

WORK FROM AFAR, SELF-REGULATE FROM WITHIN: THE ROLE OF WORK
REGULATORY FOCUS IN MANAGING REMOTE JOB DEMANDS AND
RESOURCES.

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ABSTRACT

Despite the widespread use of the Job Demands-Resources (JD-R) theory to explain burnout and work engagement, it does not fully account for variations in employees' motivational strategies and self-regulation. To address this gap, and through a Regulatory Focus Theory (RFT) lens, the present dissertation examines the moderating role of work regulatory focus in the relationships between job demands and burnout, as well as job resources and work engagement. Given that regulatory focus can be both a stable trait and contextually influenced by workplace conditions (Higgins, 1997; Neubert et al., 2008), this study further explores how remote work rate interacts with work regulatory focus to shape these relationships. As prior research on regulatory focus within the JD-R framework remains limited (Brenninkmeijer et al., 2010), understanding its role in remote work settings is particularly crucial as organizations continue adapting to evolving work environments (Ewers & Kangmennaang, 2023; Goni-Legaz et al., 2024).

Findings for three-way interactions between remote work rate and work regulatory foci indicate that higher remote work rate and prevention focus weaken the positive job

demands-burnout relationship. In contrast, work promotion focus did not exhibit significant moderation effects. From a practical standpoint, the current dissertation underscores the practical implications of adopting a prevention-focused approach in remote work settings, demonstrating that emphasizing avoidance motivation, such as preventing errors and managing threats, can potentially mitigate job demands' adverse effects on burnout. Ultimately, this study advances theoretical understanding of both JD-R and RFT, and provides actionable recommendations for designing sustainable remote work environments.

Work from Afar, Self-Regulate from Within: The Role of Work Regulatory Focus in
Managing Remote Job Demands and Resources.

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CHAPTER I: INTRODUCTION

The report by Pega et al. (2021), endorsed by the World Health Organization (WHO) and the International Labour Organization (ILO), highlights the significant health risks associated with prolonged working hours. Specifically, the report found that working an average of 55 hours per week was positively correlated with 745,000 deaths from stroke and ischemic heart disease in 2016, representing a 29% increase since 2000, underscoring the growing public health concern regarding the impact of extended job demands on physical health. Complementing these findings, the American Psychological Association's (APA) Work and Well-being Survey (2021), which surveyed 1,501 U.S. adult workers, revealed that work-related stress is a prevalent issue within the workforce. The survey indicated that 79% of participants experienced work-related stress in the month preceding the survey. Furthermore, the survey found that nearly 60% of these individuals reported negative consequences, including decreased interest, motivation, and energy levels, while 44% indicated experiencing physical fatigue. In addition to the physical and psychological implications, the relationship between workload and mental health is further illustrated by research conducted by Lee et al. (2020), which found that individuals working more than 52 hours per week are at a significantly higher risk of suicide, emphasizing the need to address the mental health repercussions of excessive demands.

In light of these empirical insights substantiating the profound psychosocial consequences engendered by prolonged occupational workload, and in the landscape of contemporary occupational dynamics, characterized by relentless temporal demands and pervasive stressors, it becomes important to investigate how employees vary in their self-regulation pursuit and management of these demands, as well as their utilization of available resources. By adopting a contextual regulatory focus framework, this study aims to examine

the moderating effect of distinct work-specific regulatory foci (i.e., preventive versus promotion focus) within the Job Demands-Resources (JD-R) model.

This approach seeks to identify how employees' adopted self-regulation strategies at work may either enhance or hinder the influence of job demands and resources on their levels of burnout and work engagement. Although JD-R and regulatory focus theories have been widely applied in organizational research, a notable gap remains in the literature regarding the moderating role of work self-regulatory foci on the outcomes of job demands and resources, particularly in relation to burnout and work engagement. Ultimately, the current study will contribute to a deeper understanding of how to improve employee well-being by alleviating burnout and fostering engagement, through a self-regulation lens. By recognizing the different ways in which employees self-regulate and manage job demands and resources, this study provides valuable insights for organizations and managers. It highlights the importance of tailoring interventions to meet the specific needs of the workforce, ensuring that strategies are aligned with employees' regulatory focus to maximize their effectiveness. The findings from this study are expected to offer valuable insights for organizational leaders seeking to customize their delegation and task handover strategies as well as the allocation of job resources based on employees' regulatory focus, thus minimizing the harmful effects of job demands on burnout and enhancing the beneficial impact of job resources on work engagement. This approach can lead to more effective leadership practices, fostering a work environment that promotes both well-being and productivity.

Moreover, in light of the significant shifts in work modality following the COVID-19 pandemic, particularly the widespread adoption of remote work, understanding the impact of these changes on employees has become increasingly important. Recent research, including data from the American Community Survey (2023), indicates that 21.7% of the total workforce now engages in remote work, up from 17.9% in October 2022. This upward trend

in remote work necessitates a closer examination of how individual employees respond to different work environments, particularly as some organizations shift back to in-office mandates. It is critical to understand how these changes in work settings, ranging from remote to onsite work, affect employees differently, and how they navigate and adapt to these varying work characteristics. In this context, this study also aims to explore the interaction between work regulatory foci and the remote work weekly rate, testing how these factors jointly influence employee outcomes such as burnout and work engagement. Given the dynamic evolution of work environments and the growing prevalence of remote work in the modern workforce, it is essential to examine whether the intensity of remote work interacts with self-regulation strategies and job characteristics in ways that significantly impact levels of burnout and engagement. By investigating these interactions, this study contributes to a more nuanced understanding of how to effectively manage employee well-being in increasingly flexible and diverse work settings.

This dissertation presents several theoretical contributions to the current literature, and practical organizational implications for improving workplace outcomes in the evolving landscape of remote and hybrid work. From a theoretical perspective, it extends the JD-R framework by integrating RFT, offering a nuanced understanding of how individual differences in self-regulation shape the relationships between job demands and burnout, as well as job resources and work engagement. By exploring the moderating role of work regulatory focus, particularly in the context of remote work, this research enhances the conceptualization of motivational tactics in organizational settings. Practically, the findings provide actionable insights for organizations seeking to optimize remote work environments. Specifically, it highlights the potential value of adopting a prevention-focused approach to mitigate the adverse effects of job demands on burnout, offering clear guidance for managers

and human resource practitioners in fostering work environments that support employee well-being and productivity.

Literature Review

Job Demands and Resources Model (JD-R)

The Job Demands-Resources (JD-R) model is a theoretical framework that describes the relationships between job demands, job resources with work-related outcomes such as burnout, work engagement, job performance, and turnover intentions. Originally, the JD-R model was developed by Demerouti, Bakker, Nachreiner, and Schaufeli in 2001 and aimed to identify potential precursors of burnout. Authors demonstrated that attainment of work-related objectives necessitates extra effort when confronted with excessive job demands, culminating in exhaustion. Likewise, an insufficiency of job resources obstructs the attainment of work-related goals and leads to disengagement. Later, the approach has shifted towards exploring the circumstances and environments that enable employees to thrive by adding work engagement as a positive dimension of well-being into the JD-R model instead of disengagement as an outcome of lack of resources (Schaufeli and Bakker, 2004; Bakker and Demerouti, 2008). The JD-R theory expands two main well-established models: Demands-Control Model (DCM; Karasek, 1979, 1998), which posits that a high demand, low control job leads to job strain, and the Effort-Reward Imbalance model (ERI; Siegrist, 1996), which proposes that a perceived imbalance between the efforts and rewards can lead to chronic stress and the development of negative health outcomes. The job demands and resources model extends both theories by including more work-related characteristics affecting the job strain, which are broadly classified into two categories: job demands and job resources. According to Schaufeli and Taris (2014), the JD-R model does not limit its scope to particular job demands or resources; rather, it postulates that any demand or resource can impact employee health and well-being.

Job Demands and Resources Overview

Job demands, described by Schaufeli and Bakker (2004), are the tasks and obligations inherent to a particular job, which pertains to the physical, psychological, social, or organizational aspects of a job that necessitate physical and psychological (i.e., emotional, and cognitive) exertion, resulting in specific physiological and psychological expenses, thus leading to physiological or psychological strain (e.g., high workload, emotional demands). Job demands are not a purely negative construct. Instead, Crawford and colleague (2010) differentiated between two types of job demands: challenging and hindering demands, and they argued that demands that are appraised as challenging motivate a learning process and enhance work engagement, while those appraised as hampering are inversely related with work engagement. Given the broad definition of job demands, Schaufeli and Taris (2014) highlighted several examples in their study. Among the examples mentioned are cognitive load, emotional stress, conflicts with coworkers, uncertainty about job security, the negative impact of family issues on work, physical strain, and excessive workload.

Job resources are the physical, psychological, social, or organizational aspects of a job that are meant to either support employees in achieving their work goals, reduce the negative effects of job demands, or motivate employee growth and development, such as social support, feedback, or autonomy. Job resources may include those at the organizational level (e.g., pay, career opportunities, job security), interpersonal and social relations (e.g., supervisor and co-worker support, team climate), organization of work (e.g., clear hierarchy, job descriptions, and role differentiation), and task level (e.g., skill variety, task identity, task significance, autonomy, performance feedback). Similar to the provided examples of job demands, Schaufeli and Taris (2014) compiled a list of examples of job resources mentioned in their study. Among the examples they highlighted are advancement, appreciation, clear

goal setting, strong leadership, colleague and supervisor support, effective skill utilization, and strategic planning.

JD-R Processes

JD-R operates in a two-fold process. The first process, called the health impairment process (aka energetic), occurs when poorly designed jobs or chronic hindering job demands coupled with a lack of or a draining to job and personal resources, leading to exhaustion, burnout, and accordingly, health problems. Bakker and de Vries (2021) described burnout as a chronic stress syndrome, whereby it can be interpreted as a spectrum that encompasses various degrees of fatigue that ranges from a brief and temporary form that arises after a hard-working day, to a persistent and severe form of exhaustion. Drawing from the research on burnout, this state of exhaustion has been linked with various health issues, including depression, cardiovascular disease, and psychosomatic symptoms (Schaufeli and Taris, 2014). Not only was burnout directly associated with significant health and psychological distress, but it was also found to diminish safety outcomes. In their review, Bakker, and de Vries (2021) mentioned the serious health consequences of even mild burnout, which ranges from psychological adverse effects of work-related anxiety and depression to physical high risk of type-2 diabetes and cardiovascular diseases. Moreover, Nahrgang and colleagues (2011) found that hindering job demands (e.g., hazards and risks) were associated with high levels of burnout and this distress is associated with reduced safety outcomes, which endangers individuals' lives through increased rates of accidents, adverse events, and hinder the employees' ability to engage in safe behaviors.

The second process is named the motivational process whereby job resources drive employees' motivation, leading to high work engagement, low cynicism, and elevated performance. Job resources can play an intrinsic motivational role by fulfilling basic human needs for autonomy, competence, and relatedness, or an extrinsic motivational role by aiding

in the achievement of work goals. While motivation in JD-R model positively enhanced job performance, job strain was found to negatively impact the job performance (Bakker & Demerouti, 2017). Additionally, JD-R proposed that job resources particularly influence work engagement when job demands are high (i.e., when job resources are needed). This notion is based on Hobfoll and colleagues (2000) premise that in order to prevent the loss of resources, individuals need to acquire resources. Individuals with ample resources are less likely to experience resource loss. However, those who lack access to robust resource pools are at a higher risk of experiencing increased resource loss, leading to a loss spiral. Conversely, having a strong resource pool increases the likelihood of individuals taking risks to gain more resources, resulting in a gain spiral.

Outcomes of JD-R

Work engagement, as an outcome of the JD-R motivational process, has been a construct of interest for both academicians and practitioners due to the promising outcomes of increasing employee retention, enhanced performance, and comprising organization's competitive advantage. Despite the construct popularity, there has been concerns about the unclarity of its meaning, and a lack of consensus for how to define and operationalize it. Moreover, as noted by Saks and Gruman (2014), there is not even an agreement amongst the researchers and practitioners on a name for the construct, whereby the construct has been termed "employee engagement", "work engagement", "job engagement", a debate wherein Schaufeli and Salanova (2011) expressed their preference for work engagement term over employee engagement as it specifically emphasizes the connection between the employee and their work, whereas employee engagement encompasses a broader range of concepts, including the employee's relationship with their profession or role and their organization. There is not only a lack of consensus regarding the name of the construct, but more importantly, work engagement has been perceived inconsistently among academicians versus

practitioners, who adopted a bottom-up approach in their incremental development of the concept. The lack of agreement surrounding the meaning of work engagement raised doubts that the construct is redundant with other preexisting constructs, which some researchers described as repackaging and blending pre-existing constructs or “old wine in new bottles,” alleging that work engagement is a redundant construct from established constructs, such as job satisfaction, organizational commitment, psychological empowerment, and job involvement (Macey and Schneider, 2008).

