etmektedir. Ek olarak, duygusal tükenmişlik, tükenmişliğin sağlık sorunları ile doğrudan ve olumsuz bir şekilde ilişkili temel bileşenidir (Schaufeli ve Taris, 2014). Buna göre duygusal tükenmişliğin olumsuz etkilerini azaltmak, tükenmişliği önlemenin etkili bir yolu olabilir (Gaines ve Jermier, 1983; Alarcon, 2011).

Duygusal tükenmişliğin öncülleri, yüksek iş talepleri ve ilgili koşulların veya stres faktörlerinin açığa çıkardığı ihtiyaçları karşılayabilecek yetersiz iş kaynaklarıdır (Demerouti ve diğerleri, 2001). Bugüne kadar birçok çalışma duygusal tükenmişlik ile çeşitli iş talepleri ve iş kaynakları arasındaki ilişkiyi araştırmış olsa da, işyerlerinde meydana gelen değişimler nedeniyle yeni ortaya çıkan teknoloji ile ilgili talepler gibi iş taleplerinin duygusal tükenmişlik aracılığıyla bireylerin iyi oluşları üzerindeki dolaylı etkilerini nispeten az çalışma araştırmıştır. Oysaki teknoloji, bireylerin çalışma şeklini önemli ölçüde etkilemiştir ve teknolojiyle birlikte çalışanlar çalıştıkları yer ve zaman konusunda esneklik kazanmışlardır. Ek olarak, e-postalar, akıllı telefonlar ve video konferanslar gibi bilgi ve iletişim teknolojileri sayesinde işle ilgili konularda kullanılabilecek yeni iletişim yolları açığa çıkmıştır (Steenbergen, Van der Ven, Peeters & Taris, 2018). Teknolojinin avantajlarına rağmen, tüm bu değişiklikler çalışanların iş ve özel yaşamları arasındaki sınırları bulanıklaştırmaktadır. Bu durum, teknostres literatüründe tekno-istila olarak adlandırılmaktadır ve çalışanın işle ilgili konularda her zaman ve her yerde bağlantıda olmak zorunda hissetmesine neden olur (Köffer, Anlauf, Ortbach & Niehaves, 2015). Önemli teknostres faktörlerinden biri olarak, tekno-istila, günümüz işlerinde baskın bir iş talebidir ve yaygınlığı, covid-19 pandemi gereksinimleriyle hızlanan uzaktan çalışma şartlarının yaygınlaşmasıyla daha da artmıştır (Bauwens, Denissen, Beurden & Coun, 2021).). Bu nedenle, tükenmişliğe neden olma potansiyelini ve dolayısıyla çalışan iyi oluşu üzerindeki olumsuz etkilerini araştırmak daha önemli hâle gelmektedir.

Birkaç çalışma, tekno-istilanın duygusal tükenmişlik ve tükenmişlik üzerindeki artırıcı etkilerini göstermiştir (Schaufeli ve diğerleri, 1995). Ek olarak, araştırmalar, bir iş talebi olarak tekno-istilanın vücuttaki stres tepkilerini harekete geçirdiğini ve dolayısıyla bireylerin sağlıklarına zarar verdiğini göstermiştir (Knardahl ve Ursin, 1985). Bu nedenle bireylerin ve kuruluşların, teknolojinin olumsuz etkilerini hafifletmek için teknolojinin bireyin yaşamına egemen olması durumunu yönetmenin yollarını bulması gerekmektedir.

Her şeyden önce, İş Talepleri ve İş Kaynakları modeli ve Kaynakların Korunması teorisine dayanarak, iş kaynakları, duygusal tükenmişlik gibi iş taleplerinin olumsuz etkilerini zayıflatabilir (Schaufeli ve Bakker, 2004; Hobfoll, 2002). Bir iş kaynağı olarak sosyal desteğin, işyeri stresinin olumsuz etkilerini azaltmadaki etkin rolü yıllar içinde yapılan araştırmalarla kanıtlamıştır. Araştırmalar, doğru kaynaklardan gelen ve bireyin mevcut ihtiyaçlarına yönelik olan sosyal desteğin, duygusal tükenmişlik ile negatif ilişkili olduğunu göstermektedir (Poulsen vd., 2016). İşle ilgili taleplerde, yönetici desteği ve çalışma arkadaşları desteği, duygusal tükenmişlik üzerinde önemli azaltıcı etkiler göstermiştir (Bakker ve diğerleri, 2005; Hall, 2007). Bu nedenle, destekleyici ve olumlu bir çalışma ortamı, yüksek iş taleplerinin olumsuz etkilerini azaltmak için önemli bir etken olabilir.

