Gordon Institute of Business Science
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The impact of work intensification on remote worker wellbeing post-COVID-19

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Abstract

The research problem addressed the relationship between work intensification and remote worker wellbeing in the post-COVID-19 environment. While remote work offers flexibility, the corresponding rise in job demands, digital accessibility expectations, and blurring boundaries risks negative employee outcomes like exhaustion and stress if sufficient job resources are not provided.

This research aimed to investigate the mediating role of job resources on the impact of work intensification on remote worker wellbeing. The research adopted a deductive, positivist philosophy while employing the Job Demands-Resources (JD-R) model as theory. For the research methodology, a cross-sectional quantitative survey was administered to 211 eligible remote workers across diverse industries and geographical locations, mainly in Southern Africa. Existing scales were used to measure work intensification, job resources (organisational, social, and technology support), and multidimensional wellbeing (organisational, physical, and psychological), with statistical analysis including regression and mediation testing.

The findings revealed that work intensification was significantly associated with structural factors, particularly senior managerial roles and employees located in resource-constrained African regions. The analysis validated that job resources partially mediate the negative relationship between work intensification and wellbeing. In particular, technology support emerged as the strongest and most consistent job resource, indicating significant associations across all dimensions of employee wellbeing (organisational, physical, and psychological). Conversely, traditional organisational and social support demonstrated limited psychological buffering capacity in the digital context. This hierarchy suggests a digital-resource adaptation of the JD-R model, emphasising technological adequacy as critical for maintaining remote worker resilience.

Keywords: Work intensification, work intensity, remote work, wellbeing, workload

Declaration

I declare that this research project is my own work. It is submitted in partial fulfilment of the requirements for the degree of Master of Business Administration at the Gordon Institute of Business Science, University of Pretoria. It has not been submitted before for any degree or examination in any other University. I further declare that I have obtained the necessary authorisation and consent to carry out this research.

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Name & Surname	Signature

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Glossary of Terms

Abbreviation	Meaning
JD-R	Job Demands-Resources
WI	Work Intensification
COR	Conservation of Resources
SDT	Self-Determination Theory
IJD	intensification of job demands
EWB	Employee Well-Being
LWB	Life Well-Being
WWB	Workplace Well-Being
PWB	Psychological Well-Being
OR	Odds Ratio
CI	Confidence Interval

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CHAPTER 1: INTRODUCTION TO RESEARCH PROBLEM

1.1 Introduction

The chapter presents the research topic on ‘The impact of work intensification on remote worker wellbeing post-COVID-19”. It will give insights on the research problem, research question and objectives, purpose statement, background, scope, business need and theoretical relevance of the study.

1.2 Research problem

Working arrangements were transformed due to the COVID-19 pandemic and there was an increase in remote working practices (McPhail et al., 2023). The advantage of remote work is that it offers flexibility and post-COVID-19 has seen an increase in remote work globally and in South Africa. However, aligned to the remote work has been an increase in work intensification through fast work pace, increase in workloads and increased expectations to be always accessible online (Mauno et al., 2022). Past research on work intensification asserts that it is associated with employee negative outcomes which include emotional exhaustion, increase in stress and reduced job satisfaction (Mauno et al., 2022; Huo et al., 2022). The fading of work-home boundaries and continuous connectivity further increase work demands, negatively affecting employee wellbeing if adequate job resources are not provided (Li et al., 2022; Mauno et al., 2022). There is mixed evidence on job resources effectiveness in remote settings. Huo et al. (2022) emphasize the buffering effects on social support and autonomy while McPhail et al. (2023) suggest that the job resources have their own challenges on remote work.

The Job Demands-Resources (JD-R) model posits that work intensification as a job demand can lessen the energy of employees leading to burnout. On the other hand, job resources such as organisational support, social support and autonomy moderate the work relationship by cushioning the negative impacts and boosting employee wellbeing (Bakker & Demerouti, 2024; Li et al., 2022; Demerouti et al., 2001). Although in remote work settings, job resources might encounter difficulties

reducing their protective results (Orlandi et al., 2024; McPhail et al., 2023). As an example, autonomy can escalate strain when workers struggle with controlling their boundaries, and social support can be less available digitally (McPhail et al., 2023; Clinton & Conway, 2025). Job resources as a mediator between work intensification and employee wellbeing has been supported in the normal working environment settings (Li et al. 2022) yet in the remote work environments post COVID-19, it is unexplored (Jackson et al., 2024). The researcher's focus will limit the investigation of the support to the mentioned ones, bearing in mind the limited time for the research.

The latest meta-analysis by Marzocchi et al. (2024) substantiate that job demands and work intensification hurt employee wellbeing, but that job resources mediate this effect. Notably, the meta-study submit that organisational job resources play an important role in mitigating the negative impact of increased demands and improving remote workers' experience (Orlandi et al., 2024; Marzocchi et al., 2024). Hence, the impact of work intensification post-COVID-19 on employee wellbeing depends not only on the levels of job demand but also on the effectiveness and accessibility of job resources. However, the remote settings add complications that demand tailored organisational strategies to sustain employee wellbeing (Marzocchi et al., 2024; Orlandi et al., 2024; Mauno et al., 2022; Li et al., 2022).

The above gaps highlight the need to understand how job resources mediate the effects of work intensification on employee wellbeing in the post- COVID-19 remote working context. For organisations to effectively support remote employees facing job demands, they must understand the relationships that influence their work experiences (Mauno et al., 2022). The aim of the study is to address the gap in analysing how job resources can mediate the negative effects of work intensification on the wellbeing of a remote worker post COVID-19. The research will help in identifying which job resources (e.g. social support, organisational support, technical support and autonomy) mediate the relationship and this will enable prioritisation of the interventions by organisations.

1.3 Background to research and rationale

The COVID-19 pandemic caused a massive global shift to remote work environments affecting how employees were doing their jobs significantly (McPhail et al., 2023). According to Mauno et al. (2022), remote work offers flexible work arrangements which has enabled work intensification where there is increased workload, increased pace at work, job demands, multi-tasking and less downtime with depleting resources. Kubicek and Tement (2016), assert that employees are expected to autonomously plan their work which involves knowing how to handle daily tasks and make decisions. There was an increased amount of effort expected from employees, where they had to multi-task and increase their working speed which reduced their idle time. According to Venz and Boettcher (2021), the challenges brought by the pandemic affected employees work life in accelerating digital transformation which increased email overload, increasing unclear boundaries between work and home. The sudden shift to remote work altered employees' behavioural change patterns which affected their wellbeing (Jackson et al., 2024).

The concern on work intensification is the threat to employee wellbeing, which can be categorised into physical, psychological, and emotional health (Zheng et al., 2015). Whereas Farley et al. (2023) categorised wellbeing into psychological, physical, and organisational wellbeing. According to Peccei and Van De Voorde (2019), employee well-being is important for the employee and the organisation's performance. When employee well-being is not given the importance it deserves, it can harm both employee well-being and organisational performance. The theoretical framework provided by Job Demands-Resources (JD-R) model (Demerouti et al., 2001) states that job demands like work intensification, cause strain on employees which must be buffered by job resources such as social support, organisational support and autonomy.

The call for action is for the research to measure work intensification among remote employees; identify the mediating effect of job resources such as social support, organisational support and autonomy. It will also inform the human resources policies of organisations and executive management to increase resource allocation while

the development of interventions will promote sustainable remote work environments.