As an early dawn of the work engagement concept, and based on an ethnographic study, Kahn (1990) defined personally engaged employees as those who bring their whole authentic selves to their work roles. Kahn further explained the components of this authentic self by categorizing it to the physical self (i.e., An engaged employee is fully immersed in their work and finds it absorbing and interesting), emotional self (i.e., an engaged employee feels enthusiastic, passionate, and excited about their work, and experiences a sense of enjoyment and fulfillment), and cognitive self (i.e., an engaged employee exerts effort to complete tasks, take on challenges, and seek out opportunities to learn and develop). This state of bringing oneself to the role is contingent on fulfilling three psychological conditions, which are meaningfulness, safety, and availability. Meaningfulness denotes feeling useful and efficiently employed, which Kahn described as an outcome of challenging and resourceful work environment. Meanwhile, safety is the confidence to engage oneself without any unease feelings, which is product of being trusted with the role and there are clear organizational norms. Finally, availability refers to having enough physical and psychological resources to engage with the role. Although Kahn offered a theoretically comprehensive theory, his approach was criticized for being based on qualitative observations only and lacking operationalization of the construct, and is not often used in empirical research on work engagement (Schaufeli, 2013; Schaufeli et al., 2002). Kahn’s definition was also

criticized for being confusing and lacking precision as it did not specify the nature of engagement as a state, trait, or set of behaviors relevant to role performance (Macey and Schneider, 2008).

Another approach by Maslach (2001) conceptualized work engagement as an expansion of burnout construct whereby engagement is the antithesis of burnout, characterized by energy, involvement, and efficacy, which are the direct antipode of the three dimensions of burnout: exhaustion, cynicism, and ineffectiveness. Based on this conceptualization Maslach and Leiter (2008) defined engagement as an energetic state whereby the individual's personal efficacy leads them to be involved in self-satisfying activities. Based on this conceptualization, Maslach operationalized work engagement by creating the Maslach Burnout Inventory (MBI; Maslach et al., 2001). Despite the significant body of literature that utilized Maslach conceptualization and measurement, Schaufeli and colleagues (2002) argued that both constructs of burnout and work engagement exist as two independent latent variables that are negatively related.

Although these definitions explain some of the components of work engagement, they do not fully explain its antecedents nor present its outcomes. Schaufeli and colleagues (2002) defined work engagement as “a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption” (p. 74). Vigor refers to the high level of energy and resilience during work, dedication refers to the high level of involvement together with the associated sense of challenge and eagerness, and absorption refers to the full concentration and the difficulty to detach from work. Based on this definition, engaged employees maintain both a high energy level and positive attitudes. For example, even when engaged employees feel tired after long working days, they still appraise this tiredness as a pleasant state (Bakker & Demerouti, 2008). Schaufeli and colleagues (2002) argued that burnout and work engagement constructs exist as two independent latent variables that are

negatively related rather than a two opposite subfactors of a one latent variable using confirmatory factor analysis. Based on this conceptualization, the Job Demands and Resources (JD-R) model was created by Demerouti and colleagues (2001) to study the antecedents and consequences of both work engagement and burnout, which integrated the definition of the work engagement within their model as a motivational construct that is tied to positive individual and organizational outcomes.

Furthermore, the outcome of the health impairment process manifests as burnout, defined as a slow reaction to chronic emotional and interpersonal stressors in the workplace that encompasses three dimensions: exhaustion, cynicism, and inefficacy. Exhaustion refers to feelings of being emotionally and physically drained and depleted due to work-related stressors. Cynicism, also referred to as depersonalization, involves developing negative or cynical attitudes towards one's work and clients or colleagues. Inefficacy reflects a decline in one's sense of competence and achievement at work (Maslach et al., 2001). Job-related stressors such as high workload, lack of control, and role ambiguity have been consistently linked as antecedents to burnout (Bakker & Demerouti, 2008). Additionally, organizational factors such as inadequate reward systems, inadequate support systems, and value conflicts can exacerbate burnout, and lead to higher turnover intentions (Leiter & Maslach, 2009). Meanwhile, burnout carries significant consequences for individuals and organizations. On an individual level, burnout is associated with impaired physical health, including cardiovascular disease, musculoskeletal disorders, and heightened mortality rates (Ahola et al., 2010). Furthermore, burnout negatively impacts job performance, leading to decreased productivity, absenteeism, and turnover intentions (Swider & Zimmerman, 2010). Burnout may engender many negative outcomes for organizations and may ultimately result in organizational decline and downsizing (Shirom, 2011).

Regulatory Focus Theory

Higgins (1997) suggests that motivation theories based on hedonism are not adequate for describing the intricate relationships that exist among approach and avoidance motivation. Such theories assert that people seek pleasure and avoid pain, but do not explain how or why people seek pleasure or avoid pain. Challenging the hedonic principle, Higgins (1997, 1998) introduced the Regulatory Focus Theory (RFT) which integrates the end states from hedonistic motivation with self-regulation describe in self-discrepancy theory (SDT, Higgins, 1987). According to SDT, individuals are motivated to align their self-concept and self-guide. One's self-concept or actual-self reflects the attributes one believes they possess. Self-guides reflect the attribution one believes they should (ought) to possess. Self-guides manifest as either an ideal-self or an ought-self (Higgins, 1987). The ideal-self is the person the individual aspires to be and represents their hopes and aspirations for their future. The ought-self is the person the individual feels they should (ought to) be and represents their sense of duty, responsibility, and morality. The theory proposes that the greater the discrepancy between these self-representations, the greater the likelihood of experiencing negative emotions. That is, individuals experience negative emotions when their actual selves do not align with their ideal or ought selves. Individuals regulate their behavior to minimize such discrepancies. According to RFT, individuals regulate behavior using either a promotion focus or prevention focus (Higgins, 1997, 1998).

Promotion and Prevention Foci Overview

A person who utilizes a promotion focus strives for goals through their "ideal selves" (Higgins, 1997). A promotion focus is driven by the desire to achieve positive outcomes such as gaining rewards, achieving success, and experiencing pleasure in response to their growth and development needs. Promotion-oriented individuals tend to be more attuned to the presence or absence of positive outcomes, such as gains or better states (i.e., +1) versus non-

gains, or the existing state (i.e., 0). These individuals do not consider potential losses when striving for their goals. Rather, they move toward desired end states by ensuring that they do not commit errors of omission. They continuously engage in challenging and major leaps to pursue ideals (Higgins, 1987; Scholer et al., 2019). Promotion-oriented individuals experience positive emotions (e.g., cheerfulness) when achieving a gain and negative emotions (e.g., dejection) in the absence of a gain (Brockner & Higgins, 2001).

A prevention focus emphasizes the “ought self” and focuses goal-striving strategies on the fulfillment of duty or responsibility (Higgins, 1997, 1998). Prevention-focused individuals attend to duties and obligations and are motivated by desire to avoid negative outcomes. Individuals who are focused on prevention tend to be more attuned to the absence or presence of negative outcomes, such as non-losses or a satisfying existing state (i.e., 0) and losses or worse state (i.e., -1) respectively. These individuals move toward desired end states by ensuring they do not commit errors of commission. Prevention-oriented individuals experience positive emotions (e.g., calmness or quiescence) when there is an absence of loss and experience negative emotions (e.g., agitation or fear) in the presence of loss (Brockner & Higgins, 2001).

According to Brockner and Higgins (2001), higher levels of motivation focus intensity are associated with higher degrees of experienced emotions (i.e., positive or negative). For this reason, individuals with dominant prevention-focus can experience accelerated accumulation effects of emotional exhaustion (Halbesleben et al., 2012), and job stress. Evidence also suggests the presence of a negative relationship between work promotion focus and burnout (Waterwall & Chullen, 2020, p. 41). However, considering the weak nature of this relationship ($B = -.10$), this study primarily focuses on exploring the interaction between prevention focus and various job demands in relation to burnout.

As a motivational theory, regulatory focus operates across three distinct and independent levels of self-regulation, as introduced by Scholer and Higgins (2008). The first level is the system level, which pertains to end-state preferences, such as the desired end-state of growth, gains, ideals in the promotion-focus versus the desired end-state of security, non-loss, responsibilities in the prevention-focus. The second level is the strategic level, which concerns the general means or manners of pursuing a goal or desired end-state, such as approaching a goal in eager or vigilant manner. Eagerness is associated with a promotion focus as it involves taking actions to increase the likelihood of positive outcomes and prevent their absence or in other words, eagerness to enthusiastically approach the desired gains and approach mismatch to the undesired non-gains. In contrast, vigilance is associated with a prevention focus as it involves taking actions to prevent negative outcomes and avoid their presence, or in other words, they aim is to prevent discrepancies from the intended positive outcomes or gains and avoid conforming to the unwanted negative outcomes or setbacks (Scholer et al., 2019).

The third and final level is the tactical level, which involves selecting specific options in a given situation based on the selected strategy, such as the tactic of minimizing mistakes based on avoidance-related strategy of being careful not to miss opportunities to prove oneself, versus the tactic of proactively volunteering for extra assignments based on the approach-related strategy of striving to grow at work (Higgins, 1998; Higgins & Pinelli, 2020). Research suggests that this promotion approach is associated with bias towards adopting riskier tactics in the pursuit of positive outcomes. Meanwhile, prevention approach is correlated with a bias towards more conservative tactics in the process of avoiding mistakes (Higgins, 2000). Examples of tactics tied to eagerness promotional strategy include exploring multiple alternatives, emphasizing optimistic possibilities, taking a big picture view, prioritizing speed, and having a willingness to embrace change. Meanwhile, some

tactics tied to vigilance preventive strategy could be scrutinizing the options being considered, acknowledging the potential for negative outcomes, taking a detailed view, prioritizing precision, and generally conforming to established norms and conventions (Scholer et al., 2019).

Chronic Versus Situational Regulatory Foci

Although individuals might have a predisposition to a specific focus (i.e., chronic or general regulatory focus) due to a relatively stable personality factors, findings from RFT research suggest that regulatory strategies are malleable, whereby individuals tend to self-regulate behavior to adjust to situational factors. Thus, adopted regulatory focus can vary as a result of the interaction between personal traits and contextual factors (Higgins, 1997, 1998; Lanaj et al., 2012; Scholer et al., 2010). Therefore, individuals can be influenced to adopt either a promotion or prevention focus and adjust to stimuli to better align with their work environment (Higgins, 2000; Liberman et al., 1999). This adaptation is context-dependent (i.e., work or situational regulatory focus) and shaped by situational factors that may activate either promotion- or prevention-focused concerns. Consequently, individuals make tactical decisions to shift their regulatory focus, which may differ from their predominant orientation at the systemic and strategic level (Johnson et al., 2015).

Although both chronic and work-related regulatory foci are linked with various work attitudes and behaviors, chronic regulatory focus is less affected by situational factors encountered in work environments due to the relative stability of individual differences in chronic regulatory focus across various situations and time. Conversely, work-related regulatory focus is more responsive to the impact of leadership and specific work environment characteristics (Lanaj et al., 2012; Neubert et al., 2008; Wallace et al., 2009). In the workplace, regulatory focus can be altered by contextual mechanisms such as group messaging (Higgins & Pinelli, 2020), leadership style and behaviors (Hamstra et al., 2011;

Johnson et al., 2017), organizational culture (Rich et al., 2018), and reward structures (Freitas et al., 2002). For example, the way leaders frame reward structures can significantly influence their followers' choice of regulatory tactics, aligning their behavior with the organization's goals. Research has demonstrated that when rewards are framed in terms of gains or losses, employees tend to adopt corresponding regulatory tactics that match the structure (Higgins et al., 2001). For instance, when rewards emphasize potential gains, employees are more likely to adopt promotion-focused tactics, such as eagerly pursuing opportunities and taking calculated risks. Conversely, when rewards are framed in terms of avoiding losses, employees tend to gravitate towards prevention-focused tactics, emphasizing vigilance and careful decision-making (Shah et al., 1998). This alignment between reward framing and regulatory tactics can lead to improved performance and goal attainment, as individuals experience a sense of "regulatory fit" when their chosen tactics match the situational demands (Cesario et al., 2004).