Ek olarak, Schaufeli ve Enzmann (1998), birey odaklı başa çıkma stratejilerinin duygusal tükenmişliği etkin bir şekilde azalttığını belirtmişlerdir. Tükenmişlik için etkinliğini kanıtlamış birey odaklı başa çıkma stratejilerinden biri de fiziksel bir aktivite olarak yogadır. Yoga, diğer fiziksel aktivitelere göre en az aynı oranda veya daha yüksek oranda bireyin sağlığı üzerinde artırıcı etki göstermektedir (Ross, Friedmann, Bevans & Thomas, 2012). Ayrıca, giderek artan sayıda araştırma, bir başa çıkma stratejisi olarak yoganın farklı iş türleri için tükenmişliği ve duygusal tükenmişliği azalttığını göstermektedir (Roeser ve diğerleri, 2013; Alexander ve diğerleri, 2015). Bu nedenle, yoga, tekno-istila sonucu açığa çıkan duygusal tükenmişliği azaltmak için etkin bir başa çıkma stratejisi olabilir. Ek olarak, Gard ve diğerleri (2014) tarafından önerilen yoga modeline göre yoga, parasempatik kontrol yoluyla öz düzenlemeyi ve öz farkındalığı geliştirmektedir. Artan öz farkındalık, bireyin tarafsız bir şekilde, herhangi bir kişisel yargı olmaksızın kendi durumunun farkında olmasını sağlar ve böylece, çevresindeki destek kaynaklarını daha iyi fark edebilir. Ayrıca artan öz farkındalık, kişinin stres unsurlarına yönelik değerlendirmesini olumlu yönde değiştirebilir. Böylece, bireyin stresle başa çıkma kapasitesi gelişebilir.

Bütün bunları göz önünde bulundurarak, bu araştırma, tekno-istila, yönetici desteği ve çalışma arkadaşları desteğinin duygusal tükenmişlik yoluyla bireyin fiziksel ve psikolojik sağlığı/iyi oluşu üzerindeki dolaylı ilişkisini araştırmaktır. Ayrıca, bu ilişki üzerinde yoganın düzenleyici rolü değerlendirilecektir. Buna göre, mevcut araştırma aşağıdaki araştırma sorularına cevap bulmaya çalışmaktadır:

1. Bir iş talebi olarak tekno-istila ve iş kaynakları olarak yönetici desteği ve çalışma arkadaşları desteği duygusal tükenmişliği, fiziksel iyi oluşu ve psikolojik iyi oluşu ne ölçüde etkilemektedir?

2. Tekno-istila, yönetici desteği ve çalışma arkadaşları desteğiyle fiziksel iyi oluş ve psikolojik iyi oluş arasındaki ilişkilere duygusal tükenmişlik ne ölçüde aracılık etmektedir?

3. Bu olası dolaylı etkiler ne ölçüde yoga tarafından düzenlenmektedir?

Çalışmanın Önemi

Mevcut çalışma, tekno-istilanın bir iş talebi olarak, yönetici desteği ve çalışma arkadaşları desteğinin iş kaynakları olarak fiziksek ve psikolojik sağlık üzerindeki dolaylı etkilerini ve yoganın bu ilişkiler üzerindeki düzenleyici etkisini ölçmeyi hedeflemektedir. Dolayısıyla bu araştırma, iş talepleri ve iş kaynakları modeline çeşitli katkılar sunmayı amaçlamaktadır. Her şeyden önce, bu çalışma, iş kaynaklarının duygusal tükenmişlik yoluyla fiziksel ve psikolojik iyi oluş üzerindeki dolaylı etkisini ölçerek iş talepleri ve iş kaynakları modelinin sağlıkta bozulma sürecine ek veriler sunacaktır. Ayrıca, duygusal tükenmişlik ile iş talepleri ve iş kaynakları arasındaki ilişki üzerinde yoganın düzenleyici etkisini dâhil ederek modeli inceleyecektir.