1.4. Theoretical relevance for the study

The theoretical relevance of the research applies the Job Demands-Resources (JD-R) model as a lens to understand how work intensification, job demand (accelerated pace, increased workload, digital overload and multitasking), affect employee wellbeing in remote work environments post-COVID-19. The second aspect investigates the mediating role of job resources in this relationship. Notably, the sudden shift to remote work has altered employees behavioural change patterns affecting their wellbeing (Jackson et al., 2024). According to Demerouti et al. (2001) job demands can lead to strain and possible burnout unless it is balanced by job resources that help employees to cope. Remote working intensifies job demands by way of working from home which brings its own challenges such as blurred home-work boundaries and digital technology overload (Mauno et al., 2022; Kubicek & Tement, 2016).

The recent studies validate that job demands combined with insufficient job resources decrease employee wellbeing and health, especially caused by challenges in remote work supervision. Job resources such as organisational support, supervisory support, social support, and autonomy act as important mediators in cushioning the harmful health effects of intensified demands and strengthen motivation (Bakker & Demerouti, 2024; Li et al., 2022). The Job Demands-Resources (JD-R) model therefore remains applicable as a theoretical framework to explain these practices in remote working and hybrid environments. However, it requires contextual adjustments to address the different remote work stressors (Orlandi et al., 2024; McPhail et al., 2023).

The primary research gap that the study seeks to address is the limited empirical application of the JD-R model explicitly to post-COVID-19 remote work intensification, including the mediating role of job resources in this environment. The

research contribution aids the theory by integrating the JD-R model with the intensified and digitally mediated remote work settings, empirically testing if job resources reduce or do not reduce work intensification's negative impact on employee wellbeing (Bakker & Demerouti, 2024; Mauno et al., 2022; Li et al., 2022).

1.5 Business need for the study

Organisations are battling to manage remote employees in a post-pandemic era where work intensification has become an increased challenge (McPhail et al., 2023). Job demands with no adequate job resources lead to employee burnout, increased sickness and absenteeism which has an impact on productivity and organisational performance (Mauno et al., 2022; Bakker et al., 2023). Sustaining employee wellbeing is important in maintaining a competitive advantage for businesses to increase their value whilst improving employee engagement and reducing turnover (Peccei & Van De Voorde, 2019; Guerci et al., 2022). Yet, many organisations lack data for their measures of human resources, well-being, and performance which limits the implementation of effective well-being programmes and allocation of resources (Nielsen et al., 2023; Peccei & Van De Voorde, 2019). When organisations invest in job resources such as organisational support, social support and autonomy, they absorb the negative effects of work intensification promoting resilience, enhancing employee's efficiency capacity and wellbeing under increased demands (Mauno et al., 2025; Farley et al., 2023).

Additionally, employee boundaries become blurred in remote settings. When connectivity pressures increase, there is an increased need for organisational strategies that will enforce healthy workforce practices for hybrid and remote settings (Orlandi et al., 2024; Adisa et al., 2023). The research rationale is on the investment in job resources to reduce adverse effects of work intensification, protect employee wellbeing and ensure organisations effectively maximise the benefits of employees working remotely (Orlandi et al., 2024; McPhail et al., 2023). The business needs emphasise the significance of evidence-based application that focuses on job resources to reduce employee exhaustion costs, improve wellbeing, and increase

the viability of a remote workforce in the changing work environment (Nielsen et al., 2023; Farley et al., 2023; Mauno et al., 2022; Bakker et al., 2023).

1.6 Purpose statement

The research aims to investigate the impact of work intensification on employee wellbeing among remote workers post-COVID-19 focusing on the mediating role of job resources. The research will investigate ways in which increased work demands, long working hours, and eroding work-life boundaries impact the wellbeing of remote workers. This will be done by investigating the nature of remote work post COVID-19 and its associated intensifications. The research will use the Job Demand-Resources model (Demerouti et al., 2001) by applying to the new normal of virtual work reshaped by the COVID-19 pandemic (Hill et al., 2022). The research will provide understandings on how businesses can support their remote workers and mitigate the unwanted consequences of these changes. The research's outcomes will add value to human resources professionals and the business heads of departments who want to create better and more sustainable remote work environments for their workers.

1.7 Research Scope and Delimitations

1.7.1 Research Scope

The study will focus on remote workers over various companies in the post-COVID-19 period. The relationship between work intensification and employee wellbeing will be explored, with job resources as a mediator. The scope encompasses measuring work intensification, wellbeing results, and job resources such as social support, organisational support, technical support and autonomy. The research will exclude non-remote workers to provide insights relevant to prevalent remote work challenges post- COVID-19.

1.7.2 Delimitations

This study acknowledges that the effectiveness of intensified work demands, and job resources vary according to individual characteristics, cultural diversity, digital tools and organisational circumstance (Clinton & Conway, 2025). However, these complications are beyond the scope of the research. Specifically, the research will not investigate individual distinctions such as career calling and personality characteristics that influence responses to resource availability and work intensification, as these also require a different research approach (Clinton & Conway, 2025). Likewise, cultural and organisational settings are excluded, since the differences institute dynamics that require frameworks and longitudinal analysis (Urrila et al., 2025; Orlandi et al., 2024). Furthermore, scrutiny of specific digital tools is excluded, and focus is on job resources as a mediator.

The researcher's intention was to focus on the research scope which enabled the research to have actionable insights within the defined scope whilst acknowledging its limitations in generalisability across technology and culturally diverse environments (Clinton & Conway, 2025; Urrila et al., 2025; Orlandi et al., 2024; Farley et al., 2023; Kubicek et al., 2023).

1.8 Research Question

The research addressed the following research question: "To what extent does work intensification affect employee wellbeing?" The question came from existing literature on work intensification (Mauno et al., 2022) and employee wellbeing (Hill et al., 2022). The research focuses on work using the Job Demands-Resources (JD-R) model as a theoretical lens (Demerouti et al., 2001). The variables are work intensification (independent), employee wellbeing (dependent) and job resources as the mediator which enhances the relationship between work intensification and wellbeing (please refer to *figure 2)* for the conceptual framework.

1.9 Research Objectives

The research objectives for the research are mentioned below, namely:

- To assess the extent to which work intensification negatively relates to the wellbeing of remote workers post-COVID-19.
- To examine the mediating effect of job resources (social support, technology support, autonomy, organisational support) on the relationship between work intensification and employee wellbeing.
- To identify which job resources most effectively absorb the negative effects of work intensification.
- To provide evidence-based recommendations for organisations to improve employee wellbeing through targeted resource management in the context of remote work.

1.10 The Final research structure

The research structure is as follows:

Chapter 1: Chapter introduction includes research problem, background of the study, highlighting of the gaps, theoretical and business need of the study and its research question and objectives.

Chapter 2: The theory and literature review, presenting arguments on work intensification in remote environments.

Chapter 3: Research question and hypotheses.

Chapter 4: The proposed methodology and design, which gives details on choice of methodology. The research methodology includes the data gathering process, measurement instrument, sampling method and size, population, unit of analysis, analysis approach, quality controls, and limitations.

Chapter 5: Finding/Results, using the relevant statistical models.

Chapter 6: Discussion of research results, findings were discussed using the research questions and hypotheses. It compares findings to the literature using the JD-R model highlighting where findings confirm or contradict the theory.

Chapter 7: Conclusions and recommendations, highlighting the main findings, recommendations to stakeholders, limitations and recommendations for future research.