Remote Work Rate

The remote work setting has been labeled in the literature by a plethora of terms, including telework, telecommuting, distributed work, virtual work, flexible work, flexplace, distance work, and working from home (Allen et al., 2015), telework from home (Lunde et al., 2022), and remote work (Torres & Orhan, 2023). Among several definition, Allen and colleagues (2015, *p. 44*) defined telecommuting as:

“Telecommuting is a work practice that involves members of an organization substituting a portion of their typical work hours (ranging from a few hours a week to nearly full-time) to work away from a central workplace—typically principally from home—using technology to interact with others as needed to conduct work tasks.”

Existing research on remote work remains limited and often produces inconclusive results concerning the impact of remote work rate on work outcomes and employee well-

being. For example, an optimal balance of remote work, labeled as hybrid work setting, is believed to be essential for worker work-life balance, job satisfaction and performance (Allen et al., 2015; Beckel & Fisher, 2022; Bloom, 2021; Dale & Tucker, 2024; Williams & Shaw, 2024). However, the shift towards remote work has been associated with diverse experiences among employees. For instance, professional isolation emerges as a prominent concern among extensive remote workers (Beckel & Fisher, 2022; Dahlstrom, 2013), impacting both perceived and actual isolation whereby employees express apprehensions about the effects of being out-of-sight on career advancement opportunities and report missing informal interactions and learning opportunities (Beckel & Fisher, 2022). In addition, remote work has been associated with increased stress due to conflicts between work and personal life, and subsequent decreases in both physical and mental well-being (Carillo et al., 2021; Izdebski & Mazur, 2021; Majumdar et al., 2020; Palumbo, 2020; Xiao et al., 2021). Specifically, job stress has been linked with remote work, with evidence indicating the extension of working hours into leisure time and periods when individuals are unwell (Goni-Legaz et al., 2023). It is important to note that research on remote work conducted during the pandemic may not accurately capture long-term trends due to the unique circumstances of forced remote work. The COVID-19 pandemic generated an unprecedented work environment, necessitating rapid adaptation to new work arrangements while simultaneously managing heightened family-work conflict and social isolation (Galanti et al., 2021). Additionally, employees experienced a substantial increase in nonwork intrusions, distractions, and multitasking compared to the pre-pandemic period (Leroy et al., 2021). These factors might have introduced considerable confounding variables that may have influenced workplace dynamics and employee outcomes.

However, recent reviews suggest that employees' perceptions of remote work have evolved as new routines and strategies have been implemented to enhance its productivity

and feasibility (Salon et al., 2022). Following the initial transition to remote work, employees reported notable improvements in their assessment of its practicality and effectiveness (Aksoy et al., 2022; Eng et al., 2024; Salon et al., 2022; Westbrook, 2023). Autonomy is a fundamental characteristic of remote work (Gajendran & Harrison, 2007), and research indicates that remote work influences job performance, job satisfaction, and organizational commitment by providing greater autonomy and self-management opportunities (Fonner & Roloff, 2010; Galanti et al., 2021; Müller & Niessen, 2019). However, emerging evidence suggests that employee perceptions of remote work are shaped by two contrasting mechanisms: perceived autonomy and social isolation. Although remote work positively impacts work outcomes by enhancing employees' sense of autonomy, it also has the potential to negatively affect well-being by increasing feelings of social isolation (Gajendran et al., 2024).

It is crucial to acknowledge that research on remote work remains relatively limited and inconclusive, as the majority of existing studies emerged in response to the COVID-19 pandemic and the associated transformations in workplace structures. While these studies have provided valuable insights into the immediate and short-term impacts of remote work, they often lack longitudinal perspectives necessary for understanding its sustained effects. As organizations continue to refine and implement remote and hybrid work models, there is a pressing need for ongoing empirical research to examine the long-term implications of these arrangements on employees' well-being, productivity, job satisfaction, and overall organizational outcomes. In light of the evolving nature of work, technological advancements, and shifting employee expectations, a more comprehensive understanding of the enduring effects of remote and hybrid work environments is needed (McPhail et al., 2024).

Finally, the remote work setting has conventionally been regarded as a dichotomous variable, indicating its mere existence or absence, nevertheless recent studies emphasize the importance of acknowledging the intensity of remote work, or its rate, in relation to work-related factors. Prior research often overlooked this dimension, leading to oversimplified comparisons between remote and on-site workers (Allen et al., 2015). Scholars emphasize that remote work is not a binary construct; rather, variations in intensity shape employees' experiences and work outcomes. Recognizing this, the current study adopts remote work rate as a continuous variable, allowing for more precise analyses, preserving statistical power, and facilitating a more nuanced understanding of its impact.

Study Goals

Despite the widespread recognition of JD-R theory as a framework to understand how job demands and resources impact employee burnout and work engagement, it does not account for variations in motivational strategies or the ways in which employees self-regulate in the workplace. These differences can shape how individuals perceive and manage their job demands and resources. Recognizing this limitation, past research has emphasized the importance of integrating additional personal resources into the JD-R model, as they play a crucial role in shaping employees' work experiences (Brenninkmeijer et al., 2010; Schaufeli & Taris, 2014). This suggests that identical job demands and resources may have differential effects depending on the individual.

To address this gap, the present study examines the moderating role of work regulatory focus in the relationships between job demands and burnout, as well as job resources and work engagement. To date, only one study by Brenninkmeijer and colleagues (2010) has explored the moderating effect of regulatory focus within the JD-R framework. However, this study had several limitations, including a small sample size ($N = 146$), a restricted focus on secondary school teachers in the Netherlands, and the use of chronic

regulatory focus measures with internal consistency values below the recommended threshold of Cronbach's alpha of .70 (Nunnally & Bernstein, 1994), with prevention focus $\alpha = .64$ and promotion focus $\alpha = .65$. These limitations raise concerns regarding the external validity of the findings. Although individuals may have a dominant regulatory focus due to stable trait factors, their adoption of a promotion or prevention focus is also context-dependent.

Situational factors can activate either a promotion- or prevention-oriented mindset (Higgins, 1997; Neubert et al., 2008). While chronic regulatory focus remains relatively stable over time and across situations, employees tend to adjust their regulatory focus tactics in response to workplace stimuli to align more effectively with their environment (Camacho et al., 2003; Higgins, 2000). In contrast, work-related regulatory focus is more sensitive to contextual influences, such as leadership and specific job characteristics (Lanaj et al., 2012). Therefore, the first objective of this study is to investigate how work regulatory focus interacts with job demands and job resources to moderate the relationships between job demands and burnout, as well as job resources and work engagement. By doing so, this research provides insights into how employees' context-specific adaptations to environmental triggers interact with job characteristics, potentially influencing their levels of burnout or engagement.

The second goal of this study is to examine how remote work rate interacts with work regulatory foci as moderators in the relationships between job demands and burnout, as well as job resources and work engagement. Research in this area is still relatively nascent, particularly in understanding how remote work rate interacts with individual differences, leading to varied experiences concerning remote work setting, and influencing various work-related outcomes (Ewers & Kangmennaang, 2023; Goni-Legaz et al., 2024). Thus, this study seeks to examine whether the degree of remote work rate may interact with employees' diverse self-regulatory orientation in the workplace, thereby influencing the strength of associations between work demands and burnout, as well as job resources and work

engagement. Given the nascent state of research in this area, particularly regarding the varying impacts of remote work intensity on individual motivational self-regulation, this study could provide valuable insights into how remote work can be optimized to support employee well-being and productivity. Such insights are crucial for developing tailored strategies that address the unique needs and challenges faced by employees in remote and hybrid work settings. By examining these relationships, the study contributes to the broader discourse on remote work by offering a more nuanced understanding of how remote work rate interacts with individual self-regulatory orientations rather than treating remote work as a static or uniform construct. On the other hand, there is a dearth of research examining interactions between regulatory focus and the organizational environment and climate features (Gorman et al., 2011). Since work regulatory orientations are malleable to work environment stimulation, self-regulatory focus literature would benefit from understanding the interaction between individuals self-regulatory orientation at work and work setting. The findings could inform organizational policies and managerial strategies aimed at developing tailored strategies that address the unique needs and challenges faced by employees in remote and hybrid work settings, ultimately fostering more sustainable and effective work arrangements in the long term.

Hypotheses

The Job Demands-Resources (JD-R) model operates through two primary processes. The first is the health impairment process, wherein poorly structured jobs or persistent obstructive job demands, result in exhaustion, burnout, and subsequent health issues. The second process, the motivational process, entails job resources stimulating employees' motivation, leading to increased levels of work engagement, reduced cynicism, and improved performance. Therefore, increased job demands heightened risk of burnout, whereas

increased job resources have been associated with enhanced work engagement and well-being (Demerouti et al., 2001). Hence, we expect the following hypotheses.

Hypothesis 1a (H1a): Job demands will be positively associated with burnout

Hypothesis 1b (H1b): Job resources will be positively associated with work engagement.

The single study that tested the relationships between JD-R and regulatory focus theories suggests that predominant prevention focus moderates the relationship between job demands and strain, whereby employees who adopt prevention focus experienced more significant harmful effects of interpersonal conflict and workload on emotional exhaustion (Brenninkmeijer et al., 2010). Moreover, the stronger the prevention motivation, the higher the likelihood of developing anxiety disorders (e.g., generalized anxiety disorder, panic disorder, agoraphobia, social anxiety disorder, and obsessive-compulsive disorder) as result of chronic actual-ought discrepancies (Scholer et al., 2019). Individuals who adopt a strong preventive focus and fail to meet their own ought selves' standard can suffer agitation-like emotions such as fear and restlessness (Brockner and Higgins, 2001). In order to mitigate these emotions, prevention-focused individuals can adopt denial, distancing, disengagement tactics to alleviate or eliminate the environmental stimuli, and accordingly lead to worsened task performance and job attitude (Zhang et al., 2019), whereby employees with higher levels of prevention focus experienced higher emotional exhaustion as result of job insecurity stressor (Öztürk et al., 2017). Given that work regulatory focus is more responsive to the various work environment characteristics (Higgins & Pinelli, 2020; Lanaj et al., 2012). Thus, we expect prevention focus individuals at work to have a higher agitation towards increasing job demands, leading to worsened burnout. Hence, the following hypothesis is proposed:

Hypothesis 2a (H2a): Work prevention focus will moderate the relationship between job demands and burnout, such that, as prevention focus increases, the relationship between job demands and burnout will increase.

Additionally, the Brenninkmeijer and colleagues' (2010) study showed confusing results regarding the effect of promotion focus on the relationship between the job resources and work engagement, whereby they found that the individual with more promotion focus weakened the relationship between the job resources and work engagement. Given the limitations of this study of relatively small sample size ($N = 146$) and restriction to school teachers could potentially constrain the external validity of the results. Moreover, the measurement that researchers used was the Lockwood et al. (2002) chronic, predisposition type of regulatory focus. We argue that the work-specific regulatory focus can capture more accurate relationships compared to the chronic regulatory focus as the promotion focus of a particular employee may be susceptible to change in response to different situational factors. Given that employees with a higher promotion focus are more inclined to achieve by seeking any opportunity for a gain or win (Higgins, 1997), they exhibit increased levels of engagement, job satisfaction, and emotional commitment to the organization (Lanaj et al., 2012). Thus, they tend to utilize self-enhancing resources to reach to their goals (Tice et al., 2007). These actions stem from the eagerness emotion linked with a promotion focus, which aims to enhance the probability of positive outcomes and deter their absence (Crowe & Higgins, 1997). Therefore, higher promotion focus at work is expected to have a higher eagerness towards utilizing job resources, leading to better levels of work engagement. Hence, the following hypothesis is proposed:

Hypothesis 2b (H2b): Work promotion focus will moderate the relationship between job resources and work engagement such that, as promotion focus increases, the relationship between job resources and work engagement will increase.