Böylece, iş kaynaklarının da duygusal tükenmişlik aracılığıyla fiziksel ve psikolojik iyi oluş üzerinde olumlu etkisi olup olmadığı değerlendirilecektir.

Ayrıca, iş talepleri ve iş kaynakları modelini temel alarak teknostres unsurlarının duygusal tükenmişlik üzerindeki etkilerini değerlendiren nispeten az araştırma vardır. Bu çalışma, bir iş talebi olarak tekno-istilanın, duygusal tükenmişlik yoluyla fiziksel ve psikolojik iyi oluş üzerindeki dolaylı etkisini inceleyerek iş talepleri ve iş kaynakları modeline ve teknostres literatürüne katkıda bulunacaktır. Ayrıca, teknostres etkenlerini araştıran çalışmaların çoğu, teknostres değişkenini tek başına değerlendirmektedir. Konunun daha iyi anlaşılması için teknostresin bileşenlerinin etkilerini ayrı ayrı değerlendirmeye ihtiyaç vardır. Bu nedenle, bu araştırma, tekno-istilanın duygusal tükenmişlik üzerindeki doğrudan etkisini ve fiziksel ve psikolojik sağlık üzerindeki dolaylı etkisini inceleyerek bu konuyla ilgili önemli bilgiler sunmayı hedeflemektedir.

Ayrıca, bu çalışma, farklı sosyal destek kaynaklarının (yönetici desteği ve çalışma arkadaşları desteği) duygusal tükenmişlik, fiziksel iyi oluş ve psikolojik iyi oluş üzerindeki etkileri hakkında bilgi sağlayacaktır. Ek olarak, araştırmanın sonuçları iş kaynaklarının duygusal tükenmişlik ve fiziksel ve psikolojik iyi oluş üzerindeki etkilerini inceleyerek kaynakların korunması teorisine de destekleyici veriler sunmayı amaçlamaktadır.

Dolayısıyla, tüm bu ilişkileri değerlendirmek için kapsamlı bir yol modeli SPSS AMOS programı kullanılarak test edilecektir. Yol modeline tekno-istila, yönetici desteği ve çalışma arkadaşları desteği üç bağımsız değişken olarak dâhil edilecek, duygusal tükenmişlik aracı olarak eklenecek ve fiziksel ve psikolojik iyi oluş ayrı ayrı bağımlı değişken olarak incelenecektir. Ayrıca yoga, modele düzenleyici olarak dâhil edilecektir. İki model de üç kontrol değişkeni eklenerek test edilecektir. Böylece bu çalışma, araştırmacının bilgisi dâhilinde sınırlı olarak kullanılmış olan bir araştırma yöntemine örnek teşkil edecektir.

Çalışmanın Yöntemi

Çalışma yöntemi olarak ilişkisel nicel araştırma yöntemi seçilmiştir. Birincil veri toplama yöntemi olarak anket kullanılmıştır. Çalışmanın hedef kitlesi, farklı sektörlerde ve görevlerde aktif olarak çalışan iki gruptan oluşmaktadır: düzenli olarak yoga uygulayanlar ve yoga uygulamayanlar. Veriler, esas olarak e-posta ve sosyal platformlar aracılığıyla dağıtılan çevrimiçi bir anket aracılığıyla toplanmıştır. Ayrıca, Ankara'da bulunan 2 yoga merkezine öğrencilere dağıtılması amacıyla basılı anket de verilmiştir. Anketi cevaplayanlar arasında yoga uygulayanların ve uygulamayanların sayıları arasındaki farkı azaltmak için sosyal platformlar aracılığıyla çeşitli yoga öğretmenleri ve yoga merkezleriyle iletişime geçilmiş ve çevrimiçi anket iletilmiştir. Bu şekilde, toplamda 637 kişi anketi açmış, 371 kişi bütün anketi tamamlamıştır. Anketi tamamlamayanlar veri analizi aşamasına dahil edilmemiştir.