CHAPTER 2: LITERATURE REVIEW

2.1 Structure and Sequence

The literature review used empirical and theoretical insights from different studies to conduct the impact of work intensification on remote worker wellbeing post-COVID-19. It focused on the constructs e.g. work intensification, wellbeing and job resources as mediators. The exploration of the relationship used the job-demand resource (JD-R) model to provide understanding for the study. Summative tables for work intensification (Table 1) and employee wellbeing (Table 2) have been added showing the synthesis of different studies from 2019 to 2025. The Job Demands-Resources (JD-R) model is substantiated and elaborated, and the competing frameworks are discussed.

2.2 Introduction

The COVID-19 pandemic caused a global shift and accelerated the transition to remote working, which was previously an unfamiliar work arrangement but has now become normal for millions of employees. Remote working introduced both flexible working conditions and increased work pressures (McPhail et al., 2023; Hill et al., 2022). The shift to remote work increased scholars' interest in how work intensification, which is defined as an increase in work demands, speed, workload, and deadlines and reduced time for recovery, affects employee wellbeing (Mauno et al., 2022). The new normal and transformation accelerated the adoption of digital technology by companies, enabling their employees to ensure business continuity during a time of uncertainty and economic changes (Duan et al., 2023).

Employee well-being is multi-dimensional. It includes physical, psychological, and organisational aspects, which are integral parts of the concern. In contrast, e-worker wellbeing refers to remote e-workers' well-being at work which includes five correlated dimensions namely affective well-being, cognitive well-being, social well-being, professional well-being and psychosomatic well-being (Charalampous et al, 2019). According to Charalampous et al. (2019), there are support structures that

lessen negative impacts caused by increased work demands for e-worker wellbeing. Similarly, Bakker et al. (2023) assert that job resources, such as manager support, autonomy, social and organisational support, are important for protecting employees from the effects of intensified job demands. The supportive job resources cushion the effects of work intensification, promoting sustainable employee wellbeing (Bakker & Demerouti, 2024; Roczniewska et al., 2021).

Work intensification has led to increased employee strain and heightened expectations regarding the use of digital technologies (Mauno et al., 2022; Wang et al., 2021). The shifts in digital technologies have helped organisations optimise resources and achieve more with less, causing employees to do more tasks (Adăscăliței et al., 2022; Wang et al., 2021). Remote work affects employee well-being, as there is social isolation, blurred work-life boundaries, while more use of digital technologies increases work expectations and job intensification (Demerouti, 2023; Hill et al., 2022). Furthermore, due to the transition to remote work, digital work stress is compounded, and there is less time for employees to recuperate (Adisa et al., 2022).

For Job Demands-Resources (JD-R) theory, researchers postulate that increased job demands, such as work intensification, lead to greater exhaustion and strain. Whereas job resources such as social support, organisational support, technical assistance, and autonomy help in job performance, employee motivation, and employee wellbeing (Bakker & Demerouti, 2024; Bakker et al., 2004; Demerouti et al., 2001). Huo et al. (2022) and Venz and Boettcher (2021) strengthen the claim by showing that buffering job resources against work intensifications underscores the potential of safeguarding the wellbeing of remote workers in unknown times.

2.3 Work Intensification

Work Intensification (WI) is defined as “a job demand characteristic of modern working life” (Mauno et al., 2022, p.1) that includes both quantitative and qualitative loads. “Quantitative WI refers to the increased pace or amount of work. Qualitative

WI refers to increased cognitive job demands, such as decision-making and learning" (Mauno et al., 2022, p. 1). Venz and Boettcher (2021) corroborate that work intensification requires employees to put more effort on multiple tasks within a limited timeframe while ensuring they are utilising technology efficiently for daily communication. Technological advancement is one of the drivers of work intensification in the era where employees work remotely (Venz & Boettcher, 2021).

According to Farley et al. (2023), work intensification can lead to workplace bullying, which affects the employee resulting in deteriorating wellbeing. Hostile work environments can be created by the stress of intensified workloads. This can be more so in remote environments where support systems may be lacking since there is no co-worker support. Furthermore, McPhail et al. (2023) state that remote work has led to increased work intensification, which has resulted in more stress and less productivity among employees, highlighting the need for organisations to address challenges.

The shift to remote work has increased job demands, leading to the increased use of new technologies and virtual meetings which has affected employees' boundaries between work and no-work by the new normal settings (Hill et al., 2022; Wang et al., 2021; Mauno et al., 2022). There are obscure lines between private and work life faced by employees, caused by increased use of email and the expectation to respond outside the normal working hours (Li et al., 2025; McPhail et al., 2023; Park et al., 2020). This affirmation indicates that work intensification is not only about the quantity of work but also the work engagement.

Adăscăliței et al. (2022) and Kubicek and Tement (2016) assert that work intensification differs by context. For example, during the COVID-19 pandemic, remote work led to increased technological and cognitive intensification, necessitating adaptation to new changes and digital transition learnings. Furthermore, Neirotti (2020) associates work intensification with lean production, where exhaustion can increase due to targets of performance improvements not

being met. There are debates about technology intensifying work, for example, Menon et al. (2020) proved that technology increases work intensity due to increases in performance expectations and monitoring. The current era arguments are that remote working and digital transformation have heightened work demands and workloads (McPhail et al., 2023; Hill et al., 2022). According to Wang et al. (2021), working remotely allow decision-making, autonomy, flexibility with less support and an increase in cognitive overload. On the contrary, Kubicek and Tement (2016) assert that the negative impact of work intensification declines when employees control their work and have access to job resources such as technical and social support. On the other hand, employees who have limited job resources and less autonomy encounter negative results, including job dissatisfaction and emotional exhaustion (Adisa et al., 2022; Sayin et al., 2021).

The research shows a link between work intensification and negative outcomes, such as reduced job satisfaction, stress and burnout (Huo et al., 2022). Similarly, Mauno et al. (2022) state that negative outcomes include burnout, job dissatisfaction and mental strain. Work intensification is used in the Job Demands-Resources (JD-R) model as a job demand that reduces employees' psychological and physical resources leading to strain and impaired wellbeing if job resources are not used to reduce it (Li et al., 2022), What must be noted is that work intensification as a construct is not only about more work but also includes fragmentation, acceleration, and the difficulty of working for remote workers in post-COVID-19 realities. It has effects on digital engagement, the different kinds of job demands and the job resources that mediate the intensity and demands (Bakker et al., 2023; Demerouti et al., 2023).

2.3.1 Work intensity and workload

Work intensification, work intensity and workload are used interchangeably, yet there are differences between these concepts. The difference between work intensity and work intensification is that work intensity is possible constant measure of present job efforts or demands, whereas work intensification refers to the increase over time of the job demands which can be qualitative or quantitative (Mauno et al., 2022). Work

intensity is defined as the level of physical, emotional, and psychological effort and focus needed when working (Kubicek et al., 2014). In contrast, workload is the total amount of work, which is measured in quantitative terms and must be completed in a set timeframe (Pindek et al., 2023; Kubicek et al., 2023). Scholars argue for making the distinction between high work intensity, which increases employee engagement and performance where job resources are used as a shield, and high workloads, which can lead to employees being disengaged or experiencing exhaustion (Kubicek et al., 2023; Black & Britt, 2023). The scholars recognise that work intensity, workload and work intensification are distinct, yet overlap, and they all have an impact on employee wellbeing, which depends on job resource availability (Venz & Boettcher, 2021; Mauno et al., 2022; Kubicek et al., 2023).