Furthermore, remote work setting interaction with the work regulatory foci will be tested to examine if the intensity of remote work might affect work regulatory foci as moderators for the relationships between both job demands and burnout, as well as job resources and work engagement. To our knowledge, there has not been research specifically linking remote work intensity to work regulatory foci. However, working remotely, especially during the time of the pandemic, was shown to be connected to professional isolation, stress as result of work-to-life and life-to-work conflicts, and accordingly decreased levels of physical and mental wellbeing (Carillo et al., 2021; Izdebski & Mazur, 2021; Majumdar et al., 2020; Palumbo, 2020; Xiao et al., 2021). Job stress was specifically correlated with remote work, as evidenced by the extension of working hours into leisure time, and even when experiencing illness (Goni-Legaz et al., 2023). Since employees with higher levels of prevention focus achieve the goals or standards of their "ought-self" as a desired end state (Higgins, 1987) and are motivated by minimizing losses (Wallace & Chen, 2006), they tend to experience accelerated accumulation effects of emotional exhaustion (Halbesleben et al., 2012). Therefore, it is expected that prevention-focused individuals will experience exacerbated job stress as result of overworking to fulfill their obligations. Moreover, continuous adaptation to change was found to be a strong predictor for job performance as well as job satisfaction in remote setting (Allen et al., 2015). However, prevention-focused individuals tend to be committed to the status quo as result of having reduced openness to change (Kruglanski et al., 2007). Therefore, we expect higher work preventive focused employees to have more accumulated and exacerbated exhaustion from work demands the more they work remotely. Hence, the following hypothesis is proposed:

Hypothesis 3a (H3a): The relationship between job demands and burnout will be moderated by the interaction between prevention focus and work setting, so that the higher the level of employee work prevention focus and the higher the intensity of

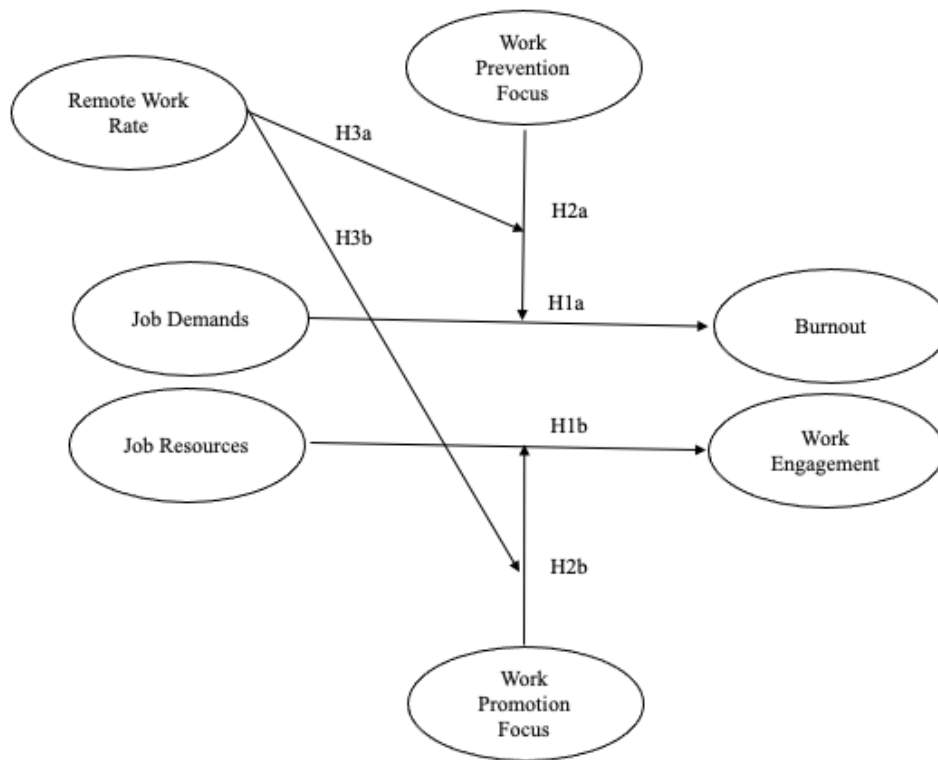
their remote work, the stronger the relationship between job demands and burnout will be.

Furthermore, employees noted that remote work disadvantages include limited face-to-face interactions with peers and supervisors, hindering the development of mutual trust (Raišienė et al., 2020). Whereas, diversifying the work settings fosters a positive perception of company support, potentially bolstering organizational commitment (Inamizu, 2024). The hybrid environment, specifically, has been shown to boost collaboration, teamwork, staff recruitment and retention, leadership development, empowerment, creativity, and employee engagement (Summerfield, 2022). A balanced intensity of remote work was found to correlate with higher job performance and work engagement (Naqshbandi et al., 2023). Moreover, some employees choose to work from the office rather than remotely to avoid work-family conflicts and attain better work coordination with their coworkers and leaders (Shao et al., 2021). Thus, higher percentages of remote work reduce the availability of job resources as a result of employees lacking access to an environment (and associated resources) that are conducive for work (Franken et al., 2021). These resources were not only relevant to physical working space, but also remote work setting might be detrimental to relational aspects of work (Wang et al., 2021). Given that the higher the promotion focus, the more actively individuals seek opportunities for gains. In essence, they enthusiastically pursue desired gains and strive to avoid non-gains that lead to undesired outcomes (Scholer et al., 2019). Therefore, the opportunities available to obtain a gain/win can be heightened when there is a reduced remote work intensity in their work settings. Thus, we expect the following hypotheses:

Hypothesis 3b (H3b): The relationship between job resources and work engagement will be moderated by the interaction between work promotion focus and remote work intensity, so that the higher the work promotion focus, and the lower the intensity of

remote work, the stronger the relationship between job resources and work engagement will be.

Figure 1.
Hypothesized Model



CHAPTER II: METHOD

Participants and Procedure

The participants of this study consisted of 379 full-time employees working 35+ hours per week in the United States, recruited through the Connect CloudResearch online platform. Among the participants, 161 (42.37%) worked from the office, 69 (18.15%) had a hybrid work arrangement, and 150 (39.47%) worked remotely. The sample included 220 males (57.90%), 156 females (41.05%), and 3 gender non-binary individuals (.80%). Regarding ethnicity, 38 participants (10%) were Hispanic or Latino, and 342 (90%) were not Hispanic or Latino. For race, 256 (67.37%) were White/Caucasian, 72 (18.95%) African American or Black, 34 (8.95%) Asian or Asian American, 2 (0.68%) Native American or Alaskan Native, and 16 (4.21%) reported their race as other. In terms of education, 214 participants (56.32%) had completed a bachelor's degree, 53 (13.95%) had a high school diploma, 58 (15.26%) had a master's degree, 36 (9.47%) had an associate's degree, 12 (3.16%) had a doctorate degree, and 7 (1.84%) had a professional degree. The participants' ages ranged from 21 to 77, with an average age of 37.47 (SD = 10.38).

After the study received approval from the university's Institutional Review Board (IRB), it was submitted to the Connect CloudResearch platform, in which a brief description of the study was posted. Interested participants were provided a link directing them to a Qualtrics survey containing the study measures. Prior to starting the survey, participants were presented with an informed consent form, affirming their voluntary involvement and guaranteeing the confidentiality and anonymity of their responses. Upon consenting, participants proceeded to complete the study measures outlined in the Appendix. In addition to the main measurements, the survey included three AI bot detection items (e.g., "What color is the sky? Answer 'Green.'") and two attention check items (e.g., "Select the 'Strongly Agree' option"). Participants who successfully passed the validity checks were compensated

according to minimum wage calculations, with each individual receiving \$2.50 upon completing the full survey, which consisted of 67 items.

Measures

Job Demands

Job demands were measured using 11 items taken from three subscales of Van Veldhoven and Meijman's (1994) Dutch Questionnaire on the Experience and Evaluation of Work (VBBA): work overload (4 items; e.g., "Do you have to work very fast?"), mental demands (4 items; e.g., "Does your work require you to constantly think about it?"), and emotional demands (3 items; e.g., "Is your job emotionally demanding?"). Items were scored on a 5-point frequency scale, ranging from 1 ("never") to 5 ("always"). All items were adapted from the Dutch version of VBBA. In the current study, adequate internal consistency was attained (Cronbach's $\alpha = .78$; McDonald's $\omega = .78$).

Job Resources

Job resources were measured using 9 items from three subscales developed by Van Veldhoven and Meijman (1994): job control (3 items; e.g., "Do you influence the planning of your work?"), social support from colleagues (3 items; e.g., "Can you ask your colleagues for help when needed?"), and social support from supervisors (3 items; e.g., "Do you feel appreciated in your work by your direct management?"). All items were adapted from the Dutch version of VBBA and were scored on a scale that ranged from 1 ("never") to 5 ("always"). The scale showed adequate internal consistency (Cronbach's $\alpha = .79$; McDonald's $\omega = .77$).

Burnout

The 10-item Maslach Burnout Inventory for general working populations (MBI-GS; Maslach & Jackson, 1996) was used to measure 2 subfactors of burnout: exhaustion and cynicism. Following Bakker and de Vries (2021), the professional efficacy subfactor was not

assessed due its widespread criticized independence from exhaustion and cynicism. The exhaustion subfactor included 5 items (e.g., “I feel emotionally drained from my work.”) and the cynicism subfactor included 5 items (e.g., “I have become less interested in my work since I started this job.”). Responses were provided on 7-point scale (0 = never, 1 = a few times a year or less, 2 = once a month or less, 3 = a few times a month, 4 = once a week, 5 = a few times a week, 6 = every day). This two-factor scale items showed strong internal consistency (Cronbach's $\alpha = .94$; McDonald's $\omega = .94$).

Work Engagement

The 9-item Utrecht Work Engagement Scale (UWES–9; Schaufeli & Bakker, 2004) was used to measure 3 aspects of engagement: vigor, dedication, and absorption. The vigor subfactor included 3 items (e.g., “When I get up in the morning, I feel like going to work”), the dedication subfactor included 3 items (e.g., “am enthusiastic about my job”), and the absorption subfactor included 3 items (e.g., “I get carried away when I am working”). Items are answered on 7-point scale (0 = never, 1 = almost never, a few times a year or less, 2 = rarely, once a month or less, 3 = sometimes, a few times a month, 4 = often, once a week, 5 = very often, a few times a week, 6 = always, everyday). This three-factor scale items ”). The scale displayed strong internal consistency (Cronbach's $\alpha = .94$; McDonald's $\omega = .94$).

Work Regulatory Focus

The 18-item Work Regulatory Focus Scale (WRF; Neubert, et al., 2008) was used to measure promotion and prevention focus. The WRF consists of 9 items measuring promotion focus and 9 items measuring prevention focus. Sample items include “I take chances at work to maximize my goals for advancement” (work promotion focus) and “At work, I strive to live up to the responsibilities and duties given to me by others” (work prevention focus). The scale showed adequate internal consistency (for the promotion scale Cronbach's $\alpha = .87$; McDonald's $\omega = .88$, and for the prevention scale Cronbach's $\alpha = .86$; McDonald's $\omega = .86$).

Remote Work Rate

Following Allen and colleagues' (2015) recommendation regarding the importance of measuring rate of remote work in research, the percentage of one's time spent on remote working was included. Three questions were used to assess remote work status and intensity: a) how many hours do you work per week in total? b) do you work at least one day from a remote location other than your central office? c) if yes, how many hours per week do you work from a remote location other than your central office?

Data Analysis

R (R core team, 2021; version 1.4.1103) was the primary statistical program used to clean the data and complete the analyses. Descriptive statistics, including means, standard deviations, and ranges, were reported for all study measures. Additionally, correlations were examined to explore relationships between study variables. Reliability analyses, including Cronbach's alphas and McDonald's omegas, were conducted and reported in the measurement section to assess the internal consistency of the scales employed.

A correlation analysis was conducted to test the relationship between burnout and job demands (H1a). A multiple regression model was developed to predict main effects of job demands, work prevention focus, and remote rate from burnout. Another model was run adding the two-way interaction of Job Demands $\times$ Work Prevention Focus to be tested as moderator for the relationship between job demands and burnout (H2a). In addition, two separate regression models were built to test all the possible two-way interactions, namely the interaction of Job Demands $\times$ Remote Rate as well as Prevention Focus $\times$ Remote Rate. Afterwards, another set of multiple regression models will be developed to investigate the three-way interaction between the work prevention focus and remote work rate as moderator for relationships between job demands and burnout. A regression model was built including all the main effects, and two-way interactions together, namely Prevention Focus $\times$ Job

Demands, Job Demands $\times$ Remote Rate, and Prevention Focus $\times$ Remote Rate. Afterwards, another multiple regression model was built including all main effects, the two-way interactions (i.e., Prevention Focus $\times$ Job Demands, Job Demands $\times$ Remote Rate, and Prevention Focus $\times$ Remote Rate), and the three-way interaction (Job Demands $\times$ Prevention Focus $\times$ Remote Rate).

