Research Article

Abusive Supervision as Predictor of Perceived Stress and Cyberloafing at Work*

İş Yerinde Algılanan Stres ve Sanal Kaytarmanın Yordayıcısı olarak İstismarcı Liderlik

Bahtiyar Duran[a], İrem Metin Orta[b]

A B S T R A C T

The increasing prevalence of Internet use in recent years has led to a growing interest among researchers in cyberloafing behaviors. In general, cyberloafing at work is defined as employees' voluntary access of the Internet for personal purposes. Previous research has shown its link with individual and organizational outcomes. This study examines the effects of abusive supervision and perceived stress on cyberloafing behaviors among employees. In addition, it investigates whether perceived stress mediates this relationship. The sample consisted of 265 employees working in various sectors. They participated in an online survey and filled out a questionnaire consisting of items that assess abusive supervision, perceived stress, and cyberloafing behaviors at the workplace. The results showed that abusive supervision positively predicts employees' cyberloafing behaviors. It was also revealed that supervisor's abusive behaviors predict greater levels of perceived stress among employees. However, the experience of stress did not play a mediating role in the relationship between abusive supervision and cyberloafing. This study contributes to a better understanding of the effects of leaders' misbehaviors on employees' perceived stress levels and counterproductive behaviors at work. It also provides suggestions for managing workplace mistreatment.

ÖZ

Son yıllarda internet kullanımının artan yaygınlığı, araştırmacılar arasında sanal kaytarma davranışlarına olan ilginin artmasına neden olmuştur. Genel olarak, işyerinde sanal kaytarma, çalışanların interneti kişisel amaçlar için gönüllü olarak kullanmaları olarak tanımlanmaktadır. Geçmiş araştırmalar bunun bireysel ve kurumsal sonuçlarla bağlantısını göstermiştir. Bu çalışma özellikle istismarcı liderliğin ve algılanan stresin çalışanlar arasında sanal kaytarma davranışları üzerindeki etkilerini incelemektedir. Ayrıca algılanan stresin bu ilişkiye aracılık edip etmediğini de araştırmaktadır. Örneklem, çeşitli sektörlerde çalışan 265 çalışandan oluşmaktadır. Katılımcılar, işyerinde istismarcı liderlik, algılanan stres ve sanal kaytarma davranışlarını değerlendiren maddeleri çevrimiçi anket yoluyla doldurmuşlardır. Araştırmanın sonuçları, istismarcı liderliğin, çalışanların stres düzeylerini ve sanal kaytarma davranışlarını pozitif yönde yordadığını göstermiştir. Ancak, algılanan stres, istismarcı liderlik ve sanal kaytarma arasındaki ilişkide aracı bir rol oynamamıştır. Bu çalışma, istismarcı liderlik davranışlarının çalışanlar tarafından algılanan stres ve iş yerindeki üretkenlik karşıtı davranışlar üzerindeki etkilerinin daha iyi anlaşılmasına katkıda bulunmaktadır. Ayrıca, işyerinde kötü muameleyle başa çıkmak için öneriler sunulmaktadır.

ᵃ *Corresponding Author, Master of Science, bahtiyar.duran53@gmail.com, ORCID: 0000-0003-2617-7480*
ᵇ *Assoc. Prof., Atılım University, Department of Psychology, Ankara, irem.metin@atilim.edu.tr, ORCID: 0000-0001-9253-9158*

1. INTRODUCTION

With the advances in technology and availability of digital devices, the misuse of the Internet has become prevalent among employees at the workplace. A previous report, for instance, has revealed that employees spend 60-80% of their time at work on non-work-related online activities (Kim, Chung, & Oh, 2016). Accordingly, cyberloafing referring to "employees' voluntary use of the Internet for nonwork-related purposes at work" (Lim, 2002, p.677) has received much attention from scholars. This concept, in general, involves a wide range of behaviors such as receiving, checking, and sending personal emails, visiting news, sport and entertainment sites, online shopping, gaming, gambling, and downloading music (Lim, 2002, Vitak, Crouse, & LaRose, 2011). Cyberloafing behaviors have been classified as nonproductive and counterproductive computer use (Mastrangelo, Everton, & Jolton, 2006), and also categorized as minor and serious behaviors (Blanchard & Henle, 2008). With the increased popularity of online communication opportunities, scholars have extended the content of cyberloafing behaviors by adding web-based activities such as downloading applications, chatting, and posting comments on social networking sites (Akbulut, Dursun, Dönmez, & Şahin, 2016). This study examines the organizational and individual predictors of cyberloafing behaviors at work by addressing its recent conceptualization (Akbulut et al., 2016).

Numerous studies have been conducted on the antecedents, consequences, and regulation of cyberloafing at workplace (see Lim & Teo, 2024; Mercado, Giordano, & Dilchert, 2017; Metin Orta & Güngör, 2018; Şimşek & Şimşek, 2019 for a review). Considering its consequences, researchers emphasize both the beneficial and detrimental effects of cyberloafing on individuals and organizations (Şimşek & Şimşek, 2019). For instance, they underlie the positive effects of cyberloafing on individuals' creativity, learning, affectivity, coping with stress, and performance (Anandarajan & Simmers, 2005; Andel, Kessler, Pindek, Kleinman, & Spector, 2019; Bhattacharjee & Sarkar, 2023; Blanchard ve Henle, 2008; Lim & Chen, 2012; İnce & Gül, 2011). Further, they stress increased learning opportunities and capacities, innovative behaviors, organizational citizenship behaviors, work engagement, and productivity among employees (Derin & Gökçe, 2016; Keklik, Kılıç, Yıldız, & Yıldız, 2015; Örücü & Yıldız, 2014; Rajah & Lim, 2011; RuningSawitria, 2012; Syrek, Kühnel, Vahle-Hinz, & De Bloom, 2018).

Despite these positive outcomes, cyberloafing is considered a "doubled-edged sword" (Lim, 2002) that has dark sides as well. In particular, it is argued that cyberloafing leads to depletion of employees' mental and physical energy, interferes with their productivity, workplace harmony and violates the security of the organizations (Aghaz & Sheikh, 2016; Blanchard & Henle, 2008; Glassman, Prosch, & Shao, 2014; Lim, 2002; Örücü & Yıldız, 2014; Özler & Polat, 2012; Page, 2015; Rajah & Lim, 2011; Ugrin, Pearson, & Odom, 2007; Vitak et al., 2011; Yıldız, Yıldız, & Ateş, 2015; Yıldız & Yıldız, 2015). Besides, empirical studies have shown that the effects of cyberloafing vary depending on the type (Lim & Chen, 2012) and the purpose of the behavior (Özkalp & Yıldız, 2018). For instance, browsing activities were related to positive affect and emailing activities were related to negative affect among employees (Lim & Chen, 2012). In addition, cyberloafing behaviors engaged for personal development purposes were negatively associated with work stress while those behaviors engaged for deviant purposes were positively correlated among employees (Özkalp & Yıldız, 2018). Studies indicate mixed findings regarding the consequences of cyberloafing behaviors in workplace.

Considerable research has also addressed the individual (i.e. Kaplan & Çetinkaya, 2014; Örücü & Yıldız, 2014; Ünal & Tekdemir, 2015) and organizational precursors (i.e. Agarwal & Avey, 2020; Kaplan & Öğüt, 2012) of employees' cyberloafing behaviors. In specific, it was argued that deprivation of perceived justice in organizations and neutralization might facilitate cyberloafing behaviors at workplace (Lim, 2002). For instance, when organizations do not meet the expectations of employees (salary, bonus, seniority, fringe benefits, etc.) or when employees perceive unfair treatment at work, it leads them to engage in more cyberloafing behaviors (Agarwal & Avey, 2020; Lim, 2002). It was also proposed that the depletion of self-control resources increases the likelihood of individuals to engage in cyberloafing (Wagner, Barnes, Lim, & Ferris, 2012). According to the study, it was proposed that workplace deviant behaviors may be related to the quality of the relationship with the immediate supervisor (Agarwal, 2019; Mayer, Kuenzi, Greenbaum, Bardes, & Salvador, 2009), in specific, abusive behaviors of the leaders. Previous research has shown that abusive supervision leads to many workplace problems and harmful situations for employees and organizations (Agarwal & Avey, 2020; Tepper, 2000; Wang et al., 2019). For instance, it was demonstrated that abusive behaviors of leaders negatively affect employees' psychological capital (the positive psychological state including hope, efficacy, resilience, and optimism), well-being and health (Agarwal & Avey, 2020; Martinko, Harvey, Brees, & Mackey, 2013; Raza, Ahmed, Zubair, & Moueed, 2019). In addition, unfavorable supervision

is linked to lower commitment, lower job and life satisfaction, greater work-family conflicts, and psychological distress (Tepper, 2000). There has been a discernible decline in employees' commitment to organizations due to emotional exhaustion caused by abusive supervision (Lim, Koay, & Chong, 2020). Past research has also revealed that supervisors' abusive behaviors (Agarwal & Avey, 2020) and passive, aggressive, and assertive communication styles (Agarwal, 2019) lead to lower levels of psychological capital which in turn, is linked to more cyberloafing behaviors among employees.