Anket 9 alt bölümden ve 69 sorudan oluşmaktadır. Ek olarak, yoga uygulayıcılarına uygulamalarının detayları ile ilgili olan 6 çoktan seçmeli soru sorulmuştur. Ankette, katılımcıların demografik bilgilerine yönelik 10 soru sorulmuştur. Tüm bilgiler isimsiz olarak toplanmış ve anketin hem çevrimiçi hem de basılı formunda katılımcılara araştırmanın amacı hakkında kısa bilgiler verilmiştir. Çevrimiçi anketteki tüm sorular yanıtlanması zorunlu olacak şekilde ayarlanmıştır. Anketin dili Türkçe'dir ve anket dağıtılmadan önce ODTÜ İnsan Araştırmaları Etik Kurulu tarafından onaylanmıştır (Bkz. Ek A).

Araştırmada kullanılan değişkenlerin ölçümü için başka araştırmacılar tarafından geçerliliği ve güvenilirliği kanıtlanmış ölçekler kullanılmıştır. Hipotezler test edilmeden önce eksik veri analizi, veri temizliği, aykırı gözlem analizi ve regresyon analizi için gereken varsayımların kontrolü yapılmıştır. Az sayıdaki eksik veriler serinin ortalamasıyla doldurulmuştur. Aykırı gözlem analizi sonucu, 18 anket verisi aykırı olarak tespit edilmiş, hipotez testi aşamasına dâhil edilmemiştir ve regresyon varsayımlarının hepsi kabul edilebilir bulunmuştur. Düzenleyici aracılık modeli SPSS AMOS'ta hazırlanmıştır. Şartlı aracılık etkisi indeksinin ve aracılık etkisinin test edilebilmesi için kullanıcı tanımlı tahminleme formülleri AMOS'a girilmiştir.

Çalışma Bulguları ve Tartışma

İlk olarak, düzenleyici aracılık modellerinin farklı model uyum indekslerine göre örnekleme uygunluğu değerlendirilmiştir. Sonuçlara göre, hem fiziksel iyi oluş bağımlı değişkenli modelin hem de psikolojik iyi oluş bağımlı değişkenli modelin örneklem verisine uygun olduğu görülmüştür. Model uyum indekslerinin hepsi, iyi bir model uyumu göstermiştir.