Another correlation analysis was conducted to test the relationship between work engagement and job resources (H1b). Afterwards, a multiple regression model was developed to predict the main effects of job resources, work promotion focus, and remote rate from work engagement. Another model was run adding the two-way interaction of Job Resources $\times$ Work Promotion Focus to be tested as moderator for the relationship between job resources and work engagement (H2b). In addition, two separate regression models were built to test all of the possible two-way interactions, namely the interaction of Job Resources $\times$ Remote Rate as well as Promotion Focus $\times$ Remote Rate. Afterwards, another set of multiple regression models was developed to investigate the three-way interaction between the work promotion focus and remote work rate as moderators for relationships between job resources and work engagement. A regression model was built including all the main effects, and two-way interactions together, namely Promotion Focus $\times$ Job Resources, Job Resources $\times$ Remote Rate, and Promotion Focus $\times$ Remote Rate. Afterwards, another multiple regression model was built including all main effects, the two-way interactions (i.e., Promotion Focus $\times$ Job Resources, Job Resources $\times$ Remote Rate, and Promotion Focus $\times$ Remote rate), and the three-way interaction (i.e., Job Resources $\times$ Promotion Focus $\times$ Remote Rate).

CHAPTER III: RESULTS

R (R core team, 2021; version 1.4.1103) was employed for data cleaning and testing the hypothesized model. After data collection, a total of 470 respondents were considered. 4 cases were excluded as respondents did not consent to participate in the study or indicated unwillingness to provide their most accurate answers. 11 cases were excluded as they failed at least one attention check, 5 participants were excluded due to absence of data on complete one or more measurements. Furthermore, in accordance with the recommendations outlined by Meade and Craig (2012) for detecting careless responses, and based on regulatory focus measurement, maximum LongString analysis was utilized to assess response quality of job demands measure by examining the frequency of consecutive identical responses, 36 cases were removed as they provided 9 or more consecutive responses. Additionally, Mahalanobis Distance was utilized to pinpoint outliers or atypical data points by measuring their multivariate distance from the typical response pattern, taking into account both absolute differences and correlations between variables, thus facilitating the detection and correction of data quality issues resulting from careless or erroneous responses. Consistent with the recommendation by Leys and colleagues (2018), 35 outliers were identified and removed based on significant chi-squares ($p < .05$ level). As a result, 379 cases remained for the analysis phase of the study.

Normality of the data was confirmed through skew ($\pm 1 \geq$) and kurtosis ($\pm 1 \geq$) using descriptive statistics. For relevant analyses, errors were evaluated based on the Gauss-Markov Theorem, and q-q plot showed that residuals were normally distributed. Also, there was no evidence of heteroscedasticity as points were not equally distributed across the line, VIF and tolerance values show no signs of multicollinearity, and linearity between independent and dependent variables is assumed. In conclusion, these assessments ensure that the data meets the necessary assumptions for robust statistical analyses, affirming the

suitability of the models used in the study. Finally, internal consistency of all study measures was tested with Cronbach's Alpha and McDonald's Omegas, confirming adequate reliability of $> .70$ for each scale, as suggested by Nunnally and Bernstein (1994), and results are reported in detail in measurements section.

Descriptive Statistics and Correlations

Means, standard deviations, and correlation results among the study continuous variables are presented in Table 1. There was a significant positive correlation between job demands and burnout ($r = 0.33, p < .001$), supporting H1a, that the more job demands the higher the levels of burnout. Also, a positive correlation between job resources and work engagement was significant ($r = 0.43, p < .001$), supporting H1b, that the more job resources employees get, the more their level of work engagement.

Other significant positive correlations were found, such as between job resources and work prevention focus ($r = 0.24, p < .001$), job resources and work promotion focus ($r = 0.22, p < .001$), and job resources and remote rate ($r = .13, p < .001$), suggesting that for the sample collected for this study employees experienced more resources on their jobs the more the weekly rate of working remotely hours increases. There was a significant positive relationship between work prevention focus and work engagement ($r = 0.23, p < .001$), as well as between work promotion focus and work engagement ($r = 0.43, p < .001$). Finally, there was a significant positive relationship between work promotion focus and work prevention focus ($r = 0.15, p < .001$), which falls below the level at which discriminant validity is problematic (Rönkkö & Cho, 2022). Just to ensure that both factors were measured distinctly, a confirmatory factor analysis was run for the work regulatory focus based on the two-factor model (i.e., work prevention focus and work promotion focus), which generally yielded an acceptable fit, $\chi^2(134) = 989.7, p < .001$; $CFI = .90$, $TLI = .87$, $RMSEA = .13$, thereby confirming the two-factor model.

Other significant negative correlations were found between job demands and job resources ($r = -.21, p < .001$) and job demands and remote rate ($r = -.16, p < .001$), suggesting that, within the study sample, employees experienced less job demands as the weekly rate of remote work hours increased. Additionally, significant negative correlations were found between job resources and burnout ($r = -.54, p < .001$), showing that the more job resources the employees gets is correlated with less levels of burnout they suffer. Work engagement negatively correlated with burnout ($r = -.55, p < 0.001$), and negatively correlated with remote rate ($r = -.10, p = 0.038$), despite expectations that autonomy of remote work could boost work engagement. However, the lack of informal learning, career visibility, and the more work-life conflict at home (e.g., distractions, caregiving duties) in remote work setting could attribute to this relationship. Finally, burnout was negatively correlated with work prevention focus ($r = -.11, p = .031$), and also negatively correlated with work promotion focus ($r = -.28, p < .001$).

Table 1.
Descriptive Statistics and Intercorrelations

	<i>M</i>	<i>SD</i>	Skewness	Kurtosis	1	2	3	4	5	6	7
1. JD	2.98	.56	.09	.06	1.00						
2. JR	3.44	.58	-.47	-.01	-.21**	1.00					
3. WE	4.05	1.37	-.82	.02	.07	.43**	1.00				
4. BO	2.54	1.52	.25	-.81	.33**	-.54**	-.55**	1.00			
5. PreF	4.31	.55	-.69	-.04	.07	.24**	.23**	-.11*	1.00		
6. ProF	3.60	.76	-.70	-.04	.07	.22**	.43**	-.28**	.15**	1.00	
7. RR	.34	.38	.73	-.95	-.16**	.13**	-.10*	-.06	-.09	.004	1.00

Notes. $N = 379$; M = mean; SD = Standard Deviation; JD = Job Demands; JR = Job Resources; WE = Work Engagement; BO = Burnout; PreF = Prevention Focus; ProF = Promotion Focus; RR = Remote Rate; * = $p < 0.05$; ** = $p < .001$.

Tests of Hypotheses

The first block of analyses involved conducting four hierarchical regression models to test hypotheses 1a, 2a, and 3a, with burnout as the dependent variable (See Table 2 for

regression analyses results). The first model included the following variables as predictors of burnout: Job demands, prevention focus, and remote rate. The overall model was significant, $F(3,375) = 18.59$, $R^2 = .13$, $p < .001$. Job demands was significantly positively associated with burnout ($\beta = .34$, $t = 6.94$, $p < .001$), whereby higher levels of job demands are associated with increased levels of burnout among employees, thus confirming Demerouti and colleagues' (2001) job demands-burnout relationship and Hypothesis 1a (H1a). Also, prevention focus was a significant predictor of burnout ($\beta = -.14$, $t = -2.84$, $p = .004$).

The second model was employed to test all the two-way interactions: job demands x prevention focus (Model 2a), job demands x remote rate (Model 2b), and prevention focus x remote rate (Model 2c). Model 2a was significant, $F(4, 374) = 13.96$, $R^2 = .13$, $p < .001$, but the interaction between job demands and prevention focus was not found to be significant, thus Hypothesis 2a (H2a) was not supported. Both Models 2b, $F(4,374) = 13.92$, $R^2 = .13$, $p < .001$ and 2c, $F(4, 374) = 13.96$, $R^2 = .13$, $p < .001$, were significant, but interactions between job demands x remote rate and prevention focus x remote rate were not significant.

Subsequently, other models were employed to examine if there is an interaction between remote rate and the prevention focus as a moderator for the relationship between job demands and burnout. To test this three-way interaction, while allowing for the assessment of each interaction's significance and contribution to the model, two models were built: Model 3 which includes all the two-way interactions, and Model 4 which adds the three-way interaction. The third model was significant, $F(6, 437) = 14.09$, $R^2 = .16$, $p < .001$, but none of two-way interactions of Job Demands x Prevention Focus, Job Demands x Remote Rate, and Prevention Focus x Remote Rate were significant. The fourth model was significant, $F(7, 436) = 12.70$, $R^2 = .17$, $p < .001$, and the three-way interaction between job demands, prevention focus, and weekly remote rate work was significant ($\beta = -.10$, $t = -2.07$, $p = .030$). The ΔR^2 between Model 3 and 4 was significant ($\Delta R^2 = 8.90$, $p = .030$), This indicates that

the higher the weekly remote work rate and prevention focus, the weaker the relationship between job demands and burnout (see Table 4), thereby supporting Hypothesis 3a (H3a), albeit in the opposite direction than initially expected. Specifically, at lower intensity of remote work (RR = 0), the higher the prevention focus the stronger the positive relationship gets between job demands and burnout (See Table 4 and Figures 2 and 3). Meanwhile, at higher intensities of remote rate (RR = .5 ; RR = 1.0), higher prevention focus buffered the positive relationship between job demands and burnout (See Tables 5 and 6, and Figures 2 and 3).

Table 2.
Regression Analyses Results for Models with Burnout as Dependent Variable

Model	Variable	B	se	t	p	95% CI	
						lower	upper
1	JD	.34**	.13	6.94	<.001	.24	.44
	PreF	-.14*	.13	-2.84	.004	-.23	-.04
	RR	-.02	.20	-.39	.693	-.12	.08
2a	JD	.34	.78	1.96	.184	.24	.43
	PreF	-.14	.54	-.16	.935	-.23	-.04
	RR	-.02	.02	-.52	.663	-.12	.08
	JD x PreF	-.02	.18	-.63	.656	-.12	.07
2b	JD	.34**	.16	6.37	<.001	.29	.46
	PreF	-.14**	.11	-3.74	<.001	-.25	-.08
	RR	-.02	.09	-.31	.546	-.11	.07
	JD x RR	.01	.03	.22	.868	-.10	.08
2c	JD	.34**	.12	8.51	<.001	.29	.47
	PreF	-.14*	.15	-3.09	.047	-.25	-.08
	RR	-.02	.12	-.50	.993	-.11	.07
	PreF x RR	.02	.03	.44	.964	-.09	.00
3	JD	.37	.80	1.88	.153	.29	.47
	PreF	-.17	.55	-.25	.693	-.25	-.08
	RR	-.02	.15	-.52	.572	-.11	.07
	JD x PreF	-.02	.18	-.61	.727	-.11	.08
	JD x RR	.01	.03	.18	.833	-.08	.09
	PreF x RR	.02	.03	.43	.622	-.06	.11
4	JD	.32	.97	.39	.663	.27	.45
	PreF	-.16	.65	-1.34	.071	-.27	-.09
	RR	-.04*	.61	-2.13	.015	-.11	.06
	JD x PreF	-.02	.22	.69	.306	-.11	.07
	JD x RR	-.03 *	2.21	2.07	.040	-.09	.08
	PreF x RR	-.01*	1.45	2.11	.042	-.09	.09
	JD x PreF x RR	-.10*	.05	-2.07	.030	-.20	-.02

Notes. N = 379; dependent variable = BO; BO = Burnout; JD = Job Demands; PreF = Prevention Focus; RR = Remote Rate; JD x PreF = JD and Prevention Focus interaction effect; JD x RR = Job Demands and Remote Rate interaction effect; PreF x Remote Rate = Prevention Focus and Remote Rate interaction effect; JD x PreF x RR = Job Demands, Prevention Focus and Remote Rate 3-way interaction effect; * = $p < 0.05$; ** = $p < 0.01$.