Grounded on the Conservation of Resources (COR) theory (Hobfoll, 1989), the current study examines the role of perceived stress in explaining the effect of abusive supervision on employees' cyberloafing behaviors. COR theory posits that employees strive to obtain, maintain, and invest appropriate resources to accomplish their tasks at the workplace (Hobfoll, 1989). Events and behaviors at work influence employees' resources and behaviors. Depending on the leaders' behaviors, employees' existing resources may be either replenished or drained (Hobfoll, 1989). Accordingly, we propose that abusive supervision will increase the experience of stress among employees due to the depletion of resources, which in turn will lead to more engagement in cyberloafing behaviors. Previous study has shown higher levels of emotional strain and psychological distress among subordinates who are highly exposed to abusive supervisory behaviors (Pradhan & Jena, 2018; Tepper, 2000). Researchers have also demonstrated links between the experience of work stress and cyberloafing behaviors (Andel et al., 2019; Koay, Soh, & Chew, 2017). Accordingly, this study aims to contribute to the extant literature by examining the effects of organizational (i.e. leadership behaviors) and individual processes (i.e. perceived stress) on cyberloafing behaviors in workplace. Furthermore, it aims to investigate the above-mentioned relationships in Türkiye, a non-Western cultural context with a relatively high-power distance (Hofstede, 1980). Examining the impact of negative leadership behaviors in this cultural context is of critical importance since the frequency of abusive supervision is greater in cultures where social institutions have unequal power distributions (Agarwal & Avey, 2020). Finally, this study will provide practical insights to organizations to address workplace deviance among leaders and misuse of the Internet among employees.

2. THEORETICAL FRAMEWORK AND HYPOTHESIS DEVELOPMENT

2.1. Abusive Supervision and Cyberloafing Behaviors

Abusive supervision is defined as "the employees' perception of the extent to which their superiors engage in non-physical, verbal or non-verbal hostile behaviors in organizations" (Tepper, 2000, p. 178). These behaviors can be classified as wearisome, narcissistic, insincere, and tyrannical leader behaviors (Başar, Sığrı, & Basım, 2016, p. 70), and they can be exemplified by public ridicule, invasion of privacy, rudeness, and inappropriately assigning blame (Tepper, Duffy, Henle, & Lambert, 2006, p. 101). Research on the antecedents of abusive leadership behaviors has shown that past life events and the situations that individuals are exposed to are influential in the formation of abusive supervisory behaviors (Tepper et al., 2006). For instance, supervisors who experience higher levels of stress in both their professional and private lives exhibit more abusive behaviors towards their subordinates (Kiewitz et al., 2012). In another study, it was revealed that supervisors with low leader-member exchange (LMX) relationships and high conflict with their colleagues exhibited more abusive behaviors (Harris, Harvey, & Kacmar, 2011). Furthermore, managers and team leaders who experienced abusive behavior by their leaders were also more likely to exhibit abusive behaviors towards their subordinates (Mawritz, Mayer, Hoobler, Wayne, & Marinova, 2012). Considerable research has been conducted on the effects of abusive supervision (Agarwal & Avey, 2020; Lim et al., 2020; Martinko et al., 2013; Tepper, 2000). The research overall demonstrates that abusive supervision has negative outcomes for the employees' psychological well-being. Tepper (2000) stated in his research that abusive supervision decreases the subordinates' sense of self-worth, job and life satisfaction, and organizational commitment. It also increases subordinates' psychological distress, anger, and their experiences of work-family conflicts. Furthermore, abusive supervision may prevent good sleep and employees may feel exhausted during working hours (Mirowsky & Ross, 1989).

Managers might use their authority for their gain, discouraging the employee and unfairly manage organizational policies (Ashforth, 1997). Previous studies have shown that abusive supervision negatively affects perceived justice in organizations (Tepper, 2000) and employee performance (Aryee, Sun, Chen, & Debrah, 2008). Indeed, the justice perceptions of the subordinates significantly affect their attitudes and reactions toward the organization. According to Bies and Moag (1986), subordinates

who are exposed to acts of disrespect, dishonesty and insensitivity to personal needs resulting from abusive supervision experience interactional injustice. Injustices experienced by employees at work may cause employees to generate anger and retaliate against organizations (Greenberg, 1990). Accordingly, it has been observed that injustices arising from abusive supervision lead to decreased job and life satisfaction, voluntary turnover intention, less commitment to the organization, and less positive attitude towards organizations (Tepper, 2000). Prior work has also demonstrated that abusive supervision negatively affects employees' attitudes toward work, organizational citizenship behaviors, individual performance, innovative thinking, work efficiency, creativity, organizational commitment, and turnover rate (Kish-Gephart, Harrison, & Trevino, 2010; Lim et al., 2020; Liu, Zhang, Liao, Hao, & Mao, 2016; Martinko et al., 2013; Tepper, 2000; Wang et al., 2019). Research shows that abusive supervisory behaviors influence the success and survival of organizations through decreasing subordinates' positive attitudes towards organizations, job satisfaction, and contextual performance.

Considering the effect of a leader's abusive behaviors on employee behavior, this study has addressed cyberloafing behaviors, which is traditionally considered as a form of workplace deviance (Lim, 2002). According to the research, American workers engage in cyberloafing activities to the tune of 61% (Lim & Chen, 2012). In general, cyberloafing behaviors decrease employees' productivity, and performance at work (Wu, Mei, Liu, & Ugrin, 2020). For instance, when they engage in cyberloafing, they need additional time to return to work (Lim & Chen, 2012). This situation results in more waste of time. It has also adverse effects on organizations such as long-term poor performance, problems on organizational structure, work, and reputation, money lost due to legal problems, and damage to organizational reliability (Hadlington & Parsons, 2017; Lim, 2002; Mercado et al., 2017). According to research, when employees engage in cyberloafing behaviors two hours a day, it costs organizations up to 85 billion dollars per year (Zakrzewski, 2016). Given this, it is of interest to researchers and practitioners to understand what factors prevent employees from using their working hours efficiently and fulfilling their job demands (Lim, 2002).

Considerable research was conducted on the predictors of cyberloafing behaviors among employees (Askew et al., 2014; Liberman, Seidman, McKenna, & Buffardi, 2011). Research has shown that employees' negative attitudes toward their work significantly increase the possibility of engaging in counterproductive work behaviors such as cyberloafing (Bennett & Robinson, 2003). When workers are subjected to injustice and unfairness in organizations, they experience negative emotions such as anger and dissatisfaction and are inclined to retaliate against the organization (Lim, 2002). It has been observed that after being exposed to threatening and unfair behaviors by organizations, employees tend to respond to the organizations by engaging in cyberloafing behaviors, and in this way, they try to provide justice by themselves (Blau, Yang, & Kory, 2006). It was also found that workers are more likely to cyberloaf when they believe that their work does not significantly benefit the organization when they are bored at work, or when they have little interest in their work activities (D'Abate, 2005). Moreover, the importance of the tasks assigned to employees in organizations has an impact on their behaviors (Katsikea, Theodosiou, Perdikis, & Kehagias, 2011). If the tasks assigned to employees are insignificant and their impact on the organization is minimal, the employees may feel worthless, and their motivation may decrease. As it is, employees might spend more time on non-work activities. Leaders' abusive behaviors may also cause employees to engage in cyberloafing behaviors since they are considered as unfair treatment. These negative behaviors reduce the motivation, commitment, and performance of the employees, and cause them to retaliate against the organizations by committing deviant behaviors such as cyberloafing (Lian, Lance Ferris, & Brown, 2012). Supporting this, previous research has demonstrated that subordinates exposed to negative leader behaviors were more prone to cyberloafing behaviors (Agarwal, 2019; Agarwal & Avey, 2020; Koay et al., 2022). Based on the research, we propose that employees who are subjected to abusive supervision will engage in more cyberloafing behaviors at work. Thus, we expect that:

H_1: There is a positive relationship between abusive supervision and cyberloafing at work.