Bağımsız değişkenlerin (tekno-istila, yönetici desteği ve çalışma arkadaşları desteği) duygusal tükenmişlik, fiziksel iyi oluş ve psikolojik iyi oluş üzerindeki doğrudan etkileri, yol modelinde test edilmiştir. Sonuçlara göre tekno-istila ile duygusal tükenmişlik arasında anlamlı ve pozitif bir ilişki ve yönetici desteği ile duygusal tükenmişlik arasında anlamlı ve negatif bir ilişkili tespit eidlmiştir. İş talepleri ve iş kaynakları modeli göz önüne alındığında, iş talebi olarak tekno-istilanın duygusal tükenmişlik ile pozitif ilişkisi ve iş kaynağı olarak yönetici desteğinin duygusal tükenmişlik ile negatif ilişkisi beklenmekteydi. Bu nedenle, bu sonuçlar çalışmanın hipotezlerini desteklemiştir. Bulgular, daha önceki teknostres çalışmalarında bulunan sonuçlarla da tutarlıydı. Bugüne kadar yapılan çalışmalar; tekno-istila olarak da adlandırılan iş talebinin -yani çalışanlardan teknoloji aracılığıyla işle ilgili talepler için sürekli ulaşılabilir durumda olmalarının beklenmesinin- günümüzdeki değişen çalışma şartları ve artan teknoloji kullanımı göz önüne alındığında çalışanlar için önemli bir stres kaynağı olabileceğini göstermişlerdir (Tarafdar vd., 2015; Ghislieri vd., 2017). Önceki çalışmalar, tekno-istilanın, günümüz işyerlerinde baskın bir iş talebi olarak duygusal tükenmişlik ile pozitif ilişkili olduğunu göstermiştir (Bauwens vd., 2021; Gaudioso, Turel ve Galimberti, 2017; Kim vd., 2015). Ayrıca, yönetici desteği ve duygusal tükenmişlik arasındaki negatif yönlü ilişki literatürdeki birçok çalışma bulgusu ile uyumludur (Bakker vd., 2005; Gibson, Gray & Hasting, 2009; Zhao, Wang, Wu & Dong, 2021; Weinert vd., 2021). Sosyal desteğin, duygusal tükenmişlik üzerindeki azaltıcı etkisinin nedeni, literatürde farklı şekillerde açıklanmaktadır. Örneğin, kaynakların korunması teorisine göre, değerli kaynakları kaybetme algısı duygusal tükenmişliğe yol açar. Dolayısıyla sosyal destek gibi ek kaynak kazanımı yaratabilecek kaynaklar, duygusal tükenmişlik ile negatif ilişkilidir (Hobfoll, 2002; Hobfoll, 2001). Ek olarak, stres tampon etki modeli, sosyal desteğin duygusal tükenmişliğin etkilerini azaltabileceğini ve dolayısıyla bireyin iyi oluşunu destekleyebileceğini öne sürmektedir (Cohen ve Wills, 1985). Bu nedenle, bu çalışmanın bulguları önceki bulgular ve teoriler ile uyumludur. Ayrıca, çalışmanın sonuçlarına göre, ilgili hipotezin aksine, çalışma arkadaşları desteğinin duygusal tükenmişlik ile negatif ilişkisi anlamlı bulunmamıştır. Literatürde bu sonuçlara benzer bulgular gösteren araştırmalar mevcuttur. Aynı modelde hem yönetici desteğinin hem de çalışma arkadaşları desteğinin duygusal tükenmişlik üzerindeki etkisi ölçüldüğünde, yönetici desteğinin negatif yönlü etkisi anlamlı bulunurken çalışma arkadaşları desteğinin etkisi anlamlı bulunmayan bazı çalışmalar mevcuttur (Constable ve Russell, 1986; Spooner Lane ve Patton, 2007). Bu sonucun olası bir nedeni olarak mevcut iş talebi, çalışma ortamı ve sosyal desteğin kaynağı arasındaki uyumsuzluk gösterilmektedir. Ayrıca, Cutrone ve Russell'a (1990) göre sosyal desteğin duygusal tükenmişlik üzerindeki azaltıcı etkisini görebilmek için mevcut destek kaynağının mevcut durumun ve iş taleplerinin ihtiyaçlarını karşılayabilmesi gerekir. Buna göre, yönetici desteği, tekno-istilanın etkisi altındayken ve mevcut örneklem için çalışma arkadaşları desteğinden daha uygun olabilir.

Mevcut çalışmada, bağımsız değişkenlerin duygusal tükenmişliğin aracı rolü olmaksızın fiziksel ve psikolojik iyi oluş üzerindeki doğrudan etkileri de değerlendirilmiştir. Bulgulara göre, tekno-istila, fiziksel iyi oluş ile negatif ve anlamlı bir şekilde ilişkiliyken, psikolojik iyi oluş ile anlamlı bir şekilde ilişkili değildi. İlk bulgu, literatüre dayalı olarak beklenen bir sonuçken; ikinci bulgu beklenmedik bir sonuçtu. Önceki bazı çalışmalarda da ciddi bir stres etkeni olarak, yüksek düzeyde tekno-istilanın sağlıktaki bozulma ile pozitif olarak ilişkili olduğu bulunmuştur (Elizalde, 2021). Uzaktan çalışma ve teknolojinin sağlık ve iyi oluş üzerindeki etkisi ile ilgili araştırmalar özellikle covid-19 pandemisinden sonra arttı ve bu çalışmalar teknostresörlerin hem fiziksel hem de psikolojik iyi oluş üzerinde olumsuz etkileri olduğunu göstermektedir (Elizalde, 2021; Borle, Reichel, Niebuhr & Voelter-Mahlknecht, 2021; Nisafani, Kiely & Mahony, 2020). Tekno-istilanın fiziksel sağlık üzerindeki negatif etkisi, bu nedenle, bu çalışmada da test edilmiş ve sonuçlara dayalı olarak desteklenmiştir. Ancak, tekno-istila ile psikolojik iyi oluş arasındaki negatif ilişkinin neden anlamlı çıkmadığı net değildir. Ayrıca, ilgili hipotezlerle uyumlu olarak, yönetici desteğinin ve çalışma arkadaşları desteğinin fiziksel ve psikolojik iyi oluş ile anlamlı ve olumlu bir şekilde ilişkili olduğu görülmüştür. Bu sonuçlar, önceki çalışmaların bulgularıyla da tutarlıdır (Turner, 1981; Hämmig, 2017; Swanzy, 2020). Ek olarka, bu çalışmanın sonuçları, sosyal desteğin iyi oluş üzerindeki olumlu etkisini destekleyen çeşitli teorilerle de uyumludur. İş talepleri ve iş kaynakları modeline dayalı olarak, iş kaynakları olan yönetici desteği ve çalışma arkadaşları desteğinin işe bağlılığı artırarak duygusal tükenmişliği azaltacağı ve böylece iyi oluş üzerinde olumlu etki yaratacağı da beklenmekteydi. Sonuçlar, bu ilişkileri de desteklemiştir.