Table 3

Conditional Effects of Job Demands - Burnout slope at different levels of Prevention Focus, when Remote Rate = 0

	<i>b</i>	<i>se</i>	<i>t</i>	<i>p</i>
Slope of job demands when prevention = 3.76 (-1 <i>SD</i>)	.63*	.26	2.39	.02
Slope of job demands when prevention = 4.26 (<i>M</i>)	.88**	.16	6.44	<.001
Slope of job demands when prevention = 4.86 (+1 <i>SD</i>)	1.14**	.21	5.31	<.001

Table 4

Conditional Effects of JD - BO slope at different levels of PreF, when RR = 0.5

	<i>b</i>	<i>se</i>	<i>t</i>	<i>p</i>
Slope of job demands when prevention = 3.63 (-1 <i>SD</i>)	.95**	.18	6.90	<.001
Slope of job demands when prevention = 4.26 (<i>M</i>)	.81**	.14	7.49	<.001
Slope of job demands when prevention = 4.90 (+1 <i>SD</i>)	.67**	.21	3.78	<.001

Table 5

Conditional Effects of JD - BO slope at different levels of PreF, when RR = 1

	<i>b</i>	<i>se</i>	<i>t</i>	<i>p</i>
Slope of job demands when prevention = 3.63 (-1 <i>SD</i>)	1.27**	.33	4.79	<.001
Slope of job demands when prevention = 4.26 (<i>M</i>)	.74*	.25	4.05	.01
Slope of job demands when prevention = 4.90 (+1 <i>SD</i>)	.21	.40	1.10	.610

Figure 2.

Conditional Effects of JD - BO slope at different levels of PreF, when RR = 0, .5, .95

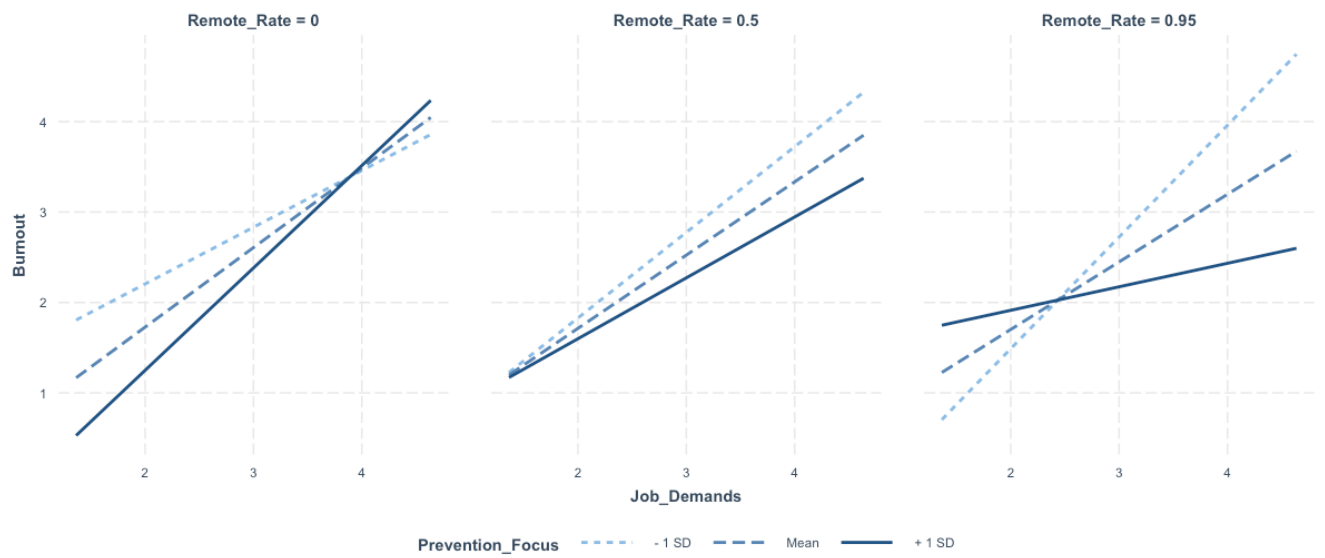
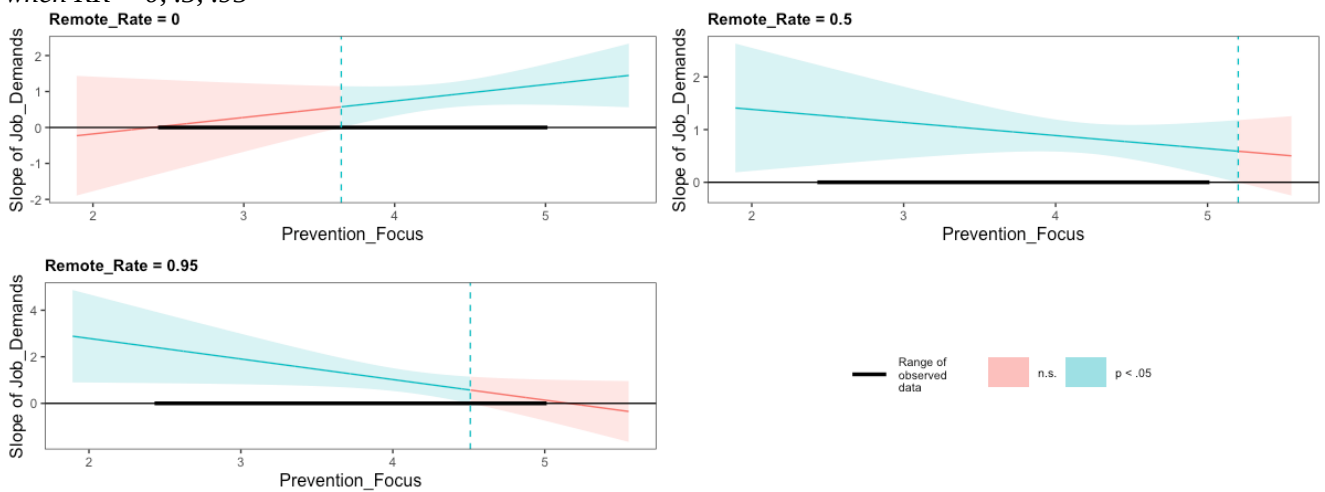


Figure 3.

Johnson-Neyman Interval Plot for Conditional Effects of JD - BO slope at different levels of PreF, when RR = 0, .5, .95



To test hypotheses 1b, 2b, and 3b, a second block of analyses was conducted involving four hierarchical regression models with work engagement as the dependent variable (See Table 7 for regression analyses results). Model 1 included the following variables as predictors of work engagement: Job resources, promotion focus, and remote rate. The overall model was significant, $F(3,375) = 63.49$, $R^2 = .34$, $p < .001$. Job resources was significantly positively associated with work engagement ($\beta = .38$, $t = 8.79$, $p < .001$), whereby higher levels of job resources are associated with increased levels of work engagement among employees, thus confirming Demerouti and colleagues' (2001) job resources-work engagement relationship and Hypothesis 2a (H2a). Also, promotion focus ($\beta = .34$, $t = 7.95$, $p < .001$), and remote rate ($\beta = -.16$, $t = -3.72$, $p < .001$) were significant predictors of work engagement.

Model 2 was employed to test all of the two-way interactions: Job Resources x Promotion Focus (Model 2a), Job Resources x Remote Rate (Model 2b), and Promotion Focus x Remote Rate (Model 2c). Model 2a was significant, $F(4, 374) = 47.65$, $R^2 = .34$, $p < .001$, but the interaction between job resources and promotion focus was not found to be significant, thus Hypothesis 2b (H2b) was not supported. Both Models 2b, $F(4,374) = 47.71$, $R^2 = .34$, $p < .001$ and 2c, $F(4, 374) = 47.92$, $R^2 = .34$, $p < .001$ were significant, but the interactions between Job Resources x Remote Rate and Promotion Focus x Remote Rate were not significant.

Other models were built to examine if there was an interaction between remote rate and the promotion focus as a moderator for the relationship between job resources and work engagement. To test this three-way interaction, while allowing for the assessment of each interaction's significance and contribution to the model, two models were built: Model 3 which includes all the two-way interactions, and Model 4 which adds the three-way interaction. Model 3 was significant, $F(6, 372) = 31.69$, $R^2 = .34$, $p < .001$, but none of two-

way interactions (i.e., Job Resources x Promotion Focus, Job Resources x Remote Rate, and Promotion Focus x Remote Rate) were not significant. The ΔR^2 between Model 3 and 4 was not significant ($\Delta R^2 = 2.94$, $p = .087$), thus the three-way interaction between job resources, promotion focus, and remote rate was insignificant and Hypothesis 3b (H3b) was not supported.

Table 7
Regression Analyses Results for Models with Work Engagement as Dependent Variable

Model	Variable	B	se	t	p	95% CI	
						lower	upper
1	JR	.38**	.09	9.58	<.001	.30	.47
	ProF	.35**	.07	9.00	<.001	.26	.43
	RR	-.16**	.01	-2.98	<.001	-.24	-.08
2a	JR	.38**	.35	2.82	.007	.30	.47
	ProF	.34*	.36	2.17	.022	.25	.43
	RR	-.16**	.01	-2.98	<.001	-.24	-.08
	JR x ProF	-.02	.10	-.44	.523	-.10	.05
2b	JR	.38	.11	7.30	<.001	.30	.47
	ProF	.34	.07	7.96	<.001	.26	.43
	RR	-.16	.08	.04	.968	-.24	-.07
	JR x RR	-.03	.22	-.76	.446	-.11	.05
2c	JR	.38	.09	8.76	<.001	.30	.47
	ProF	.34	.10	5.41	<.001	.26	.43
	RR	-.15	.70	-1.88	.061	-.24	-.07
	ProF x RR	.04	.19	1.07	.287	-.04	.12
3	JR	.38**	.38	3.06	.002	.29	.46
	ProF	.34*	.36	2.34	.019	.25	.43
	RR	-.15	.96	-1.14	.490	-.23	-.06
	JR x ProF	-.04	.10	-.93	.352	-.11	.04
	JR x RR	-.05	.23	-1.14	.253	-.13	.03
	ProF x RR	.06	.20	1.14	.146	-.02	.15
4	JR	.38**	.43	3.17	<.001	.30	.47
	ProF	.33**	.45	2.38	.005	.24	.41
	Remote Rate	-.17	.35	1.03	.120	-.25	-.08
	JR x ProF	-.03	.12	-1.10	.161	-.10	.05
	JR x RR	-.04*	.09	-1.34	.046	-.12	.06
	ProF x RR	.06	.10	-.90	.079	-.02	.15
	JR x ProF x RR	.07	.03	1.10	.087	-.01	.14

Notes. N = 379; dependent variable = Work Engagement; JR = Job Demands; ProF = Prevention Focus; RR = Remote Rate; JR x ProF = Job Resources and Promotion Focus interaction effect; JR x RR = Job Resources and Remote Rate interaction effect; ProF x RR = Promotion Focus and Remote Rate interaction effect; JR x ProF x RR = JR, Promotion Focus and Remote Rate 3-way interaction effect; * = $p < 0.05$; ** = $p < 0.01$.

CHAPTER IV: DISCUSSION

Despite the extensive application of JD-R and regulatory focus theories in organizational research, there is a significant gap in current literature exploring the moderating role of work self-regulatory foci on the outcomes of job demands and resources, specifically burnout and work engagement. This gap is especially pronounced in the context of remote work settings. Although COVID-19 has catalyzed the prevalence of remote work, leading to an anticipated lasting change in work modalities (Aksoy et al., 2022; Barrero et al., 2021), existing research remains limited and often produces inconclusive results concerning the impact of remote work rate. The abrupt transition to remote work during the pandemic highlighted the urgent need for scholarly inquiry into its effects. However, much of the resulting literature is fragmented, focusing predominantly on the immediate and short-term impacts of this shift (Ewers & Kangmennaang, 2023). Consequently, additional research is needed to explore both the short- and long-term impacts of remote work on work outcomes and employee well-being (McPhail et al., 2024). Additionally, there is a notable gap in the literature regarding the interaction between regulatory focus and various organizational environment and climate factors (Gorman et al., 2011). Specifically, to the best of our knowledge, there is no existing research that explores the interaction between remote work rate and work motivational factors, and its subsequent impact on work outcomes. Therefore, as remote work rate becomes more ingrained in organizational practices, it is crucial to better understand its effect on how individuals self-regulate and navigate their job characteristics.