2.2. Abusive Supervision and Perceived Stress

This study focuses on the role of perceived stress in the relationship between abusive supervision and cyberloafing behaviors. Scholars define stress as "the body's reaction to external stimuli or the wear rate of the body" (Selye, 1976). Considerable research shows that stress negatively impacts both physical and mental health (Cohen, Janicki-Deverts, & Miller, 2007). For instance, previous studies have shown that perceived stress, the extent to which people perceive the situations/events they encounter as stressful (Cohen, Kamarck, & Mermelstein, 1983), is related to shorter telomere length (Epel, 2012). In general, long telomeres are associated with healthier and longer lifespans, while short telomeres

are associated with poorer health and higher mortality because telomere length is regarded by researchers as a gauge of cellular aging (Parks et al., 2009). It has been found that telomere length is shortened in situations involving negative emotions, such as exposure to stress and abusive behaviors (Humphreys et al., 2012). Considering the negative effects of stress on individuals' well-being, scholars have also discovered a positive link between perceived stress and depression (Stansfeld & Candy, 2006), anxiety (Theorell et al., 2015), and sleep problems (Linton et al., 2015). Physically and mentally negative situations experienced by employees who are exposed to stressful situations such as excessive workload and abusive supervision for a long time prevent employees from coping with stressful situation. For this reason, physical weariness, poor quality sleep, exhaustion, burnout, fatigue, low motivation, and physical and mental complaints can be observed among those employees (Herr et al., 2018).

Empirical research has shown a connection between abusive supervision and psychological distress. It has been observed that abusive behaviors that subordinates are exposed to in the workplace by their supervisors cause an increase in perceived stress, psychological distress, and emotional exhaustion (Akram, Li, & Akram, 2019; Pradhan & Jena, 2018; Tepper, 2000). According to studies, being constantly exposed to abusive supervision has significant adverse effects on subordinates' performance due to an increase in their stress and emotional exhaustion levels (Akram et al., 2019; Aryee et al., 2008; Pradhan & Jena, 2018). In other words, abusive supervision negatively and significantly affects the contextual performance of employees through psychological distress (Martinko et al., 2013). When the correlation between abusive supervision and psychological distress is examined, it has been observed that subordinates exposed to abusive supervision for a long time display many negative consequences both in their professional and private lives.

Perceived stress levels of employees are affected by distress, serious problems, and the number of personal resources they have (Cohen et al., 1983). The abusive behaviors of the superiors in some cases pose a threat to the resources of the subordinates, and sometimes superiors consume their resources. When the resources that employees value and need to live their lives more successfully and happily, are under threat or are rapidly depleted, this causes an increase in the stress levels of employees (Hobfoll, 1989). The conservation of resources theory may explain how abusive supervision increases the perceived stress levels of employees. According to COR theory, individuals should have the things (material

and non-material values) they care about, maintain their existence, and strive to acquire new things (Hobfoll, 1989). The resources that individuals have may be reduced for various reasons and come to an end. Because of decreasing resources, individuals must use fewer resources (time, motivation, energy, etc.) to meet their job demands. Thus, an increase in the stress levels of individuals can be observed (Higgins, Duxbury, & Irving, 1992). More importantly, individuals may devote time and energy from their private lives to complete the tasks that were not completed due to insufficient resources. In this case, further increases are observed in individuals' stress and burnout levels (Bakker, Demerouti, Boer, & Schaufeli, 2003). Abusive supervision is one of the leading factors that cause employees to be in a distressed situation, to worry, and to burn out. The leaders' abusive behaviors such as reminding past mistakes, publicly criticizing, and ridicule of the employee, showing disrespect, devaluing, rudeness, invasion of privacy or inappropriately assigning blame (Tepper et al., 2006) may lead to the draining of personal resources and more stress among employees (Agarwal & Avey, 2020).

In addition, the inability of employees to receive support from their superiors further negatively affects employees' resources (Pradhan & Jena, 2018). Thus, workplace stress is not only a response to the loss of employee resources but also a response to an inability to get new resources (Hobfoll, 1989). Accordingly, considerable research has shown that subordinates who are constantly exposed to abusive supervision experience more distress (Tepper, 2000), and emotional exhaustion (Akram et al., 2019; Aryee et al., 2008, Breaux, Perrewe, Hall, Frink, & Hochwarter, 2008; Pradhan & Jena, 2018), burnout (Martinko et al., 2013), insomnia (Rafferty, Restubog, & Jimmieson, 2010), poor psychological health, and less life satisfaction (Bowling & Michel, 2011). Thus, based on the arguments of COR theory, we propose that employees who are subjected to abusive supervision will perceive more stress. Thus, we expect that:

H_2: There is a positive relationship between abusive supervision and perceived stress.

2.3. The Mediating Role of Perceived Stress

Some researchers propose the experience of stress as an important predictor of cyberloafing behaviors (Andel et al., 2019; Bhattacharjee & Sarkar, 2023; Henle & Blanchard, 2008; Koay et al., 2017; Pindek, Krajcevska, & Spector, 2018; Prakash & Kaur, 2018). They argue that cyberloafing may serve as one way to cope with work stress. According to the Transactional Model of Stress (Lazarus & Folkman,

1984), when individuals view any event as harmful or threatening, they appraise it as a negative stressor. Especially, the pressures, constraints, or stresses that employees experience due to organizational or job-related factors are called role stressors. Studies indicate that the stresses that workers experience affect them both mentally and physically in a negative way. For instance, these employees exhibit behaviors such as leaving the job, showing poor job performance, or engaging in cyberloafing behaviors as a non-work activity (Hang-Yue, Foley, & Loi, 2005). Role ambiguity, excessive workload, and role conflict are examined under the concept of role stressors. One of the most crucial elements influencing the thoughts and behaviors of workers about the organization and work is the roles of employees in the organization. The troubles and stresses experienced by employees due to their roles may cause them to be more interested in non-work activities within the organization. When employee's roles in the organization and their expectations based on these roles are unclear and not known well, this leads to role ambiguity (Rizzo, House, & Lirtzman, 1970). It may also result from the weak communication between the subordinates and the superior, and the insufficient training of the employee (Prakash & Kaur, 2018). It is argued that employees are more prone to cyberloafing because of their ambiguous roles (Blanchard & Henle, 2008; Henle & Blanchard, 2008).

Another stressor that negatively affects employees mentally and physically is excessive workload (Rizzo et al., 1970). If the time and resources required to fulfill the requirements of a task are not sufficient, excessive workload occurs for the employees. Employees lose more resources due to excessive workload, and those employees may attend to non-work activities either to protect their existing resources or obtain new resources (Hang-Yue et al., 2005). For this reason, excessive workload might cause employees to engage in more cyberloafing behaviors at work (Blanchard & Henle, 2008; Korzynski & Protsiuk, 2024; RuningSawitria, 2012). Finally, role conflict is proposed as another stressor (Rizzo et al., 1970) that leads to more cyberloafing behaviors at work (Blanchard & Henle, 2008; Henle & Blanchard, 2008; Prakash & Kaur, 2018; RuningSawitria, 2012). Grounded on the Transactional Model of Stress (Lazarus & Folkman, 1984), cyberloafing is proposed as another form of emotion-focused coping strategy as it allows employees to psychologically detach from the negative effects of workplace stressors (Andel et al., 2019; Henle & Blanchard, 2008). In a related vein, previous studies link employees' cyberloafing behaviors with stressful work conditions (Andel et al., 2019; Bhattacharjee & Sarkar, 2023; Henle & Blanchard, 2008; Koay et al., 2017; Pindek et al.,

2018). Thus, we propose that employees who perceive stress will engage in more cyberloafing behaviors at work.

H₃: There is a positive relationship between perceived stress and cyberloafing at work.

In this study, it is particularly proposed that the relationship between abusive supervision and cyberloafing will be mediated by perceived stress. As stated previously, cyberloafing behaviors engaged by employees during working hours pose a threat to both organizations and employees since it negatively affects work efficiency, productivity, performance, and efficient use of time (Liberman et al., 2011). However, despite these negative outcomes, the desire of subordinates who are exposed to abusive supervision to ensure justice, regain, and protect their resources in the face of injustices motivates them to engage in cyberloafing (Agarwal & Avey, 2020) because employees are more inclined to try to obtain new resources by attending to non-work activities due to the work stress. Employees try to cope with work stress through cyberloafing (Koay et al., 2017) to prevent emotional exhaustion and potential loss of resources (Lim et al., 2020).