Duygusal Tükenmişliğin Aracı Rolü

Bu çalışmada, bağımsız değişkenlerin (tekno-istila, yönetici desteği ve çalışma arkadaşları desteği) bağımlı değişkenler (fiziksel iyi oluş ve psikolojik iyi oluş) üzerindeki duygusal tükenmişlik aracılığıyla olan dolaylı etkisi araştırılmıştır. Sonuçlara göre tekno-istilanın duygusal tükenmişlik yoluyla fiziksel iyi oluş ve psikolojik iyi oluş üzerindeki negatif dolaylı etkilerinin anlamlı olduğuna dair kanıt sağlamaktadır ve böylece mevcut çalışmanın ilgili hipotezleri desteklenmiştir. Ayrıca, bu sonuçlar, iş talepleri ve iş kaynakları modelinde öngörülen duygusal tükenmişliğin, sağlık sorunları ile iş talepleri arasında önemli aracı rolünü de desteklemektedir. Bugüne kadar, duygusal tükenmişliğin bu aracı rolü, farklı iş talepleriyle doğrulanmıştır (Huang ve diğerleri, 2011; Santa Maria ve diğerleri, 2017). Bu çalışmanın sonuçları, iş talepleri ve iş kaynakları modelini temel alarak duygusal tükenmişlik yoluyla tekno-istilanın fiziksel iyi oluş ve psikolojik iyi oluş üzerindeki anlamlı negatif dolaylı ilişkisini destekleyen ilk katkılardan biri olarak görünmektedir.

Ayrıca, yönetici desteğinin fiziksel iyi oluş ve psikolojik iyi oluş üzerindeki pozitif yönlü dolaylı etkisinin duygusal tükenmişlik yoluyla anlamlı olduğu bulunmuştur. Sonuçlar hipotezleri desteklemiştir. Revize edilen iş talepleri ve iş kaynakları modeli, duygusal tükenmişliğin yalnızca iş talepleri ile sağlık sorunları arasındaki aracı rolüne vurgu yapsa da, iş kaynaklarından tükenmişliğe ve tükenmişlikten sağlık sorunlarına doğru olan ilişki de modelde belirtilmiştir. Dolayısıyla bir iş kaynağı olarak yönetici desteğinin duygusal tükenmişlik yoluyla iyi oluş üzerindeki pozitif dolaylı etkisinin olması beklenmekteydi. Bulgular, ayrıca, kaynakların korunması teorisiyle de uyumludur. Kaynakların korunması teorisi, iş kaynaklarının duygusal tükenmişlik gibi iş taleplerinin olumsuz etkilerini ve dolayısıyla sağlık sorunları gibi sonuçlarını azalttığını öne sürmektedir. Buna göre, mevcut çalışmanın sonuçlarının da desteklediği gibi, duygusal tükenmişlik, yönetici desteği ile fiziksel iyi oluş ve psikolojik iyi oluş arasındaki pozitif ilişkiye anlamlı bir şekilde aracılık etmektedir. Ancak, beklenmedik bir şekilde ve bu açıklamaların aksine, çalışma sonuçlarına göre çalışma arkadaşları desteğinin duygusal tükenmişlik yoluyla fiziksel iyi oluş ve psikolojik iyi oluş üzerindeki pozitif dolaylı etkisi anlamlı bulunmamıştır. Bu bulgunun arkasındaki neden net değildir. Çalışma arkadaşları desteği ile mevcut durumun ihtiyaçları veya mevcut iş talebi arasında uygun bir eşleşme olmaması olası bir açıklama olabilir.