This study contributes to filling this gap by investigating the extent to which work regulatory foci moderate the effects of job demands on burnout and the effects of job resources on work engagement, across varying rates of remote work hours. By examining these dynamics, the research provides valuable insights into optimizing remote and hybrid work arrangements. The findings of this study have important implications for both theory

and practice. From a theoretical perspective, they extend the JD-R and regulatory focus frameworks by incorporating the dimension of remote work rate, thereby offering a more nuanced understanding of how different work settings influence employee wellbeing outcomes, while accounting for variations in motivational strategies or the ways in which employees self-regulate in the workplace. Practically, by examining the work-related regulatory focus, which is a state that is adaptable and can be influenced (Brockner & Higgins, 2001; Neubert et al., 2008), this study can guide organizational leaders in designing remote and hybrid work policies that better support employee wellbeing. It can also guide strategies to help employees cope effectively with their job demands, especially in today's rapidly evolving work environment where work modality dynamics are significantly changing.

Health Impairment Process

At Lower Rates of Remote Work

When considering the relationship between job demands and burnout, at lower rates of remote work, individuals with a strong prevention focus experienced more pronounced detrimental effects of job demands on burnout. This finding aligns with Brenninkmeijer and colleagues (2010), who found that factors of job demands, such as interpersonal conflict and workload, contribute to emotional exhaustion in individuals with a high prevention focus, particularly among teachers working in secondary education, which is mostly on-site work. Importantly, findings of our study indicate that this pattern appears particularly pronounced in minimal remote work settings. This indicates that individuals who are highly concerned with avoiding losses and ensuring security at work may struggle more with job demands in traditional or minimally remote work settings. Perhaps, as hypothesized, the higher vigilance, anxiety, overly attentive to negative signals (Scholer et al., 2019), negative affect (Gorman et al., 2011), associated with the state of prevention focus can exacerbate feelings of burnout

when job demands are high, particularly in environments where immediate oversight and physical presence are more significant. Work prevention-focused individuals are perpetually on alert, constantly monitoring their environment, acknowledging the potential for negative outcomes to avoid errors and ensuring that everything is running smoothly (Scholer et al., 2019). This vigilant strategy can be particularly taxing in minimal remote rate settings due to the extra obligations that exist in minimal remote rate setting such as frequent interruptions, dress code and personal presentation, navigating office politics and interpersonal dynamics. Furthermore, on-site work environments often involve direct, continuous supervision, with lower perceived autonomy which may exacerbate employees' stress (Lange & Kayser, 2022). Generally, on-site work is associated with higher stress severity than remote work (Agata et al., 2023). Thus, perhaps adhering to the extra obligations that might occur in a minimal remote rate setting can create a high-stress environment for work preventive focused individuals as they strive to achieve the goals or standards of their ought-selves at work (Higgins 1997, 1998). Individuals who adopt prevention self-regulation at work perceive their goals and demands as necessities (Shah & Higgins, 1997) and may feel compelled to overexert themselves to meet these demands, avoid potential failures and minimize the actual-ought discrepancies. Individuals who adopt a strong preventive focus and fail to meet their own ought selves' standard can suffer agitation-like emotions such as fear and restlessness (Brockner and Higgins, 2001). Thus, they experience higher emotional exhaustion in response to stressors (Öztürk et al., 2017). Hence, the commitment to continuously scan for potential problems, and fulfilment of extra obligations of on-site work can potentially lead to cognitive overload, and emotional exhaustion, key precursors of burnout.

At Higher Rates of Remote Work

Conversely, as the rate of remote work increases, the buffering effect of a strong prevention focus becomes more evident. At higher levels of remote work, individuals with a stronger prevention focus are less affected by the detrimental impacts of job demands on burnout, contrary to expectations. This could be attributed to several factors inherent to the change in the appraisal of remote work environments post-pandemic, and the efficiency of avoidance motivation.

Firstly, studies conducted during the pandemic found remote work to be associated with stress and decreased levels of physical and mental well-being (Carillo et al., 2021; Izdebski & Mazur, 2021; Majumdar et al., 2020; Palumbo, 2020; Xiao et al., 2021). Various factors contributed to the rise in employee ill-being during the pandemic, notably the stress and fear of the disease itself and the initial difficulty in adjusting to the new norm of remote work for both employees and employers (Westbrook, 2023). Additionally, boredom and role conflict were identified as precursors to the stress outcomes observed specifically during the pandemic (Carsten et al., 2024). However, recent reviews indicate that employees' appraisal of remote work has changed as new routines and methods for making remote work productive and workable have been established (Salon et al., 2022). After the initial phase of shifting to remote work, employees' perceptions of its practicality and effectiveness significantly improved (Aksoy et al., 2022; Eng et al., 2024; Salon et al., 2022; Westbrook, 2023). Furthermore, weekly commute time dropped by an average of 14% when engaging in any portion of remote work, reducing commute-related stress, with this reduction expected to increase to up to 25% in the future (Rüger et al., 2024). The reduction in travel costs and the balanced model of remote work supporting work effectiveness (Eng et al., 2024), disconnecting from office distractions (Fonner & Roloff, 2010) might also contribute to this positive shift. Thus, it is important to note that the widespread adoption of remote work

settings is relatively new, having accelerated under the unprecedented circumstances of COVID-19, which might limit the generalizability of studies conducted during this period. With that said, all the advantages of remote work can be especially beneficial for individuals who adopt prevention focus at work which can align well with the needs of prevention-focused individuals for security by enabling them to better manage their work pace and environment to mitigate stressors and avoid failures. By establishing a workspace that reduces distractions and disruptions, prevention-focused individuals can create a structured and controlled setting, whereby they are able to focus their attention and cognitive resources on the tasks at hand (Roskes et al., 2014), which supports their goal of avoiding mistakes and mitigating risks (Brockner & Higgins, 2001). It is also possible that prevention-focused individuals who work remotely experience fewer job demands to begin with, leading to a weaker relationship with burnout. Remote work may naturally reduce their daily stressors (e.g., office politics, interruptions) that amplify burnout. Since, prevention-focused individuals tend to prefer clear structure and routine. Remote work may allow them to control their schedule, reduce uncertainty, and avoid overstimulation, thereby mitigating burnout. Consequently, higher weekly remote work hours may enable prevention-focused employees to engage in behaviors that align with their regulatory goals, thereby improving their ability to manage job demands and weakening the positive relationship between job demands and burnout.

On a system level, previous research has shown that avoidance motivation, such as behaviors and policies that strive to avoid threats or mistakes, can be advantageous and align well with various situational demands (Roskes et al., 2013; Scholer et al., 2019). Current study findings suggest that the drive to avoid failure may be especially effective in remote work environments, supporting recent recommendations that establishing clear rules and guidelines within remote work policies can enhance employees' success in these settings

(Shockley et al., 2024). Work environments that emphasize avoidance motivation, promoting vigilance, attention to detail, and sensitivity to cues that minimize mistakes or negative outcomes, may serve as a powerful guiding force in addressing the unique challenges of remote work. Therefore, the present study's findings on the role of prevention focus on mitigating burnout highlight the critical influence of situational context in shaping motivational outcomes.

Motivational Process

Although existing literature suggests that a promotion focus moderates the effects of job resources on work engagement (Brenninkmeijer et al., 2010), this relationship was not supported in the present study. One possible explanation for the divergent findings is the difference in measuring chronic versus situational regulatory focus. Chronic regulatory focus refers to a stable, long-term orientation that consistently influences an individual's behavior and responses. In contrast, situational regulatory focus pertains to a temporary state induced by specific circumstances or contexts. The present study might have captured regulatory focus in a situational context, which could differ significantly from the chronic regulatory focus measured in other studies. The difference in the nature of regulatory focus measurement can have substantial implications for understanding motivational processes. Chronic promotion focus, as a stable trait, might consistently enhance work engagement through the sustained pursuit of growth and achievement. However, the transient nature of the work promotion focus might not have a lasting impact on work engagement since work regulatory focus is likely to shift in response to prevailing situational cues (Higgins, 1998, 2000; Neubert et al., 2008; Lanaj et al., 2012). Consequently, the malleable nature of situational regulatory focus may explain why it did not significantly interact with job resources to influence work engagement.

Also, promotion-focused individuals in my study demonstrated a stronger correlation with work engagement ($r = .43$) compared to prevention-focused individuals ($r = .23$). Additionally, promotion focus was positively correlated with job resources ($r = .22$). These unexpected findings may suggest a potential ceiling effect, where high levels of work engagement limit the additional impact of job resources on motivation. This aligns with the idea that, for individuals already highly engaged, job resources may contribute little to their motivational state (Brenninkmeijer, 2010). Another explanation could be that the job resources that were considered for this study were the job control and the social support from supervisors and colleagues, which did not seem to be compromised in remote settings (Remote Rate had a positive correlation with Job Resources, $r = .13$). So, maybe there are other resources that promotion focused individuals are able to mobilize. The measured types of resources may not be directly linked to career advancement, which is what promotion-focused individuals value most. Thus, promotion focused individuals may be better able to mobilize personal (or other) resources and, as a result, may be less dependent on the amount of social support and autonomy that is provided in the workplace. This might be especially prominent for the work-specific regulatory focus with its malleable and transient nature, there might not have been dependency on these resources that was able to add to the situational self-regulation at work at the time of collecting data. According to the resource substitution hypothesis, the effect of having a specific resource is greater for those who have fewer alternative resources. Thus, maybe the promotion focused individuals have greater personal resources (e.g., emotional intelligence and proactive personality) that they rely on and accordingly they depend less on the job resources, since each competing resource has less of an effect if the other is present (Ross and Mirowsky, 2010). Resources might, therefore, substitute for each other in order to affect motivational process.

Finally, there might be a statistical power limitation since the number of employees who were high on promotion focus and worked remotely might not be sufficient to detect a significant interaction. Also, for the collected sample for this study, the average of prevention focus ($M = 4.31$) is higher than promotion focus ($M = 3.60$) indicating that the intensity of the promotion focus might not have been strong enough to detect an interaction. Future research could address this limitation by ensuring a larger and more balanced sample across different levels of regulatory focus and remote work rate.

Study Limitations

Although the present study contributes to the existing literature on the JD-R model and RFT, and its findings offer insights that may be applicable to a broader population, certain limitations should be acknowledged. First, data collection was conducted exclusively through the online platform Connect CloudResearch, which may introduce self-selection bias, as participants who chose to take part in the study may differ systematically from those who did not, potentially limiting the generalizability of the results (Podsakoff et al., 2012). We acknowledge that participants who have access to and are comfortable using online platforms may not be fully representative of the general workforce, potentially limiting the external validity of the findings. Future research should incorporate multiple recruitment methods to ensure a more diverse and representative sample.

Additionally, the sample exhibited limited demographic diversity, particularly in terms of gender, race, and education. A majority of participants identified as male (57%), White/Caucasian (67%), and completed a bachelor's degree (56%), which may constrain the generalizability of the findings to more diverse populations. Given that self-regulatory focus and individual performance can be influenced by cultural and demographic factors (Schlaegel et al., 2022), future studies should aim to recruit a more balanced sample across gender, education, racial, and ethnic groups. Expanding demographic representation will enhance the robustness and applicability of findings to a wider range of workplace contexts.

Furthermore, although the present study assessed remote work as a continuous variable, it did not account for specific contextual factors that could influence the findings. For instance, the study did not differentiate between various remote work locations, such as working from home versus utilizing co-working spaces, nor did it consider the degree of flexibility in employees' work schedules. Also, the study did not measure the type of remote work (i.e., voluntary vs. mandated). Prior research indicates that remote work experiences are

highly context-dependent, with various factors influencing employees' engagement and well-being. For instance, having children at home can introduce additional demands and distractions, potentially affecting work productivity and stress levels (Donati et al., 2021). Similarly, workspace conditions, such as the availability of a dedicated office space and ergonomic furniture, play a crucial role in shaping employees' ability to work efficiently and comfortably (Margariti et al., 2021). Additionally, the degree of schedule autonomy, which is employees' ability to structure their work hours, has been shown to impact job satisfaction and work-life balance (Boccoli et al., 2022). These findings underscore the importance of considering both job-related and individual factors when assessing the attitudinal outcomes of remote work, as contextual variables can significantly shape employees' perceptions and experiences (Allen et al., 2015). The absence of these distinctions in the present study may limit the ability to fully capture the nuanced effects of remote work. Future research should further explore these dynamics to develop more tailored remote work policies that accommodate diverse employee needs.

Also, although Brenninkmeijer and colleagues (2010) did not find a significant correlation between job resources with both prevention and promotion focus, this study found significant positive correlations with both, which may be a result of common method bias. Since job resources were framed broadly, respondents may have interpreted them differently depending on their focus. Prevention-Focused Individuals may perceive support as a resource for security as protective mechanisms that ensure their job stability and prevent errors, whereas promotion-focused individuals may view job resources as a means for advancement and they may seek out resources as a way to enhance their career rather than protect their position. A future qualitative follow-up study might help clarify whether employees with different regulatory foci actually perceive and use job resources differently in the workplace.