The psychological resources of employees who are exposed to abusive supervision for a long time are depleted and therefore negative emotions and situations occur (Wang et al., 2019). Supervisors' abusive behaviors cause an increase in emotional exhaustion and psychological distress (Akram et al., 2019; Pradhan & Jena, 2018; Tepper, 2000). As abusive supervision has harmful effects on the resources of workers gained within the organization, it becomes difficult for them to protect their existing resources and gain new ones (Hobman, Restubog, Bordia, & Tang, 2008). Accordingly, employees may engage in non-work activities to protect their resources and regain their lost resources (Agarwal & Avey, 2020; RuningSawitria, 2012). Drawing upon the premises of COR Theory (Hobfoll, 1989) and past research showing the link between the experience of stress and cyberloafing (Koay et al., 2017), we expect that:

H₄: Perceived stress has a mediating role in the relationship between abusive supervision and cyberloafing at work.

3. METHOD

3.1. Participants and Procedure

The study sample consisted of 265 employees working in various sectors mainly from Ankara, Kocaeli, Istanbul, and Bursa. Among the

participants, 77.7% of them were male (N = 206) while the 22.3% were female (N= 59). The participants' ages ranged from 18 to 67, with an average age of 38.1 years. In addition, 56.6% of the respondents were university graduates, and 10.2% were postgraduate/PhD graduates, 26% were high school graduates and 7.2% were primary school graduates. Furthermore, 54.3% of the participants were working in the public sector, and the most common sector was the service sector (50.2%) followed by machinery/metal/automotive (12.5%), education (7.9%), construction/energy (6.4%), chemistry/petrochemistry (6%), information technologies (5.7%), and other sectors (11.3%). In addition, 23.8% of the respondents were working in managerial and 76.2% were working in non-managerial positions. Concerning digital devices, 78.5% of the participants had access to a laptop/desktop and 67.5% had access to a smartphone at work. Among Internet applications, 33.2% of the participants use Facebook, 21.1% use Twitter, 48.7% use Google+, 36.2% use Instagram, 37.7% use YouTube, 11.3% use LinkedIn and 73.2% of them use WhatsApp. Considering the average daily time spent on Internet-based technologies, it was shown that 11% of the participants spent less than 1 hour, 26.4% spent 1-2 hours, 23.0% spent 2-3 hours, 17.0% spent 3-4 hours, 8.3% spent 4-5 hours and 14.3% spent more than 5 hours on average per day. The sample was selected using the convenience sampling method, and the data were collected through an online questionnaire created via Google Forms. The link was distributed to the participants via social networking sites. Before starting the data collection, ethical approval was gathered from the university's ethics committee. Then, the participants were informed about the research before filling out the questionnaire which consists of items that assess abusive supervision, perceived stress, cyberloafing, and demographic information.

3.2. Measures

3.2.1. Abusive supervision

Participants' perceptions of abusive supervision were assessed by using the Abusive Supervision Scale developed by Tepper (2000). It was adapted into Turkish by Ulbegi, Ozgen, & Ozgen, (2014). It is a one-dimensional scale consisting of 15 questions such as "My supervisor ridicules me" and "My supervisor tells me my thoughts or feelings are stupid". Scale items are scored on a 5-point scale (1: Never does this behavior, 3: Does this behavior sometimes/occasionally, 5: Always does this behavior). High scores obtained from the scale mean that individuals have high abusive supervision perceptions. Confirmatory factor analysis was conducted for the Abusive Supervision Scale using

the AMOS program, and fit indexes were reviewed. Two items ("My supervisor does not allow me to interact with my coworkers" and "My supervisor tells me I'm incompetent") were removed. As a result of modifications, most of the fit indexes reached an adequate level (X2/df= 3; GFI= .90; CFI= .87; RMSEA= .09). The Cronbach's alpha was .85 in the current study.

3.2.2. Perceived stress

Participants' perceptions of stress were assessed by using the Perceived Stress Scale developed by Cohen et al. (1983). The scale was adapted into Turkish by Çelik-Örücü and Demir (2009). It has ten items and two sub-dimensions. The perceived helplessness subscale has six items (i.e. "In the last month, how often have you felt nervous and stressed?"). and the perceived self-efficacy subscale has four items (i.e. "In the last month, how often have you been able to control irritations in your life?"). The scale items are scored on a 5-point scale (1: Never, 3: Sometimes, 5: Very often) with high scores indicating greater levels of perceived stress among individuals. Confirmatory factor analysis was conducted for the Perceived Stress Scale using the AMOS program, and fit indexes were reviewed. One item ("In the last month, how often have you felt that things were going your way?") was removed. As a result of modifications, most of the fit indexes reached an adequate level (X2/df= 3.5; GFI= .94; CFI= .95; RMSEA= .09). The Cronbach's alpha was .86 for the total scale, .89 for the perceived helplessness subscale, and .84 for the perceived self-efficacy subscale. In this study, the composite score of the scale was used.

3.2.3. Cyberloafing behaviors

Participants' cyberloafing tendencies were assessed by using the Cyberloafing Scale developed by Akbulut et al. (2016). It consists of 30 items and 5 sub-dimensions. These dimensions are sharing (9 items; i.e. "I check my friends' posts"), shopping (7 items; "I shop online"), real-time updating (5 items; i.e. "I comment on trending topics"), accessing online content (5 items; i. e. "I watch videos online"), and gaming/gambling (4 items; i.e. "I play online games"). The scale items are scored on a 5-point scale (1: Never, 3: Sometimes, 5: Always). High scores obtained from the scale indicate that individuals engage in more cyberloafing behaviors. The scale yielded good psychometric properties in the previous studies among Turkish samples (Akbulut et al., 2016; 2017). In the current study, a second-order confirmatory factor analysis was conducted for the Cyberloafing Scale using AMOS program, and fit indexes were reviewed. One item ("I visit auction sites") was removed. As a result

of modifications, most of the fit indexes reached an adequate level (X2/df= 2.6; GFI= .78; CFI= .88; RMSEA= .07). The Cronbach's alpha was .94 for the total scale, .91 for the sharing subscale, .83 for the shopping subscale, .91 for the real-time updating subscale, .85 for the accessing online content subscale, and .80 for the gaming/gambling subscale. To test the study hypotheses, the composite score of the scale was used.

3.2.4. Demographic information

The participants were asked to respond to demographic questions including age, gender, education level, the sector, and position they work in the institution. In addition, past studies have shown that cyberloafing behaviors were related to the time spent on the Internet and mobile technologies (Baturay & Toker, 2015). Thus, in the current study, the participants responded to items that assess time spent daily on the Internet or mobile technologies, and it was added to the model as a control variable.

4. FINDINGS

4.1. Preliminary Analysis

First, the responses were checked whether there were any missing data. It was found that there was no missing data. Second, the descriptive statistics, and the extreme values were checked, and the mean and the standard deviations of each scale score were compared (see Table 1). The means were larger than the standard deviations. To identify any outliers, the "Z" scores of each scale item were evaluated. According to the data obtained, there was no outlier as the Z scores were between -3.29 and +3.29. Furthermore, regression analysis was performed to detect multivariate outliers, and Mahalanobis values were examined. As a result, all values were below the critical value. The skewness and kurtosis values were examined as they provide information about whether the data is normally distributed. According to the results of the analysis, since the skewness and

kurtosis values were in the range of -1.5 and +1.5, the data were normally distributed (Tabachnick & Fidell, 2019).

Since the data for all measures were obtained from the same source, we conducted Harman's test to examine common method variance (Podsakoff et al., 2003). The results of an exploratory factor analysis showed twelve factors, with the variance extracted by the first factor being 19.5%. This indicates that there is no general factor, and it is unlikely that common method bias affects the results. As shown in the Table 1, the Cronbach's alpha internal consistency scores were found to be .85 for the Abusive Supervision Scale, .86 for the Perceived Stress Scale and .94 for the Cyberloafing Scale.

Before testing the study hypotheses, correlation analysis was performed to examine the relationships between the variables. As shown in Table 2, abusive supervision was significantly and positively correlated with perceived stress (r= .20, p<.01), and cyberloafing (r= .14, p<.05). However, perceived stress and cyberloafing were not significantly correlated (r= .10, p =.11).