2.3.2 Different types of work intensification

Work intensification has different types with unique implications for employee wellbeing in remote work settings post-COVID-19. The different types of work intensifications have distinct dimensions (Kubicek et al., 2014, 2023), that include quantitative intensification, which refers to the increase in both the amount of work and pace required in a particular period (Mauno et al., 2022). Emotional intensification involves managing an increase in emotions, including the regulation of emotions during communication in virtual settings and expressing empathy (Venz & Boettcher, 2021; Mauno et al., 2022). Multitasking responsibilities require the execution of many tasks and roles within limited timelines (Neirotti, 2020; Kubicek et al., 2014). Cognitive intensification is the expectation for employees to process more information, maintain concentration levels, and think fast in digital and remote work settings, where distractions are common.

Black and Britt (2023) assert that some types of intensification can increase performance and motivate employees when job resources are available. On the contrary, Farley et al. (2023) suggested that causes of intensification, such as cognitive and emotional intensification, can negatively affect employee wellbeing and lead to burnout when organisation support is inadequate. Hill et al. (2022) warned that lack of physical social cues adds strain since it requires more emotional

regulation. They argued that emotional intensification in virtual work environments is understated.

Following the COVID-19 pandemic, the various types of work intensification, including quantitative, emotional, multitasking, and cognitive intensification, are interconnected with job resources and significantly affect employee wellbeing in remote work settings. The understanding of the different types of intensification enables interventions to reduce the strain and their impact on employee wellbeing. Below is the synthesis of studies from 2020 to 2025 on work intensification/workload/work intensity.

Table 1: Work intensification/Workload/work intensity synthesis (2020-2025)

Journal	**Type of Work Intensification**	**Result of Work Intensification**	**Empirical Context (Country, Industry)**
Kubicek et al. (2014, 2023)	Quantitative, Emotional, Cognitive.	Intensive/cognitive demands linked to stress	Europe-wide, Various industries
Neirotti (2020)	Multitasking and Quantitative	Persistent intensification with limited resources increases strain	Europe, Manufacturing and lean production
Venz & Boettcher (2021)	Quantitative (email demands)	Work intensification correlated with leader and follower strain	Germany, Leadership roles
Wang et al. (2021)	Quantitative and Cognitive	Remote work imposes high intensification and cognitive load	China, Information technology
Hill et al. (2022)	Emotional and Cognitive	Emotional intensification leads to strain in virtual work	Global, Various sectors

Adisa et al. (2022)	Quantitative and Multitasking	Intensified work contributes to boundary blurring and stress	UK, Mixed sectors
Black & Britt (2023)	Challenge-type intensification	Moderate work intensification can enhance performance	USA, Various
McPhail et al. (2023)	Digital and Quantitative	Post-COVID remote work increased digital workload and strain	Australia, Remote workers
Li et al. (2025)	After-hours ICT use	Increased work intensification leads to procrastination and reduced wellbeing	USA and Europe, ICT industries

2.3.3 Digital Transformation

The term "digital transformation" pertains to the incorporation of digital technologies and the alteration of task performance within a business operation (Stevenson, n.d.). It is noted that organisations increased their usage of digital tools during the COVID-19 pandemic to sustain their operations leading to a shift to remote work (McPhail et al., 2023; Duan et al., 2023; Aleem et al., 2023). The shift changed job demands, work processes, and expectations.

Research scholars (McPhail et al., 2023; Duan et al., 2023; Wang et al., 2021; Aleem et al., 2023) argued that digital tools increase work intensification since they act as a catalyst, yet they are useful for remote workers when they conduct their work. An example of the increased use of technologies blurring boundaries between private life and work is the extended working hours, which also include expectations of accessing and being available to consistently respond to emails after hours (Li et al., 2025; Park et al., 2020). Furthermore, the demands of digital communication, which require multitasking and faster responses, intensify both the work pace and cognitive load (Wang et al., 2021; Hill et al., 2022). The expectations of real-time responses

intensify work activities, which lead to employees being overwhelmed by the digital tools (Adisa et al., 2022).

McPhail et al. (2023) assert that digital engagement increased post-COVID-19 for remote workers due to continuous virtual interactions and multitasking, which promoted work intensification. Likewise, Duan et al. (2023) highlighted that an increase in work tasks, work pressures and perceived emotional exhaustion was encountered when employees started utilising technology more productively which enabled flexible working. Wang et al. (2021) argued that working digitally reduces boundaries as daily tasks are sent digitally and anytime. This increases job demands on processing information, requiring more cognitive effort and effectively increasing mental fatigue to employees.

However, not all researchers agree that digital transformation increases work intensity. For Menon et al. (2020), digital devices enhance control and choice, allowing employees to customise their work, and reduce stress as they own the process. Similarly, George et al. (2022) mentioned that digital demand can be moderated by organisational support, which includes technological resources and training that reduces work intensity, and turns it into an opportunity for autonomy and improve employee wellbeing.

The literature indicates that digital transformation can improve and exacerbate work intensification in remote work settings. In these work settings, employees multitask and are expected to respond quickly and continuously engage using digital tools, causing intensified digital demands and increasing emotional and cognitive stress (Duan et al., 2023; McPhail et al., 2023; Hill et al., 2022). However, availability and effective job resources, such as autonomy, managerial assistance, and technological support, can mitigate work intensity (Demerouti, 2023; George et al., 2022).

2.4 Wellbeing and the different types of wellbeing

Wellbeing is defined as the overall outcome variable in this study. Wellbeing is divided into three main types that are psychological, physical, and organisational wellbeing (Farley et al., 2023). It reflects employees' attitudes, quality of life and how they operate within the work environment (Charalampous et al., 2019; Zheng et al., 2015). The shift to remote work and the onset of COVID-19 have intensified the understanding and promotion of wellbeing in research and organisations (Wood et al., 2023; Hill et al., 2022). Scholars have recognised that employee wellbeing consists of engagement, satisfaction, positive emotions and a sense of meaningful work, not merely the absence of ill health and burnout (Bakker et al., 2023; Peccei & Van De Voorde, 2019). The perspective concedes that job demands (work intensification) have an impact on wellbeing and job resources.

According to McPhail et al. (2023), wellbeing in the workplace is defined as conditional and can either be reduced or increased based on workplace safety to autonomy, control, and flexibility. Employee wellbeing significantly correlates to job performance, highlighting the importance of organisations to promote a supportive work culture for employees, which successfully increases employee engagement and productivity (Peccei and Van De Voorde, 2019; Ho et al., 2020).Employee wellbeing is influenced by work conditions, which include autonomy, workloads and social support (Peccei & Van De Voorde, 2019). For Jackson et al. (2024), remote working has an adverse impact on employee wellbeing, increasing stress and emotional exhaustion. In contrast, there is an opportunity for autonomy and self-management when employees have flexibility.

2.4.1 Psychological Wellbeing

Psychological wellbeing refers to mental health, emotional stability, and being able to experience positive emotions such as happiness, engagement, and satisfaction (Zheng et al., 2015). With the rapid shift to remote work, employees encounter psychological pressures, including uncertainty, isolation and blurred boundaries, which were fast-tracked by work intensification and digital overload (Jackson et al., 2024; Charalampous et al., 2019).

Charalampous et al. (2019) assert that remote workers' psychological health is linked to the availability of job resources like role clarity, social support, and intensity of work demands. Similarly, Bakker et al. (2004, 2023) assert that consistent exposure to job demands without the availability of job resources increases employee disengagement and emotional exhaustion. Whereas when there are autonomy, employee recognition, motivation and meaningful work, there is a positive effect. Thus, psychological outcomes are dependent on job resources and work intensification (Mauno et al., 2022). The authors further assert that psychological wellbeing is a result of work intensification which is related to mental health. They argue that work intensification results in employees' impaired wellbeing. Similarly, Farley et al. (2023) states that psychological wellbeing affects emotional health and that different types of resources, such as personal, social and organisational, are used as moderators. For Hill et al. (2022), happiness and satisfaction are attained through psychological wellbeing. Remote employees experience with the availability of resources and work intensification differs; it can have a dual effect, which is enhancing or undermining psychological wellbeing (Hill et al., 2022). Shifrin and Michel (2022) argue that a lack of support in a flexible work environment can lead to negative psychological outcomes for employees, affecting their wellbeing.