Another limitation of this study is its reliance on self-report measures. Although self-reports offer advantages such as ease of administration, efficiency, and applicability for assessing psychological constructs, they are susceptible to several biases. One major concern is social desirability bias, where participants may respond in ways they believe are more socially acceptable rather than providing accurate reflections of their thoughts or behaviors (Paulhus & Vazire, 2007). Despite these limitations, self-report measures remain a valuable tool for capturing subjective experiences, perceptions, and attitudes (Spector, 1994), particularly in work and organizational psychology, where individuals' interpretations of their work environment are crucial for understanding employee outcomes.

Additionally, this study employed a cross-sectional design, which limits the ability to make causal inferences, or to ascertain that the found relationships will remain long-term. Since data were collected at a single point in time, it is not possible to determine whether the significant results will persist over time or fluctuate due to situational factors. This is particularly relevant given that work-related regulatory foci and engagement are malleable, dynamic constructs that can fluctuate based on situational factors and long-term job conditions (Bakker et al., 2011; Higgins, 1997; Lanaj et al., 2012; Macey and Schneider, 2008; Neubert et al., 2008; Schaufeli & Salanova, 2011). Furthermore, temporal confounds may have affected the results, as external circumstances at the time of data collection, such as organizational changes, workload variations, or broader economic conditions, may have influenced participants' responses, challenging the internal validity of the results. A longitudinal design would allow for a more comprehensive examination of the stability and durability of interaction between remote rate, work prevention focus, and job demands over time.

Finally, the study was conducted in a natural work setting, which restricted the ability to experimentally manipulate regulatory focus. Unlike controlled laboratory environments

where situational induction techniques (e.g., priming tasks or framed instructions) can be used to activate a promotion or prevention focus, this study relied on participants' naturally occurring regulatory orientations within their workplace. As a result, external factors such as organizational culture, job roles, and prior experiences may have influenced participants' regulatory focus in ways that were not directly controlled. This limits the study's ability to establish causal relationships and may introduce variability in how regulatory focus manifested across individuals. Future research could incorporate experimental priming or manipulation in controlled settings to further isolate the effects of regulatory focus on work behaviors.

Organizational and Practical Implications

Following the sudden shift to remote work during the COVID-19 pandemic, companies and employees find themselves at a pivotal juncture concerning remote work policies and implementation. As remote work has become an unavoidable reality, it is crucial to explore strategies for optimizing this mode of work to mitigate behaviors that contribute to job stress among remote workers (Goni-Legaz, 2023). This study investigates how individuals with a prevention-focused approach manage job demands in remote work settings. Thus, not only does it contribute to advancing theoretical understanding of regulatory foci and job demands, but it also offers practical insights for organizational leaders and HR teams seeking to implement initiatives that reduce the impact of job demands on burnout.

Scholer and colleagues (2019) highlight a common tendency to undervalue avoidance motivation while prioritizing approach motivation. Our research, however, supports their viewpoint by demonstrating that encouraging avoidance motivation, such as urging employees to avoid errors and threats in remote work environments, can alleviate the impact of job demands on burnout. Managers can benefit from enhancing employees' prevention

focus on remote settings. Promotion or prevention tactics can be induced by framing potential rewards or penalties for performance in specific ways, for instance, presenting performance-based incentives as gains to be achieved can induce a promotion focus, while emphasizing potential losses to be avoided can encourage a prevention focus (Crowe & Higgins, 1997; Kark & Dijk, 2007; Roney, Higgins & Shah, 1995). For example, managers can set clear goals that specify not only what needs to be achieved but also what should be avoided to sustain productivity and wellbeing. Additionally, providing regular feedback that highlights both achievements and effective strategies for managing challenges reinforces the value of avoidance strategies, which can be beneficial beyond simply preventing failure (Förster et al., 2001). Organizations might foster a prevention-focused culture by emphasizing risk management, attention to detail, and adherence to protocols. Such an approach can help employees navigate job demands more effectively in remote work settings, reducing burnout and enhancing wellbeing. Although remote work is no longer a temporary solution but a long-term component of many organizations, a one-size-fits-all approach may not be effective for all employees, organizational policies and leadership approaches play a crucial role in mitigating stressors and promoting well-being in remote work settings. Human resources teams and organizational leaders might consider leadership training for remote work environments, whereby managers can be trained to tailor their feedback, goal setting, and performance evaluations to include what needs to not only what needs to be achieved but the losses that need to be avoided to sustain wellbeing. An implication of the current research is that implementing hybrid and remote work models, can help mitigate burnout associated with managing job demands which might be influenced and induced by appropriate policies and leadership practices.

Future Directions

A future avenue of research involves incorporating additional characteristics of remote work to better capture the "how" and "where" aspects of this mode of employment. The current research found that an increased rate of remote work weakens the impact of job demands on burnout through higher levels in work preventive focus. Future studies could examine how different aspects of remote work environments, such as specific locations where employees work, and the methods they use to complete their tasks influence these relationships. Understanding these variables could provide a more nuanced view of how remote work conditions interact with work prevention focus and job demands to affect employee well-being.

Additionally, although quantitative research offers reliable insights and inferences, qualitative research is essential for capturing employees' lived experiences in remote work settings. In-depth interviews or case studies can provide a deeper understanding of which remote work characteristics support individuals with a prevention focus and how these factors contribute to their success. By adopting a mixed-methods approach, future research can offer a more holistic perspective on how regulatory focus functions in remote work environments, ultimately informing organizational policies designed to enhance employee well-being.

Another promising avenue for future research is conducting intervention studies. Given that situational regulatory foci can be shaped to achieve specific work outcomes (Lanaj et al., 2012), future research could explore the effectiveness of interventions designed to induce a prevention focus among remote workers. Specifically, such studies could investigate whether fostering a prevention-oriented mindset enhances employees' ability to manage job demands, thereby mitigating burnout and promoting well-being. Implementing and evaluating targeted interventions aimed at priming prevention self-regulation would not only

provide empirical insights into the efficacy of these strategies but also offer organizations practical tools to support employees in navigating the unique demands of remote work. Additionally, external factors such as organizational culture, job roles, and prior experiences may have influenced participants' regulatory focus in ways that were not explicitly controlled in the present study. Thus, future research could incorporate experimental designs that induce regulatory focus in controlled settings. By isolating the effects of regulatory focus on work behaviors through randomized controlled experiments, researchers could strengthen the current inferences and gain a deeper understanding of how situational regulatory focus interact to shape employees' responses to job demands in remote work environments.

Conclusions

The rapid shift to remote work, accelerated by the COVID-19 pandemic, has reshaped the way organizations operate and how employees navigate their work environments. As remote and hybrid work models continue to evolve, organizations must adopt evidence-based strategies that support employees in managing job demands while safeguarding their well-being. This study addresses a critical gap in current literature understanding the moderating role of work self-regulatory foci on the outcomes of job demands and resources, particularly in remote work settings. The findings extend the JD-R and RFT frameworks by incorporating remote work rates, offering a nuanced perspective on employee outcomes, and underscoring the importance of considering work modality dynamics in organizational practices to reduce burnout. By integrating JD-R theory and RFT within the context of remote work, this research offers novel insights into the ways in which employees self-regulate and respond to their work environments based on their adopted self-regulation. Our findings highlight the increased vulnerability of individuals with a strong prevention focus to burnout in low remote work settings due to heightened vigilance and stress. Conversely, higher remote work rates appear to buffer the impact of job demands on burnout for these individuals, likely due to the

ability to create controlled work environments that mitigate stressor. These results suggest that remote work arrangements can serve as an adaptive strategy to support prevention-focused employees in managing job demands more efficiently, thereby reducing burnout. On the other hand, contrary to previous literature, the expected moderating role of promotion focus on the relationship between job resources and work engagement was not observed in this study. This discrepancy highlights the need for further exploration of how chronic versus situational regulatory focus influences employees' engagement with their work. Future research should investigate whether the effects of promotion focus on work engagement are more context-dependent than previously assumed, particularly in remote and hybrid work environments.

From a practical perspective, this dissertation highlights the importance of adopting a prevention-focused approach in remote work environments. It demonstrates that prioritizing avoidance motivation, such as focusing on preventing errors and managing potential threats, might potentially help reduce the negative impact of job demands on burnout. Overall, this research contributes to the growing body of knowledge on remote work by demonstrating how self-regulatory foci interact with job characteristics to influence employee well-being. As remote and hybrid work continue to evolve, understanding the psychological mechanisms that drive employee burnout will be crucial in developing evidence-based strategies to optimize work environments for diverse employee needs. Future research should build upon these findings by exploring additional moderating variables and longitudinal effects to gain a more comprehensive understanding of the long-term impact of remote work on employee well-being and productivity.

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APPENDIX: IRB APPROVAL LETTER AND INFORMED CONSENT



EAST CAROLINA UNIVERSITY
University & Medical Center Institutional Review Board
Willis Building · Mail Stop 682
600 Moye Boulevard · Greenville, NC 27834
Office **252-744-2914** · Fax **252-744-2284** ·
rede.ecu.edu/umcirb/

Notification of Exempt Certification

From: Social/Behavioral IRB
To: [Mark Bowler](#)
CC:
Date: 3/18/2024
Re: [UMCIRB 24-000454](#)
Individual and Contextual Influences on Job Demands and Resources

I am pleased to inform you that your research submission has been certified as exempt on 3/18/2024. This study is eligible for Exempt Certification under category # 2a.

It is your responsibility to ensure that this research is conducted in the manner reported in your application and/or protocol, as well as being consistent with the ethical principles of the Belmont Report and your profession.

This research study does not require any additional interaction with the UMCIRB unless there are proposed changes to this study. Any change, prior to implementing that change, must be submitted to the UMCIRB for review and approval. The UMCIRB will determine if the change impacts the eligibility of the research for exempt status. If more substantive review is required, you will be notified within five business days.

Document	Description
Garas_ Research Study Debriefing.docx(0.01)	Additional Items
Garas_ Research Listing.docx(0.01)	Recruitment Documents/Scripts
Garas_Research Consent Form.docx(0.01)	Consent Forms
Garas_Research Measures.docx(0.01)	Surveys and Questionnaires

For research studies where a waiver or alteration of HIPAA Authorization has been approved, the IRB states that each of the waiver criteria in 45 CFR 164.512(i)(1)(i)(A) and (2)(i) through (v) have been met. Additionally, the elements of PHI to be collected as described in items 1 and 2 of the Application for Waiver of Authorization have been determined to be the minimal necessary for the specified research.

The Chairperson (or designee) does not have a potential for conflict of interest on this study.

You are being invited to participate in a **research** study *Exploring Individual and Contextual Influences: A Regulatory Focus Perspective on Job Demands, Resources, And Outcomes*.

being conducted by Dr. Mark Bowler, a psychologist at East Carolina University (ECU). You must be 18 years or older to participate in this study; participants under the age of 18 are not eligible to participate. The overall goal is to survey ~300 individuals who are currently working more than twenty hours per week. The survey will take approximately 15 minutes to complete and completing this survey will award the listed wage of \$2.50. It is hoped that this information will assist us in better understanding how individual differences, leadership behaviors, and work setting affect how employees navigate various job demands, resources, and subsequent outcomes. Thus, the survey will measure relevant psychological and demographic characteristics with regard to their impact on employee burnout, health promoting leadership and willingness to take leave. Researchers will have access to your Connect CloudResearch Participant ID that is specific to this study. However, this information cannot be associated with your Connect CloudResearch profile or information. Your participation in the research is **voluntary**. You may choose not to answer any or all questions, and you may stop at any time. There is **no penalty for not taking part** in this research study, though you will not be paid for your time unless the survey is completed appropriately. Additionally, please note that this study contains a validity check to ascertain the authenticity of participant responses. Those participants who are deemed to be answering insincerely will not be awarded payment. Please contact Dr. Mark Bowler (bowlerm@ecu.edu; 252-328-0013) if you have any research related questions or the University and Medical Center Institutional Review Board (UMCIRB) at 252-744-2914 for questions about your rights as a research participant.

By entering this survey, you are indicating that you have read the consent form, you are age 18 or older and that you voluntarily agree to participate in this research study. Please make

sure that you have read and agree to Connect by CloudResearch participant and privacy agreements as these may impact the disclosure and use of your personal information.