4.2. Hypothesis Testing

To test the study hypotheses, the data were analyzed using Hayes's (2022) Process Macro Model 4. Using the bootstrap technique that allows the relationships to be tested in much larger samples, the relationships are tested at 95% confidence intervals. In the model, abusive supervision was the independent variable, cyberloafing was the dependent variable, perceived stress was the mediating variable, and finally, the time spent on the Internet or mobile technology was the control variable. A bootstrap-based regression analysis testing was done to see whether perceived stress acts as a mediator in the relationship between perceived abusive supervision and cyberloafing tendencies among employees at the workplace. When the paths between the variables were examined, a direct relationship was identified

Table 1: Descriptive Statistics and Cronbach's Alpha Coefficients

Variable	Mean	S.D.	Min.	Max.	α
Abusive Supervision	1.36	.40	1	2.69	.85
Perceived Stress	2.59	.78	1	4.56	.86
Perceived Helplessness	2.46	.90	1	5	.89
Perceived Self-efficacy	2.84	1.05	1	5	.84
Cyberloafing	2.06	.66	1	4.03	.94
Sharing	2.42	.83	1	5	.91
Shopping	2.22	.84	1	5	.83
Updating	1.60	.85	1	5	.91
Accessing	2.25	.96	1	5	.85
Gaming	1.41	.64	1	4.50	.80

Table 2: Pearson Correlation Coefficients (N =265)

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Age	1	-.19**	.65**	.75**	.03	-.05	-.08	.03	-.18**	-.12*	-.13*	-.14*	-.18**	-.17**
2. Time spent on the Internet or mobile tech.		1	-.22**	-.16*	-.03	.06	.10	-.05	.23**	.22**	.18**	.17**	.18**	.09
3. Total tenure in this position			1	.80**	.01	-.08	-.11	.00	-.14*	-.08	-.08	-.14*	-.15*	-.12*
4. Total tenure in this sector				1	.05	-.07	-.09	-.00	-.12*	-.10	-.04	-.14*	-.11	-.11
5. Abusive Supervision					1	.20**	.25**	-.02	.14*	.02	.16*	.13*	.16**	.19**
6. Perceived Stress						1	.90**	.69**	.10	.08	.16*	.10	.07	-.05
7. Perceived Helplessness							1	.32**	.09	.07	.13	.10	.04	-.01
8. Perceived Self-efficacy								1	.08	.07	.12	.05	.08	-.08
9. Cyberloafing									1	.86**	.83**	.68**	.86**	.61**
10. Sharing										1	.60**	.42**	.65**	.39**
11. Shopping											1	.48**	.68**	.40**
12. Updating												1	.46**	.35**
13. Accessing													1	.54**
14. Gaming														1

Note. ** Correlation is significant at the 0.01 level, * Correlation is significant at the 0.05 level

between abusive supervision and cyberloafing (β= .14, t= 2.25, 95% CI [.03, .41]). Thus, H₁ was supported. Furthermore, abusive supervision predicts perceived stress in a positive and significant way (β= .20, t= 3.3, 95% CI [.16, .62]), supporting H₂. Even though the total effect of abusive supervision on cyberloafing was significant (β= .15, t= 2.5, 95% CI [.05,.43]), perceived stress did not significantly predict cyberloafing (β= .07, t= 1.1, 95% CI [-.04,.16]). Thus, H₃ was not supported. Furthermore, the indirect effect of abusive supervision on cyberloafing through perceived stress was not significant (β=.01, SE(β)=.01, %95 CI [-.01, .05]), and therefore, H₄ was not supported. The results overall show that perceived stress does not act as a mediator in the relationship between cyberloafing and abusive supervision.

stress, and cyberloafing behaviors among employees in the workplace. Furthermore, this study investigated whether the experience of stress plays a mediating role in the relationship between abusive supervision and employees' cyberloafing behaviors. The findings revealed that abusive supervision positively predicts the cyberloafing behavior of employees at work. This finding is in line with the previous research that shows the impact of leadership behaviors on employees' attitudes and behaviors (Agarwal, 2019; Agarwal & Avey, 2020; Akram et al., 2019; Bhattacharjee & Sarkar, 2023; Koay et al., 2022; Pradhan & Jena, 2016). Scholars have shown that abusive supervision is associated with lower job performance, low productivity, work-family conflicts, psychological distress, and negative affect among employees (Bhattacharjee & Sarkar, 2023; Pradhan & Jena, 2016, 2018).
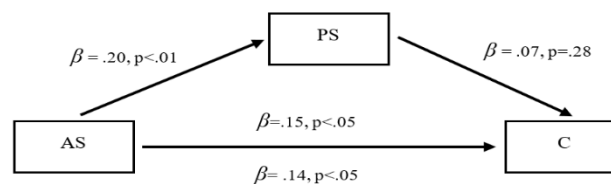
Note: AS: Abusive supervision score, PS: Perceived stress score,

C: Cyberloafing score. All effects are standardized regression coefficients.

Figure 1: The Relationships among Abusive Supervision, Perceived Stress and Cyberloafing

5. DISCUSSION

5.1. Discussion of the Findings

The purpose of this study was to examine the relationships among abusive supervision, perceived

Current study demonstrates that abusive supervision positively predicts employees' perceived stress levels. This finding is consistent with the previous research. For instance, prior studies have shown that perceptions of injustice and abuse caused by managers lead to more emotional exhaustion and

psychological distress in subordinates (Akram et al., 2019; Aryee, Chen, Sun, & Debrah, 2007; Pradhan & Jena, 2018; Zellars, Tepper, & Duffy, 2002). In addition, negative interactions between employees and supervisors may cause serious reductions in the physical and psychological well-being of employees (Grandey, Kern, & Frone, 2007; Richman, Flaherty, Rospenda, & Christensen, 1992). Increasing in the level of abusive supervision produced more negative thoughts toward work, life, and organizations and increased job burnout, perceived stress, and the turnover rate (Martinko et al., 2013; Tepper, 2000). In another study examining the connection between abusive supervision and perceived stress, workers who were exposed to abusive supervision faced harmful psychological situations such as anxiety and depression (Martinko et al., 2013). Similarly, a previous study examining the impact of abusive supervision on family life has also shown that abusive behaviors have a significant and positive relationship with unwanted family conflicts (Carlson, Ferguson, Perrewe, & Whitten, 2011).

Subordinates experience interactional injustice when their managers do not show respect, honesty, and sensitivity to their personal needs (Tepper, 2000). Consistent with the premises of COR Theory (Hobfoll, 1989), it may be argued that abusive supervision negatively affects the resources that employees gain within the organization, making it difficult for them to protect their existing resources and gain new ones. Accordingly, employees may engage in cyberloafing to protect their resources and regain their lost resources. The COR theory assumes that subordinates who lose resources must both conserve existing resources and find new resources to regain their motivation and emotional control. In this case, they may engage in cyberloafing to maintain their motivation and gain emotional control (Agarwal & Avey, 2020).

On the other hand, the findings of the study revealed that perceived stress did not predict cyberloafing behaviors at work. Thus, the anticipated relationship between perceived stress and cyberloafing, and the mediating role of perceived stress in abusive supervision and cyberloafing relationship were not supported. These findings are inconsistent with the previous studies demonstrating more cyberloafing behaviors among employees with high levels of perceived stress (Andel et al., 2019; Koay et al., 2017; RuningSawitri, 2012). For instance, a previous study (Koay et al., 2017) has demonstrated that job stress partially mediates the relationship between employees' private demands and cyberloafing. In addition, a recent study has shown that work-related negative affect mediate the relationship between abusive supervision and cyberloafing among Indian workers of the IT sector (Bhattacharjee & Sarkar,

2023). However, in the current study, only a direct (but not an indirect) relationship was found between supervisors' abusive behaviors and cyberloafing behaviors.