2.4.2 Physical Wellbeing

Physical wellbeing refers to the health and functioning of the body, which includes fatigue, illness and physical strain. the physical effects caused by work intensification take longer to manifest than other health issues (Farley et al., 2023), Work intensification negatively relates to employees' health (Mauno et al., 2022). The risk of this illness is likely to increase for remote workers who experience work intensity (Wood et al., 2023; Wang et al., 2021).

McPhail et al. (2023) argued that the long-term effects of remote working must be monitored as it impacts employee health and safety. Work intensification, especially in remote settings, can lead to sedentary behaviour, sleep disturbances, and musculoskeletal issues, which have a direct effect on employees' physical wellbeing (Shifrin & Michel, 2022). Similarly, Wang et al. (2021) and Wood et al. (2023) assert

that the constant use of digital devices in the absence of proper ergonomics for remote workers increases eye strain, sedentary behaviour and stress. Furthermore, Adisa et al. (2022) highlights that lack of physical movement and excess screen time cause declines in physical health, with the root cause being work intensification and limited breaks.

Undoubtedly, job resources are necessary to mitigate the intensity, for example, organisational support for wellness programmes and encouraging employee movement during the day through flexible working and ergonomics can reduce the effects (Wang et al., 2021; McPhail et al., 2023). Working remotely with the adequate support can lessen transmittable disease, strengthen physical wellbeing, and enable a supportive working life for employees (Saridakis et al., 2023). Zheng et al. (2015) discuss workplace wellbeing and argue that managers/supervisors should be authentic and genuinely care for their employees, emphasising that they must not only focus on job satisfaction because it is connected to employees' physical wellbeing.

2.4.3 Organisational Wellbeing

Organisational wellbeing refers to the health of the workplace environment, which includes job satisfaction, engagement, and the quality of social relationships at work. It is shaped by the organisational culture, which includes the organisational support (Farley et al., 2023). In wellbeing employees are viewed as a collective, considering shared values, culture, employees' treatment and belongingness (Urrila et al., 2025; Zheng et al., 2015). Current research studies (Mauno et al., 2022; Adisa et al., 2022) have highlighted that work intensification is a threat to organisational wellbeing, with results that include lack of trust, employee disengagement, and an increase in turnover.

High work intensity can erode organisational wellbeing by increasing conflict, impairing collaboration and reducing social support (Mauno et al., 2022). For McPhail et al. (2023), organisational strategic focus and workload can have a negative impact

on employees' wellbeing, leading to disengaged employees. Furthermore, organisations are urged to invest in employees, which will benefit the organisation and society including having a positive impact on employee wellbeing. Shifrin and Michel (2022) allude to the fact that, as organisations strive for a good work environment where there is less absenteeism, there are positive financial outcomes for the organisation.

Orlandi et al. (2024) and George et al. (2022) mentioned how job resources, such as organisational support, which included tangible and strong and leadership support, clear communication, and programmes that boosted culture and enhanced employee connectedness, improved organisational wellbeing regardless of work intensity and work demands. Team cohesion and a sense of belonging reduced the negative effects in remote settings (Urrila et al., 2025). However, Farley et al. (2023) related that an absence of supportive structures where there was work intensity led to low workplace bullying, decreased employee wellbeing and employee morale.

The literature emphasises understanding of the different types of wellbeing, ways in which job resources can be a mediator and the intensity of job demands. Post-pandemic remote work settings have accelerated work intensity, necessitating organisations to identify correct job resources to support their employees' wellbeing. Below is the synthesis of studies from 2019 to 2025 on employee wellbeing.

Table 2: Employee Wellbeing synthesis (2019-2025)

Journal/Article	**Employee Wellbeing type**	**Employee wellbeing results**	**Empirical Context (Industry, Country)**
Charalampous et al. (2019)	Multi-dimensional wellbeing at employee's work.	Remote work affects wellbeing in different ways, with	Knowledge workers, in Europe.

		satisfaction and stress co-existing	
Peccei & Van De Voorde (2019)	HRM and holistic wellbeing.	Job resources and systems for HRM are important for wellbeing	Diverse global contexts
Anicich et al. (2020)	Psychological wellbeing and autonomy.	Regaining autonomy aids wellbeing during pandemic	Workforce at large, USA.
Hill et al. (2022)	Effects of wellbeing on virtual work. (psychological well-being)	Both negative and positive wellbeing results.	Diverse International industries,
Yang et al. (2023)	Psychological and work-life wellbeing.	Remote work improved wellbeing for some, decreased for others; varied effects.	Multiple industries, Germany.
Harju et al. (2023)	Emotional exhaustion and boredom. (General well-being)	Job stressors associated with decrease in wellbeing and increased exhaustion.	Services and healthcare, Finland.
Farley et al. (2023)	Wellbeing controlled by bullying. (Organisational well-being; Psychological well-being; Physical well-being)	Negative effect of workplace bullying on wellbeing reduced by moderators.	Multiple industries, Many countries.
McPhail et al. (2023)	Wellbeing in post-pandemic remote work. (worker wellbeing; mental	Proper support during remote work showed	Diverse sectors, Multiple countries.

	health and physical health wellbeing)	improvement in wellbeing.	
Jackson et al. (2024)	Empowerment perceptions and Wellbeing. (affective employee well-being)	Wellbeing improved due to shift to work from home.	Different industries, United Kingdom.

2.5 Work intensification and wellbeing

Much research has explored the effects of work intensification on employee wellbeing, which results in organisational, physical, and organisational health outcomes caused by increased job demands (Bakker et al., 2023; Mauno et al., 2022). The shift to remote working after the COVID-19 pandemic came with work changes that increased digital connectivity, intensified work, and effectively reduced traditional employee support (Charalampous et al., 2019; Hill et al., 2022).

Work intensification and wellbeing primarily have a negative relationship since an increase in work intensity is linked to high levels of exhaustion, stress and job dissatisfaction (Mauno et al., 2022; Herttalampi et al., 2022). The availability of job resources acts as a mediator in this relationship (Bakker & Demerouti, 2024). The comprehensive review by Mauno et al. (2022) indicates negative outcomes, such as impaired mental and physical health, reduced employee engagement, and increased employee intensity, after analysing data from over two decades. Likewise, Kubicek et al. (2023) provided evidence that stress and mental fatigue in employees in different industries was caused by cognitive overload and an increase in work pace.