Yoganın Düzenleyici Rolü

Son olarak, yoganın duygusal tükenmişlik yoluyla bağımsız değişkenler ve bağımlı değişkenler arasındaki dolaylı ilişki üzerindeki düzenleyici etkisi araştırılmıştır. Bu modelde öne sürülen düzenleyici etki, bağımsız değişken ile aracı arasındaki ilişki üzerinde değerlendirilmiştir. Araştırmanın sonuçlarına göre tekno-istilanın duygusal tükenmişlik aracılığıyla fiziksel iyi oluş ve psikolojik iyi oluş üzerindeki koşullu dolaylı etkilerinin anlamlı olduğu tespit edilmiştir. Sonuçlar, yoga yapan bireylerde tekno-istila ile duygusal tükenmişlik arasında daha güçlü ve anlamlı bir pozitif ilişki olduğunu göstermiştir. Buna göre, tekno-istila ile fiziksel iyi oluş ve psikolojik iyi oluş arasında daha güçlü ve anlamlı bir negatif ilişki olduğu görülmektedir. Böylece, sonuçlar tahmin edilenin aksine yönde bir düzenleyici etki ortaya koymuştur. Yoga ve farkındalık literatürü, tutarlı bir şekilde yoganın tükenmişlik ve duygusal tükenmişlik üzerindeki etkin azaltıcı etkilerini vurgulamaktadır (Alexander vd., 2015; Cocchiara vd., 2019; Lindahl, Tilton, Eickholt & Ferguson-Stegall, 2016; Ioannou, 2018). Bu nedenle, mevcut araştırmanın literatür bulgularıyla çelişen sonuçlarının altında yatan nedenler net değildir ve kesin bir açıklama sağlamak için araştırmacının bilgisi dahilinde bir mekanizma yoktur. Bununla birlikte, birkaç öneri sunulacaktır. İlk olarak, fiziksel aktivitelerin iyi oluş üzerindeki etkili sonuçlarını deneyimlemek için literatürde bazı yönergeler mevcuttur. Örneğin, fiziksel egzersizlerin iyi oluş üzerinde etkili olması için, orta maksimum çalışma kapasitesinde haftada üç ila dört kez 30 ila 40 dakika egzersiz yapılmalıdır (Ross ve Altmaier, 1994). Buna benzer olarak, yoga uygulamasının olumlu etkilerini deneyimleyebilmek için de uygulama boyunca nefes ve an farkındalığı, uyanık dikkat ve gevşeme gibi bazı gereksinimler vardır. Yoga, bir bütün olarak bireysel bütünlüğü sağlayabilen bilimsel uygulamalar olarak kabul edilir (Betûl, 2011; Brown, 2002). Dolayısıyla uygulamanın içeriği, mevcut çalışmanın beklenmedik sonuçları için olası bir açıklama olabilir. Ayrıca, sonuçlar, yüksek tekno-istila seviyelerine kadar, yoga uygulayıcılarının daha düşük seviyelerde duygusal tükenmişlik deneyimlediklerini ve ancak bir noktadan sonra, yoga yapanların duygusal tükenmişlik düzeylerinin, yoga yapmayanların duygusal tükenmişlik düzeylerini aştığını göstermiştir. Bununla ilgili olarak, Bakker ve Vries (2021) güncel çalışmalarında, artan yüksek düzeyde iş talebi söz konusu olduğunda, çalışanlar, etkili başa çıkma stratejileri uygulayamamaları nedeniyle sağlıklarında bozulmaya neden olan bir kayıp sarmalı yaşama eğiliminde olduklarını öne sürmüşlerdir. Açıklamalara göre yüksek iş talepleri, dikkatin iş taleplerinde daralmasına yol açar ve bu nedenle bireyler, duygusal tükenmişliğin daha da kötüleşmesine yol açan uyumsuz başa çıkma stratejilerini seçme eğilimi gösterirler. Bu nedenle, daha yüksek iş talepleri seviyelerinde, çalışanların stresle başa çıkma stratejilerini ayarlamaları gerekebilir ve bu durum mevcut araştırmanın beklenmedik sonuçlarının nedeni olabilir. Beklenmeyen bulguların bir başka olası nedeni ise yoga grubunun örneklem sayısının azlığından kaynaklanıyor olabilir. Bunlar dışında, literatürdeki bilgilere göre yoga müdahaleleri hakkında doğru sonuçlar elde etmek için deney gibi metodolojik olarak uygun çalışmaların yapılması gerekmektedir (Cocchiara vd., 2019).