5.2. Limitations and Avenues for Future Research

This study has some limitations. First, the study design was correlational. Thus, an inference about causality of the relationships between the variables could not be drawn. Future studies using longitudinal design may allow a better understanding of the temporal relationships among the variables, and draw causal implications for these relationships. Second, the data were collected using a self-report method; thus, common method bias was a concern (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). However, Harman's test indicated that there was no general factor. Besides, there is a possibility of social desirability bias as employees report their own cyberloafing behaviors (Fisher, 1993; Akbulut, Dönmez, & Dursun, 2017). Future research may investigate these relations by using multiple methods (i.e., observational method) and multiple sources (i.e. ratings from supervisors or colleagues). Finally, the data were obtained using the convenience sampling method, which may restrict the representativeness of the population. In future studies, the socioeconomic structure of the country of study, community values, commitment to cultural values (e.g. moral disengagement, negative reciprocity; Koay et al., 2022), and cultural dimensions such as power distance (Agarwal & Avey, 2020) may be investigated as potential moderators and/or mediators to better comprehend the relationship between abusive supervision and cyberloafing. Employees may remain silent in response to workplace mistreatment in more hierarchical, collectivistic, and high power-distance cultures (Agarwal & Avey, 2020; Imran, Fatıma, Sarwar, & Iqbal, 2021). Besides, the responses of employees working in different occupational classes (i.e. blue-collar vs white-collar) might vary (Metin Camgöz, Bayhan-Karapınar, Tayfur-Ekmekçi, Metin-Orta, & Özbilgin, 2023). Thus, future research may examine the impact of power distance and occupational classes in these relationships by ensuring the participation of employees from different countries and occupational classes.

5.3. Practical Implications and Conclusion

This study demonstrates the impact of abusive supervision on employees' perceived stress levels and cyberloafing behaviors, and thus, provides important practical implications for managers and organizations in terms of dealing with workplace mistreatment. The supervisors' abusive behaviors can be an obstacle to the innovative thinking of

subordinates (Wang et al., 2019). In a workplace dominated by abusive supervision, subordinates experience emotional exhaustion and psychological distress while participating and producing less (Akram, Li, & Akram, 2019; Pradhan & Jena, 2018; Tepper, 2000). Therefore, managing abusive supervisory behaviors at work is highly crucial for the psychological well-being, and productivity of the employees as well as the organization. Accordingly, necessary steps might be taken by the organization such as providing regular training on effective leadership (Wang et al., 2019), and informing supervisors about its adverse consequences (Agarwal & Awad, 2020). In addition, human resources departments might consider implementing rules or policies that punish abusive behaviors or do not award leaders with hostile behaviors (Agarwal & Avey, 2020; Wang et al., 2019). These interventions would not only promote leaders' positive behaviors but also decrease the experience of stress and engagement in cyberloafing among employees. Besides, with the development of technology, it is not possible to reduce the use of digital devices and Internet access, as they are indispensable parts of daily life. Instead, improving the working environment and training employees on the effects of the misuse of the Internet might reduce the time loss caused by cyberloafing at work.

In conclusion, this study contributes to the limited but growing body of literature (i.e. Agarwal & Away, 2020) on the effects of abusive supervision on cyberloafing behaviors at work. Further, it provides suggestions for managing leaders' misbehaviors to mitigate their adverse effects at the workplace. The mechanisms that explain the impact of workplace discrimination, ostracism, incivility, and bullying on counterproductive workplace behaviors might also be addressed in future studies.

ETHICS DECLARATIONS

Funding: This study has not received support from any organization such as government, commercial or non-profit organizations.

Author Contribution Declaration: 1st author's contribution rate is %50, 2nd author's contribution rate is %50

Conflict of interest: The corresponding author declares no conflict of interest.

Ethical Approval: All procedures performed in studies involving human participants conform to the ethical standards of the institutional and/or national research committee and the 1964 Helsinki declaration and its subsequent amendments or comparable ethical standards.

For this research, Atılım University Ethics Committee Approval was obtained from the Human Research Ethics Committee with decision number: E-59394181-604.01.02-33330 and date: 15.04.2022.

Informed Consent: Informed consent form was obtained from all individual participants who participated in the study.

REFERENCES

Agarwal, U. (2019). Impact of supervisors' perceived communication style on subordinate's psychological capital and cyberloafing. *Australasian Journal of Information Systems*, *23*, 1-27.

Agarwal, U. A., & Avey, J. B. (2020). Abusive supervisors and employees who cyberloaf: Examining the roles of psychological capital and conctract breach. *Internet Research, 30*(3), 789-809.

Aghaz, A., & Sheikh, A. (2016). Cyberloafing and job burnout: An investigation in the knowledge-intensive sector. *Computers in Human Behavior*, *62,* 51-60.

Akbulut, Y., Dönmez, O., & Dursun, Ö. Ö. (2017). Cyberloafing and social desirability bias among students and employees. *Computers in Human Behavior*, *72,* 87-95.

Akbulut, Y., Dursun, Ö. Ö., Dönmez, O., & Şahin, Y. L. (2016). In search of a measure to investigate cyberloafing in educational settings. *Computers in Human Behavior*, *55,* 616-625.

Akram, Z., Li, Y., & Akram, U. (2019). When employees are emotionally exhausted due to abusive supervision. A conservation of resources perspective. *International Journal of Environmental Research and Public Health*, *16*(18), 1-17.

Andel, S. A., Kessler, S. R., Pindek, S., Kleinman, G., & Spector, P. E. (2019). Is cyberloafing more complex than we originally thought? Cyberloafing as a coping response to workplace aggression exposure. *Computers in Human Behavior*, *101,* 124-130.

Anandarajan, M., & Simmers, C. A. (2005). Developing human capital through personal web use in the workplace: Mapping employee perceptions. *Communications of the Association for Information Systems*, *15*(1), 41.

Aryee, S., Chen, Z. X., Sun, L.Y., & Debrah, Y. A. (2007). Antecedents and outcomes of abusive supervision: Test of a trickle-down model. *Journal of Applied Psychology*, *92*(1), 191-201.

Aryee, S., Sun, L.Y., Chen, Z. X., & Debrah, Y. A. (2008). Abusive supervision and contextual performance: The mediating role of emotional exhaustion and the moderating role of work unit structure. *Management and Organization Review*, *4*(3), 393-411.

Ashforth, B. E. (1997). Petty tyranny in organizations: A preliminary examination of antecedents and consequences. *Canadian Journal of Administrative Sciences*, *14*(2), 126-140.

Askew, K., Buckner, J. E., Taing, M. U., Ilie, A., Bauer, J. A., & Coovert, M. D. (2014). Explaining cyberloafing: The role of the theory of planned behavior. *Computers in Human Behavior*, *36,* 510-519.

Bakker, A. B., Demerouti, E., Boer, E. D., & Schaufeli, W. B. (2003). Job demands and job resources as predictors of absence duration and frequency. *Journal of Vocational Behavior*, *62*(2), 341-356.

Başar, U., Sığrı, Ü., & Basım, N. (2016). Dark leadership at the workplace. *Journal of Human and Work, 3*(2), 65-76.

Baturay, M.H., & Toker, S. (2015) An Investigation of the Impact of Demographics on Cyberloafing from an Educational Setting Angle. *Computers in Human Behavior*, 358-366.

Bennett, R. J., & Robinson, S. L. (2003). The past, present, and future of workplace deviance research. *J. Greenberg, Organizational Behavior*, 247-281.

Bies, R. J., & Moag, J. S. (1986). Interactional justice: Communication criteria of fairness. *Research on Negotiation in Organizations*, *1*, 43-55.

Bhattacharjee, A., & Sarkar, A. (2024). Abusive supervision and cyberloafing: an investigation based on Stressor-Emotion-CWB theory. *Information Technology & People*, *37*(3), 1126-1155.

Blanchard, A. L., & Henle, C. (2008). Correlates of different forms of cyberloafing: The role of norms and external locus of control. *Computers in Human Behavior*, *24*(3), 1067-1084.

Blau, G., Yang, Y., & Kory, W.C. (2006). Testing a measure of cyberloafing. *Journal of Allied Health*, *35*(1), 9-17.

Bowling, N. A., & Michel, J. S. (2011). Why do you treat me badly? The role of attributions regarding the cause of abuse in subordinates' responses to abusive supervision. *Work & Stress*, *25*(4), 309-320.

Breaux, D. M., Perrewé, P. L., Hall, A. T., Frink, D. D., & Hochwarter, W. A. (2008). Time to try a little tenderness? The detrimental effects of accountability when coupled with abusive supervision. *Journal of Leadership & Organizational Studies*, *15,* 111-122.

Carlson, D. S., Ferguson, M., Perrewe, P. L., & Whitten, D. (2011). The fallout from abusive supervision: An examination of subordinates and their partners. *Personnel Psychology*, *64*(4), 937-961.

Çelik-Örücü, M., & Demir, A. (2009). Psychometric evaluation of perceived stress scale for Turkish university students. *Stress and Health*, *25*(1), 103-109.