McPhail et al. (2023) and Wang et al. (2021) highlighted that post-COVID-19 work intensified for many employees working remotely, which affected their wellbeing. They encountered blurred work-life boundaries and work pressures due to flexible connectivity. Similarly, Hill et al. (2022) mentioned that there is an expectation for employees to be consistently connected, causing an increase in work intensification

which negatively affects their wellbeing. In contrast, Black and Britt's (2023) argue that when the employee has the necessary job resources to effectively achieve work targets, work intensification may act as a badge of honour. The "badge of honour" idea, particularly related to the extent of stress as achievement, involves the personal appraisal that a high workload suggests importance and is a means to success. The dimension further emphasises viewing the experience of high workloads as impressive, often resulting in a sense of pride associated with managing many responsibilities and high levels of stressors (Black & Britt's, 2023)

The Job Demand-Resources (JD-R) model (Demerouti et al., 2001; Bakker et al., 2004) will be used to understand the relationship of how job resources mediate work intensification and wellbeing. Prior research underscores that job resource availability, such as organisational, social, and technical support, reduces work intensity impacts (George et al., 2022; Huo et al., 2022). For example, George et al. (2022) asserted that in a remote work setting, control was restored through autonomy and technological support, leading to improved employee mental health. Likewise, Huo et al. (2022) mentioned that there was a reduction in negative effects caused by an increase in job demands because of visible employee direct manager support.

Work intensification is a job demand that uses employees' emotional health and depletes job resources, leading to a decrease in employee wellbeing (Li et al., 2022). According to Li et al. (2022), job resources mediate the relationship and absorb negative effects of work intensification on wellbeing. This mediation occurs through factors such as autonomy, organisational support, and social support. Herttalampi et al. (2022) argue that there must be a supportive leader-follower relationship, which can reduce the negative impact of intensified work demands on the well-being of employees.

Some contrasting views exist, for example Wood et al. (2023) suggest that remote work satisfaction depends on how employees manage their boundaries and their differences, indicating that job resources may not consistently improve wellbeing.

Similarly, Kubicek and Tement (2016) gave examples where autonomy-intensified workloads due to an increase in employees' self-management job demands, which was a strain on the employees. Furthermore, Keller and Meier (2024) argued that in the long run, the impact of intensification may vary due to job demands and fluctuating resources.

2.6. Job resources

Job resources are the aspects of the job that help employees achieve work goals (Demerouti et al., 2001: Bakker et al., 2004). They reduce the negative impact of job demands and foster learning development and personal growth. The organisational, physical and social aspects are job resources that prompt learning, development, and personal growth (Bakker et al., 2023; Bakker et al., 2004). Job resources, within the Job Demands-Resources (JD-R) model, give clarity on how employees sustain wellbeing, cope with intensified job demands for remote workers post-COVID-19 and use digital tools (Demerouti, 2023; Bakker & Demerouti, 2024).

Li et al. (2022) and Herttalampi et al. (2022) give examples of job resources, which include autonomy, organisational and social support. The JD-R model mentions that job resources play an important role in buffering the negative effects of job demands like work intensification on employee wellbeing (Demerouti et al., 2001; Bakker et al., 2004). According to Li et al. (2022), employees who have access to job resources maintain their motivation better, cope with high job demands, and protect their well-being. In remote work settings, important job resources are efficient and clear communication, technological support, and social support (Hill et al., 2022).

2.6.1 Social support

Social support refers to the emotional, informational, and practical assistance provided by colleagues and supervisors, as well as support from the organisation (Farley et al., 2023). During the pandemic, isolated,support was strengthened

because remote workers were isolated and the uncertainty of work increased (Hill et al., 2022; Charalampous et al., 2019).

Research alludes to the fact that social support lessens the negative emotional and psychological effects of work intensity, effectively providing problem-solving, empathy to employees, and advice (Mauno et al., 2022; Huo et al., 2022). Herttalampi et al. (2022) and Mockaitis et al. (2022) state that support from leadership leads to positive outcomes from the employees. It is important since it shields against the negative effects of work intensification helping employees to manage stress and maintain psychological wellbeing (Mauno et al., 2022; Huo et al., 2022). Organisational culture and communication channels are the results of favourable social support (Farley et al., 2023).

2.6.2 Organisational support

Organisational support refers to the extent to which contributions by employees and wellbeing are valued by the organisation. The organisation provides job resources that include clear communication channels, policies, and procedures, as well as training programmes, and employees have access to prescribed assistance (Orlandi et al., 2024; George et al., 2022). Work intensification impact is reduced when organisations have policies and procedures that enforce work-life balance, diversity, employee feedback, and inclusivity (Wood et al., 2023; Urrila et al., 2025). However, Murtola and Vallelly (2023) consider a superficial level of organisational support when company policies failed to keep pace with digital transformation. This superficiality ordinarily materialises when organisations emphasize individualising employee well-being, regularly through initiatives such as corporate wellness. Doing so thereby covers the need to supply adequate organisational job resources or adjust structures to address the new demands linked with digital and remote working settings, such as providing clear organisational goals or sufficient infrastructure.

George et al. (2022) mention that an employee's sense of belonging is felt when there is proactive organisational support that increases their wellbeing. Organisational support was important during the transition to remote working, where

employees needed clarity on access to information, job expectations, and adaptation to the technological changes posed by the new normal work environments.

2.6.3 Autonomy

Autonomy refers to the control that employees have over their work tasks in their jobs (Demerouti et al., 2001; Bakker et al., 2004; Bakker & Demerouti, 2024). Autonomy as a job resource is important in hybrid and remote contexts where employees practice self-management (Jackson et al., 2024; Wang et al., 2021). High autonomy enables employees to efficiently manage their workloads, supporting both organisational and psychological wellbeing and reducing the strain caused by work intensification (Li et al., 2022; Shifrin & Michel, 2022). Moreover, it can boost motivation, creativity, and psychological wellbeing since employees have control of their work schedules, which can be specially made to suit work demands (Demerouti, 2023; Bakker et al., 2023). Similarly, Clinton and Conway (2025) mentioned that there is a correlation between an increase in employee strain in remote work environments and an increase in autonomy. Another correlation is autonomy and performance-related pay with firm performance (Ho et al., 2022).

In contrast, remote settings where employees experience isolation, high autonomy and are without guidance can result in work overload and increased responsibility (Wood et al., 2023; Kubicek & Tement, 2016). The remote work setting introduces demand of isolation/loneliness to employees which negatively affects employee satisfaction and when consolidated with lack of guidance/support it can increase negative results. For autonomy, when it is high without proper guidance it leads to work overload since there is lack of an important aspect which is guidance/social support (Wood et al., 2023). In this instance, autonomy shifts from being a job resource and increases work intensification.

2.6.4 Technical Support

Technical support refers to the provision of hardware, software, technology training, and access to IT helpdesks, ensuring that remote workers are working efficiently and effectively (George et al., 2022; Wang et al., 2021). Employees who can access

adequate technical resources effectively handle their digital workloads, have less technological stress, and have fewer connectivity issues (Demerouti, 2023; Orlandi et al., 2024; George et al., 2022). For Demerouti (2023), employees who benefit from technological support given by their organisations through IT resources and digital skills are better equipped to handle digital workloads, have minimal disruptions, and maintain their wellbeing. George et al. (2022) assert that employees can manage intensified digital demands effectively when there is timely access to technical support, which reduces technostress and cognitive overload. In contrast, poor technological support increases anxiety and frustration, reducing productivity when job demands intensify.

Social support, organisational support, autonomy and technical support (job resources) mediate the impact of work intensification on employee wellbeing. The work intensity challenge can turn into an opportunity for growth and employee engagement (Huo et al., 2022; Bakker et al., 2023).