Ayrıca sonuçlar, yönetici desteğinin ve çalışma arkadaşları desteğinin duygusal tükenmişlik aracılığıyla fiziksel ve psikolojik iyi oluş üzerindeki koşullu dolaylı etkilerinin mevcut çalışmanın hipotezlerinin aksine önemsiz olduğunu göstermiştir.

Sonuç

Tükenmişlik, çalışanların fiziksel ve psikolojik iyi oluşlarına zarar verebilecek, giderek artan iş yeri olgularından biridir. Temel bileşeni olan duygusal tükenmişliğin hem çalışanlar hem de örgütler üzerindeki olumsuz etkilerini önlemek için uygun şekilde yönetilmesi gerekmektedir. Bu nedenle, bu araştırma, bir iş talebi olarak tekno-istilanın, iş kaynakları olarak yönetici desteğinin ve çalışma arkadaşları desteğinin duygusal tükenmişlik yoluyla fiziksel ve psikolojik iyi oluş üzerindeki koşullu dolaylı etkilerini, yoganın düzenleyici rolünü de dâhil ederek araştırmayı amaçlamıştır. Çalışmanın örneklemi iki gruptan oluşmaktadır: farklı sektörlerde çalışan ve yoga yapan ya da yapmayan çalışanlar. Yol analizi kullanılarak düzenleyici aracılık modeli analizleri yapılmıştır. Araştırma sonuçlarına göre, tekno-istila, duygusal tükenmişlik ile pozitif ve anlamlı bir şekilde; fiziksel iyi oluş ile negatif ve anlamlı bir şekilde ilişkiliydi. Ek olarak, yönetici desteğinin, duygusal tükenmişlik ile negatif ve anlamlı ilişkili olduğu tespit edilmiştir. Ayrıca, yönetici desteği ve çalışma arkadaşları desteğinin fiziksel ve psikolojik iyi oluş ile anlamlı ve pozitif ilişkili olduğu bulunmuştur. Sonuçlara göre, tekno-istilanın fiziksel ve psikolojik iyi oluş üzerindeki negatif ilişkisi ile yönetici desteğinin fiziksel ve psikolojik iyi oluş üzerindeki pozitif ilişkisi arasında duygusal tükenmişliğin anlamlı aracı rolü desteklenmiştir. Tekno-istila ve duygusal tükenmişlik arasındaki ilişki üzerinde yoganın düzenleyici etkisi test edildiğinde önerilen hipotezin aksine yoganın, tekno-istilanın duygusal tükenmişlik üzerindeki pozitif etkisini anlamlı bir şekilde güçlendirdiği bulunmuştur. Ayrıca, yönetici desteğinin duygusal tükenmişlik yoluyla fiziksel ve psikolojik iyi oluş üzerindeki koşullu dolaylı etkileri desteklenmemiştir. Sonuç olarak, mevcut araştırma, anlamlı sonuçlar sunarak örgütsel davranış literatürüne çeşitli şekillerde katkıda bulunmuştur.

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