Cohen, S., Janicki-Deverts, D., & Miller, G. E. (2007). Psychological stress and disease. *JAMA*, *298*(14), 1685-1687.

Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived stress. *Journal of Health and Social Behavior*, *24*(4), 385-396.

D'Abate, C. P. (2005). Working hard or hardly working: A study of individuals engaging in personal business on the job. *Human Relations*, *58*(8), 1009-1032.

Derin, N., & Gökçe, S. G. (2016). Are cyberloafers also innovators?: A study on the relationship between cyberloafing and innovative work behavior. *Procedia-Social and Behavioral Sciences*, *235,* 694-700.

Epel, E. (2012). How "reversible" is telomeric aging? *Cancer Prevention Research*, *5*(10), 1163-1168.

Fisher, R. J. (1993). Social desirability bias and the validity of indirect questioning. *Journal of Consumer Research*, *20*(2), 303-315.

Glassman, J., Prosch, M., & Shao, B. B. (2014). To monitor or not to monitor: Effectiveness of a cyberloafing countermeasure. *Information & Management*, *52*(2), 170-182.

Grandey, A. A., Kern, J. H., & Frone, M. R. (2007). Verbal abuse from outsiders versus insiders: Comparing frequency, impact on emotional exhaustion, and the role of emotional labor. *Journal of Occupational Health Psychology*, *12*(1), 63-79.

Greenberg, J. (1990). Organizational justice: Yesterday, today, and tomorrow. *Journal of Management*, *16*(2), 399-432.

Hadlington, L., & Parsons, K. (2017). Can cyberloafing and Internet addiction affect organizational information security? Cyberpsychology, *Behavior and Social Networking*, *20*(9), 567-571.

Hang-Yue, N., Foley, S., & Loi, R. (2005). Work role stressors and turnover intentions: A study of professional clergy in Hong Kong. The International *Journal of Human Resource Management*, *16*(11), 2133-2146.

Harris, K. J., Harvey, P., & Kacmar, K. M. (2011). Abusive supervisory reactions to coworker relationship conflict. *The Leadership Quarterly*, *22*(5), 1010-1023.

Hayes, A. F. (2022). *Introduction to Mediation, Moderation, and Conditional Process Analysis* (3rd Edition). Guilford Publications.

Henle, C. A., & Blanchard, A. L. (2008). The interaction of work stressors and organizational sanctions on cyberloafing. *Journal of Managerial Issues*, *20*(3), 383-400.

Herr, R. M., Barrech, A., Riedel, N., Gündel, H., Angerer, P., & Li, J. (2018). Long-term effectiveness of stress management at work: Effects of the changes in perceived stress reactivity on mental health and sleep problems seven years later. *International Journal of Environmental Research and Public Health*, *15*(2), 1-12.

Higgins, C. A., Duxbury, L. E., & Irving, R. H. (1992). Work-family conflict in the dual-career family. *Organizational Behavior and Human Decision Processes, 51*(1), 51-75.

Hobfoll, S. E. (1989). Conservation of resources: A new attempt at conceptualizing stress. *American Psychologist*, *44*(3), 513-524.

Hobman, E. V., Restubog, S. L., Bordia, P., & Tang, R. L. (2008). Abusive supervision in advising relationships: Investigating the role of social support. *International Association of Applied Psychology*, *58*(2), 233-256.

Hofstede, G. (1980). *Culture's consequences: International differences in work-related values*. Thousand Oaks, CA: Sage.

Humphreys, J., Epel, E. S., Cooper, B. A., Lin, J., Blackburn, E. H., & Lee, K. A. (2012). Telomere shortening in formerly abused and never abused women. *Biological Research for Nursing*, *14*(2), 115-123.

Imran, M. K., Fatima, T., Sarwar, A., & Iqbal, S. M. J. (2021). Will I speak up or remain silent? Workplace ostracism and employee performance based on self-control perspective. *The Journal of Social Psychology*, *163*(1),107-125.

İnce, M., & Gül, H. (2011). The relation of cyber slacking behaviors with various organizational outputs: Example of Karamanoğlu Mehmetbey University. *European Journal of Scientific Research*, *52*(4), 507-527.

Kaplan, M., & Çetinkaya, A. (2014). Meaningful differences between demographic features and cyberloafing: Case in hotel businesses. *Anatolia:Tourism Research Journal*, *25*(1), 26-34.

Kaplan, M., & Öğüt, A. (2012). The relationship between perceived organizational justice and cyberloafing: The case of hospital employees. *Dokuz Eylül University Journal of Faculty of Business Administration*, *13*(1), 1-13.

Katsikea, E., Theodosiou, M., Perdikis, N., & Kehagias, J. (2011). The effects of organizational structure and job characteristics on export sales managers' job satisfaction and organizational commitment. *Journal of World Business*, *46*(2), 221-233.

Keklik, B., Kılıç, R., Yıldız, H., & Yıldız, B. (2015). The investigation of the effect of cyberloafing behaviors on organizational learning capacity. *Business & Economics Research Journal*, *6*(3), 129-144.

Kiewitz, C., Restubog, S. L., Zagenczyk, T. J., Scott, K. C., Garcia, P. R., & Tang, R. L. (2012). Sins of the parents: Self-control as a buffer between supervisors' previous experience of family undermining and subordinates' perceptions of abusive supervision. *The Leadership Quarterly*, *23*(5), 869-888.

Kim., Chung, & Oh. (2016). When do employees cyberloaf? An interactionist perspective examining personality, justice, and empowerment. *Human Resource Management*, *55*(6),1041–1058.

Kish-Gephart, J. J., Harrison, D. A., & Treviño, L. K. (2010). Bad apples, bad cases, and bad barrels: Meta-analytic evidence about sources of unethical decisions at work. *Journal of Applied Psychology*, *95*(1), 1-31.

Koay, K. Y., Lim, V. K., Soh, P. C.-H., Ong, D. L., Ho, J. S., & Lim, P. K. (2022). Abusive supervision and cyberloafing: A moderated moderation model of moral disengagement and negative reciprocity beliefs. *Information & Management*, *59*(2), 1-10.

Koay, K. Y., Soh, P. C.-H., & Chew, K. W. (2017). Do employees' private demands lead to cyberloafing? The mediating role of job stress. *Management Research Review*, *40*(9), 1025-1039.

Korzynski, P., & Protsiuk, O. (2024). What leads to cyberloafing: the empirical study of workload, self-efficacy, time management skills, and mediating effect of job satisfaction. *Behaviour & Information Technology*, *43*(1), 200-211.

Lazarus, R. S., & Folkman, S. (1984*). Stress, appraisal, and coping.* Springer Publishing Company.

Lian, H., Lance Ferris, D., & Brown, D. J. (2012). Does taking the good with the bad make things worse? How abusive supervision and leader–member exchange interact to impact need satisfaction and organizational deviance. *Organizational Behavior and Human Decision Processes*, *117*(1), 41-52.

Liberman, B., Seidman, G., McKenna, K. Y., & Buffardi, L. E. (2011). Employee job attitudes and organizational characteristics as predictors of cyberloafing. *Computers in Human Behavior*, *27*(6), 2192-2199.

Lim, P. K., Koay, K. Y., & Chong, W. Y. (2020). The effects of abusive supervision, emotional exhaustion and organizational commitment on cyberloafing: A moderated mediation examination. *Internet Research*, *31*(2), 497-518.

Lim, V. K. (2002). The IT way of loafing on the job: Cyberloafing, neutralizing and organizational justice. *Journal of Organizational Behavior*, *23*(5), 675-694.

Lim, V. K., & Chen, D. J. (2012). Cyberloafing at the workplace: Gain or drain on work? *Behaviour & Information Technology*, *31*(4), 343-353.

Lim, V. K., & Teo, T. S. (2024). Cyberloafing: A review and research agenda. *Applied Psychology*, *73*(1), 441-484.

Linton, S. J., Kecklund, G., Franklin, K. A., Leissner, L. C., Sivertsen, B., Lindberg, E., . . . Hall, C. (2015). The effect of the work environment on future sleep disturbances: A systematic review. *Sleep Medicine Reviews*, *23,* 10-19.

Liu, W., Zhang, P., Liao, J., Hao, P. & Mao, J. (2016). Abusive supervision and employee creativity: The mediating role of psychological safety and organizational identification, *Management Decision*, *54*(1), pp. 130-147.

Mayer, D. M., Kuenzi, M., Greenbaum, R., Bardes, M., & Salvador, R. B. (2009). How low does ethical leadership flow? Test of a trickle-down model. *Organizational Behavior and Human Decision Processes*, *108*(1), 1–13.