2.7 Job Demands-Resources (JD-R) Model

2.7.1 Introduction to Job Demands-Resources (JD-R) Model

The model posits that job demands (physical, social, psychological, and organisational) can accelerate adverse health outcomes and strain if job resources are not available as neutralisers (Demerouti et al., 2001). On the contrary, job resources, such as social support, development opportunities, and autonomy, promote engagement, wellbeing, and motivation (Li et al., 2022; Bakker et al., 2004). The JD-R model will be used as a theoretical lens for the research for understanding various work environments. Bakker and Demerouti (2024) highlighted the model's adaptability to various working-form settings, including hybrid and remote ones. Marzocchi et al.’s (2024) research settings were the healthcare sector, and the model was valid for both engagement and burnout results whereas the job demands were fluctuating. The JD-R model is used to explore the dimensions of job demands and job resources, facilitating an understanding of how work intensification affects employee wellbeing in remote work settings (Li et al., 2022; Mauno et al., 2022).

2.7.2 Applicability of JD-R to remote work settings and remote workers

The JD-R model gives an extensive theoretical framework to appreciate employee wellbeing in different work environment settings, including remote work that have become common post-COVID-19. This model categorises workplace features into two broad categories: job resources and job demand. Job resources are those physical, social, psychological, or organisational aspects that help employees achieve their work goals, lower job demands and the related costs or revive personal development and growth. Job demands refer to the psychological, physical, organisational or social, aspects of the job that require sustained effort and are associated with psychological and physiological costs (Bakker et al., 2023).

In remote work contexts, the applicability of the JD-R model centers on its duplex process explanation, where an increase in job demands such as workload intensification, the blurring of work-life boundaries, and technological demands may lead to strain and lessen wellbeing. However, job resources such as autonomy, social support, and perceived organisational support serve as important barriers that protect against these negative outcomes (Bakker et al., 2023; Demerouti, 2023). For example, Clinton and Conway (2025) report that more autonomy, a key job resource, although generally useful, sometimes may paradoxically link to an increase in employee strain when not balanced properly, underscoring the difficulty of resource effects in remote settings. Therefore, comprehension of this balance is important for applying the JD-R model to remote workers in a post-pandemic work environment.

See below figure 1 is extracted from Bakker et al. (2023):

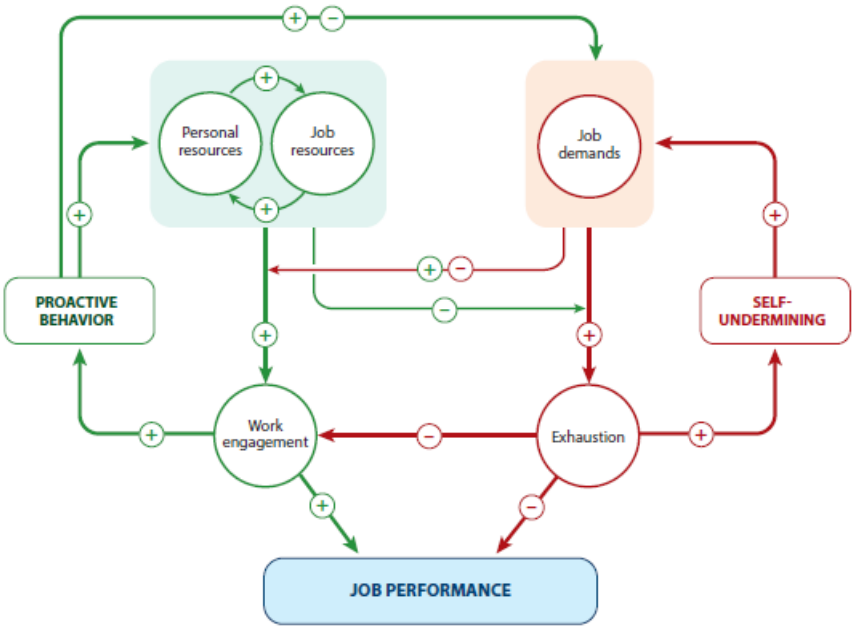

Figure 1: The job demands–resources model. Source (Bakker et al. (2023)

(The above figure 1 is the original JD-R model that explains the two processes, the health impairment process is the red path showing the job demands (e.g. time pressure, interruptions, workload, email overload) requiring effort. Prolonged demands lead to exhaustion which include physical, emotional, and cognitive strain. The draining cycle can stimulate self-undermining behaviours which leads to higher demands such as inefficiencies, mistakes and poor communication. The whole process impairs job performance and overall wellbeing. The motivational process is the green path, it illustrates the job resources (e.g. organisational support, social support, autonomy) and personal resources such as self-efficacy, resilience and optimism. They foster work engagement (e.g. absorption, vigour, dedication) and boosts proactive behaviour and eventually job performance).

Work intensification which is defined as an increase in work effort, complexity, or pace has been regularly associated with harmful effects on employee wellbeing across remote and traditional work settings (Pindek et al., 2023; Mauno et al., 2025). Remote work intensifies demands as employees face technological interference, sustained connectivity pressures, and lessened informal social support factors that add to burnout and emotional exhaustion (Marzocchi et al., 2024; Kubicek et al., 2023). The JD-R model successfully explains this dynamic by categorising these

pressures as job demands that, unless weakened by enough job resources, reduce employee engagement and mental health (Bakker et al., 2023; Mockaitis et al., 2022).

Furthermore, the mediating part of job resources between work intensification and employee wellbeing is necessary in remote work situations. Job resources such as autonomy, organisational support, and social support help reinstate the balance and promote a sense of competence and control, as a result positively affecting wellbeing (Maley et al., 2024; Demerouti, 2023). Urrila et al. (2025) emphasise that sense of belonging which is a significant social resource is an important factor in remote and hybrid work settings, strongly associated with strengthened psychological wellbeing and job satisfaction. Likewise, the support obtained from supervisors' intercepting work boundary breaches after hours, represents another vital job resource for mitigating the strain caused by intensification in remote work (McCartney et al., 2023).

The JD-R model's tailoring and longevity, as assessed by Bakker et al. (2023), illustrate its persistent relevance to changing work environments, including hybrid and remote structures. The model's flexibility permits combining new job resources and demands framed by digital transformation while preserving its predictive power in allowing pathways leading to engagement or burnout (Bakker et al., 2023). Similarly, Mauno et al. (2025) points at the role of profession calling and personal meaning as intrinsic job resources mediating how work intensification impacts wellbeing, which could be of importance to remote workers seeking purpose amongst scattered work contexts.

2.7.3 JD-R model post COVID-19 application

The shift to remote work has increased job demands through blurred boundaries, greater work intensification and an increased reliance on digital communication (Hill et al., 2022; McPhail et al., 2023). Mauno et al. (2022) and Kubicek et al. (2023) argue that the pandemic rearranged the balance of resources and demands,

sometimes leading to an increase in workload and effective labour, yet there were also opportunities to improve flexibility and autonomy. When employees have access to job resources, such as autonomy, social support, and feedback, it lessens the negative impact of intensified work demands, increasing employee engagement and wellbeing (Herttalampi et al., 2022; Li et al., 2022). The JD-R model highlights the importance of balancing job demands with adequate job resources in remote work environments where there is minimal support (Demerouti et al., 2001; Bakker et al., 2004). Sustainable employee wellbeing is promoted when interventions are directed at different levels, such as individual, organisational and societal, mitigating the negative effects of work intensification (Mauno et al., 2022).

The JD-R model highlights that the availability of resources and demands determines employee wellbeing (Bakker et al., 2023). In contrast, some argue that technological tools, organisational culture, and the type of leadership mediate the impact of intensified demands (Herttalampi et al., 2022; George et al., 2022). Evidence underscores that job resources guard negative effects of work intensification (Huo et al., 2022; Bakker et al., 2023). Some researchers have different views, for example, Neirotti (2020) asserted that resources are sometimes insufficient, citing the lean production environment where intensified demands resulted in strain. Furthermore, it was mentioned that the different types of resources have different outcomes, such as autonomy sometimes increasing pressure and responsibility, whereas positive outcomes were associated with social support (Clinton & Conway, 2025; Wood et al., 2023).