Martinko, M. J., Harvey, P., Brees, J. R., & Mackey, J. (2013). A review of abusive supervision research. *Journal of Organizational Behavior*, *34*(1), 120-137.

Mastrangelo, P., Everton, W, & Jolton, J.(2006). Personal use of work computers: Distraction versus destruction. *CyberPsychology & Behavior*, *9*(6), 730- 741.

Mawritz, M. B., Mayer, D. M., Hoobler, J. M., Wayne, S. J., & Marinova, S. V. (2012). A trickle-down model of abusive supervision. *Personnel Psychology*, *65*(2), 325-357.

Mercado, B. K., Giordano, C., & Dilchert, S. (2017). A meta-analytic investigation of cyberloafng. *Career Development International*, *22*(5), 546–564.

Metin Camgoz, S., Bayhan-Karapinar, P., Tayfur-Ekmekci, O., Metin-Orta, I., & Ozbilgin, M. F. (2023). Why do some followers remain silent in response to abusive supervision? A system justification perspective. *European Management Journal*, doi: 10.1016/ j.emj.2023.07.001

Metin Orta, I., & Güngör, E. (2018). A review on antecedents, consequences and control of cyberloafing. *"Is, guc" Industrial Relations and Human Resources Journal*, *20*(1), 79–95.

Mirowsky, J., & Ross, C. E. (1989). *Social causes of psychological distress.* Aldine de Gruyter.

Örücü, E., & Yıldız, H. (2014). The personal internet and technology usage at the workplace: Cyberslacking. *Ege Akademic Review*, *14*(1), 99-114.

Özler, D. E., & Polat, G. (2012). Cyberloafing phenomenon in organizations: Determinants and impacts. *International Journal of eBusiness and eGovernment Studies*, *4*(2), 1-15.

Özkalp, E., & Yıldız, H. (2018). The effects of positive and negative cyberloafing behaviors on the work stress. *IS, GUC" Industrial Relations and Human Resources Journal*, *20*(1), 57-74.

Page, D. (2015). Teachers' personal web use at work. *Behaviorand Information Technology*, *34*, 443-453.

Parks, C. G., Miller, D. B., McCanlies, E. C., Cawthon, R. M., Andrew, M. E., DeRoo, L. A., & Sandler, D. P. (2009). Telomere length, current perceived stress, and urinary stress hormones in women. *Cancer Epidemiology, Biomarkers & Prevention*, *18*(2), 551-560.

Pindek, S., Krajcevska, A., & Spector, P. E. (2018). Cyberloafing as a coping mechanism: Dealing with

workplace boredom. *Computers in Human Behavior*, *86*, 147-152.

Podsakoff, P. M., MacKenzie, S. B., Lee, J.Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, *88*(5), 879-903.

Pradhan, S., & Jena, L. K. (2016). The moderating role of neutralizers on the relationship between abusive supervision and intention to quit: A proposed model. *Journal of Human Values*, *22*(3), 238-248.

Pradhan, S., & Jena, L. K. (2018). Abusive supervision and job outcomes: a moderated mediation study. *Evidence-based HRM*, *6*(2), 137-152.

Prakash, M. A., & Kaur, D. A. (2018). Cyberloafing in the organisation- Gain or drain. *JK International Journal of Management and Social Science*, *31*(4), 343-353.

Rafferty, A., Restubog, S. L., & Jimmieson, N. (2010). Losing sleep: Examining the cascading effects of supervisors' experience of injustice on subordinates' psychological health. *Work & Stress*, *24*, 36-55.

Rajah, R., & Lim, V. K. (2011). Cyberloafing, neutralization, and organizational citizenship behavior. *PACIS 2011 Proceedings*. 152.

Raza, B., Ahmed, A., Zubair, S., & Moueed, A. (2019). Linking workplace deviance and abusive supervision: Moderating role of positive psychological capital. *International Journal of Organizational Leadership*, *8*, 95-111.

Richman, J. A., Flaherty, J., Rospenda, K. M., & Christensen, M. L. (1992). Mental health consequences and correlates of medical student abuse. *The Journal of the American Medical Association*, *267*(5), 692-694.

Rizzo, J. R., House, R. J., & Lirtzman, S. I. (1970). Role conflict and ambiguity in complex organizations. *Administrative Science Quarterly*, *15*(2), 150-163.

RuningSawitria, H. S. (2012). Role of Internet experience in moderating influence of work stressor on cyberloafing. *Procedia-Social and Behavioral Sciences*, *57,* 320-324.

Selye, H. (1976). *Stress in Health and Disease.* Butterworth-Heinemann.

Stansfeld, S., & Candy, B. (2006). Psychosocial work environment and mental health--A meta-analytic review. *Scandinavian Journal of Work, Environment & Health, 32*(6), 443-462.

Syrek, C. J., Kühnel, J., Vahle-Hinz, T., & De Bloom, J. (2018). Share, like, twitter, and connect: Ecological momentary assessment to examine the relationship between non-work social media use at work and work engagement. *Work & Stress*, *32*(3), 209-227.

Şimşek, A., & Şimşek E. (2019). Beneficial and detrimental effects of cyberloafing in the workplace. *Journal of Organizational Behavior Review*, *1*(1), 97-114.

Tabachnick, B. G., & Fidell, L. S. (2019). *Using Multivariate Statistics (7th Edition).* New York: Pearson Education.

Tepper, B. J. (2000). Consequences of abusive supervision. *Academy of Management*, *43*(2), 178-190.

Tepper, B. J., Duffy, M. K., Henle, C. A., & Lambert, L. S. (2006). Procedural injustice, victim precipitation, and abusive supervision. *Personnel Psychology*, *59*(1), 101-123.

Theorell, T., Hammarström, A., Aronsson, G., Bendz, L. T., Grape, T., Hogstedt, C., . . . Hall, C. (2015). A systematic review including meta-analysis of work environment and depressive symptoms. *BMC Public Health*, *15*(738), 1-14.

Ugrin, J. C., Pearson, J. M., & Odom, M. D. (2007). Profiling cyber-slackers in the workplace: Demographic, cultural and workplace factors. *Journal of Internet Commence*, *6*, 75-89.

Ulbegi. D., Ozgen, H. M., & Ozgen, H. (2014). Adaptation of the abusive management scale in Turkey: Reliability and validity analysis. *Çukurova University Journal of Institute of Social Sciences*, *23*(1), 1-12.

Ünal, Ö. F., & Tekdemir, S. (2015). Cyberloafing: An empirical research on a public institution. *Süleyman Demirel University The Journal of Faculty of Economics and Administrative Sciences*, *20*(2), 95-118.

Vitak, J., Crouse, J., & LaRose, R. (2011). Personal internet use at work: Understanding cyberslacking. *Computers in Human Behavior*, *27,* 1751-1759.

Wagner, D. T., Barnes, C. M., Lim, V. K. G., & Ferris, D. L. (2012). Lost sleep and cyberloafing: Evidence from the laboratory and a day light saving time quasi experiment. *Journal of Applied Psychology*, *97*, 1068–1076.

Wang, D., Li, X., Zhou, M., Maguire, P., Zong, Z., & Hu, Y. (2019). Effects of abusive supervision on employees' innovative behavior: The role of job insecurity and locus of control. *Scandinavian Journal of Psychology*, *60*(2), 1-9.

Wu, J., Mei, W., Liu, L., & Ugrin, J. C. (2020). The bright and dark sides of social cyberloafing: Effects on employee mental health in China. *Journal of Business Research*, *112*(1), 56-64.

Yıldız, B., & Yıldız, H. (2015). The examination of legal aspects ofcyberloafing behaviors in the business life. *Journal of Management and Economics Research, 13*(3), 1-17.

Yıldız, H., Yıldız, B., & Ateş, H. (2015). Is there a role of organizational justive perceptions on cyberslacking activities. *Journal of Knowledge Economy and Knowledge Management*, *10*(2), 55-66.

Zakrzewski, C. (2016). The key to getting workers to stop wasting time online. *The Wall Street Journal*, *13*. Retrieved from http://www.wsj.com/articles/the-key-to-getting-workers-to-stop-wasting-timeonline-1457921545

Zellars, K. L., Tepper, B. J., & Duffy, M. K. (2002). Abusive supervision and subordinates' organizational citizenship behavior. *Journal of Applied Psychology*, *87*(6), 1068-1076.