In this researcher's opinion, literature supports the JD-R model in examining the relationship between work intensification and employee wellbeing in remote settings post-COVID-19.

2.7.4 Benefits and Criticism of the JD-R Model

The JD-R strength lies in its dual pathway framework, which explains how job resources improve wellbeing and motivation while job demands contribute to burnout

and strain (Bakker et al., 2004; Demerouti et al., 2001). This makes the model suitable for analysing remote work settings post-COVID-19, where work intensity accelerated. The model can adapt to a variety of contexts, including digital work settings and remote working environments (Bakker & Demerouti, 2024). The model's dynamic nature of job resources and demands across different roles allows fluctuation over time, allowing for the recording of intensified workloads (Marzocchi et al., 2024).

Actionable interventions in the JD-R model can be pointed out in prior research; for example, according to Demerouti (2023), job resources such as technical tools, autonomy and manager support lessen the negative effects of work on intensification. Likewise, Huo et al. (2022) assert that direct manager support mitigate the negative impact of intensified job demands and improves employee wellbeing. The applied logic adds to the value of the model as a company guide to elevate employee performance in work conditions that are evolving.

There is also criticism of the JD-R model, which includes the broad categorisation of job resources, making job characteristics unclear (Kubicek et al., 2023). An example is the treatment of work intensification as a single concept. Yet, research by Pindek et al. (2023) and Mauno et al. (2022) identifies different types of intensification that have different effects on employee wellbeing such as emotional versus cognitive demands which have different effects on employee wellbeing.

The model focuses on individual-level processes that sometimes downplay organisational and contextual elements that boosts or guard the effects of demand and resources. Roczniewska et al. (2021) mentioned that the model must integrate both unit and organisational levels to understand how demand and resource availability differ in various departments, which can also occur in remote settings. Neirotti (2020) and Venz and Boettcher (2021) also expressed concerns about the model's applicability in changing environmental settings, such as during the

transitions to remote work caused by the pandemic. Their argument is that when both resources and demands increase, it diminishes their influence.

2.7.5 Competing models

2.7.5.1 Conservation of Resources (COR) Theory

Hobfoll (2011) developed the COR theory, which Halbesleben et al. (2014) discussed. The theory suggests that when individuals fail to protect, retain, and obtain valuable resources, their stress levels increase. It focuses on understanding how psychological outcomes are motivated by losing or gaining resources. However, the COR theory cannot be used for analysis of work intensification and well-being for remote workers post-COVID-19 for the following reasons.

COR theory uses job resources within a framework that examines gain or loss cycles, but it does not describe the tension between job demands and resources (Bakker & Demerouti, 2024). In contrast, the JD-R model considers a dual pathway by analysing both the negative effect of job demands and the buffering effects of job resources, which assist in navigating different work intensities (Bakker et al., 2023; Demerouti et al., 2001). The COR theory lacks the precision and clarity that the JD-R model provides. The COR theory prioritises job resources over resource gain, resulting in job resources being less suitable for promoting performance and wellbeing (Bakker & Demerouti, 2024). Lastly, the COR theory is less developed in the application of some contexts compared to advances made by the JD-R model in processes that are relevant to remote work settings (Li et al., 2022; Roczniewska et al., 2021). This research prefers JD-R models that include processes on job resource mediation.

2.7.5.2 Self-Determination Theory (SDT)

The Self-Determination Theory was developed by Gagné and Deci (2005), which Gagné et al. (2022) further developed. Its emphasis is on psychological needs

(relatedness, competence and autonomy) and the role of intrinsic motivation in promoting work engagement and employee wellbeing. The theory helps in understanding how attainment of the psychological needs' increases employee outcomes, which includes wellbeing in remote work settings (Anicich et al., 2020; Jackson et al., 2024).

The theory was not used in the research.

2.8 Conclusion

The literature demonstrates the linkages in work intensification, job resources, and employee wellbeing as they relate to the shift to remote work post-COVID-19. The literature showed that work intensification, increased workload, an increase in work pace, blurred work boundaries, and digital overload were challenges faced by employees affecting them physically, organisationally and psychologically (Hill et al., 2022; Mauno et al., 2022; Wang et al., 2021; Charalampous et al., 2019).

The JD-R model was used to understand the impact of work intensification (job demand) on employee wellbeing using the job resources as a mediator (Bakker et al., 2023; Bakker & Demerouti, 2024). The different scholars in the literature attest that social support, organisational support, autonomy and technology support do not only absorb the negative effects of work intensification but can also be an opportunity to forge employee growth and engagement (George et al., 2022; Venz & Boettcher, 2021; Huo et al., 2022).

CHAPTER 3: RESEARCH QUESTION AND SUPPORTING HYPOTHESES

Research Question

The research question sought to understand to what extent work intensification affects employee wellbeing. The question comes from existing literature on work intensification (Mauno et al., 2022) and employee wellbeing (Hill et al., 2022). The shift to remote work post-COVID-19 increased workload, cognitive, and emotional strain (Mauno et al., 2022; Hill et al., 2022). The work intensification has negative impacts on psychological and physical wellbeing, and job resources can be a mediator (Wood et al., 2023; Charalampous et al., 2019).

Firstly, prior research gap on Job resources as a mediating role between employee wellbeing and work intensification has been supported in the traditional work settings (Li et al. 2022) yet in the context of remote work post- COVID-19 it is unexplored (Jackson et al., 2024). Secondly, Mauno et al. (2022) emphasize that remote work may be intensified by job demands such as blurred work-home boundaries and constant connectivity which has effects on employee wellbeing if there are no job resources provided. Lastly, there is mixed evidence on job resources effectiveness in remote settings, Huo et al. (2022) highlight the safeguarding effects on autonomy and social support, and McPhail et al. (2023) suggest that the job resources have their own challenges on remote work.

Hypothesis 1: Work intensification is more likely associated with job resources.

Recent research studies (Bakker et al., 2023; Li et al., 2022; Venz & Boettcher, 2021) illustrate that work intensification consistently prompts increases in job resources such as managerial support, digital tools and autonomy as employees and organisations adjust to increased demands. Although, empirical evidence from remote working settings remains finite (Jackson et al., 2024; Mauno et al., 2022) remote work environments present different challenges including constant connectivity and obscure boundaries that can change the dynamics between resource allocation and intensification (McPhail et al., 2023; Mauno et al., 2022). The

hypothesis seeks to direct such unknown problems by examining how job resources respond to work intensification especially in remote settings, as a result contributing to the growing discussion on remote work and digital transformations (Saridakis et al., 2023; Orlandi et al., 2024).

Hypothesis 2: Job resources are more likely associated with employee wellbeing.

Job resources have a motivational role of promoting employee wellbeing in well established traditional work environments, increasing psychological, physical, and organisational health through autonomy, support, and technological facilities (Charalampous et al., 2019; Bakker & Demerouti, 2024). However, remote working arrangements present narrative contextual impact that may change these effects (Zheng et al., 2015; Hill et al., 2022). Several studies reflect the favourable effects of social support and autonomy (Huo et al., 2022), while others underscore prospective challenges such as resource scarcity or unexpected strain (Clinton & Conway, 2025; McPhail et al., 2023). This hypothesis distils the understanding of job resources' impact on wellbeing by clearly exploring the boundary and variability of conditions applicable to remote work post-COVID-19, making a contribution by explaining when and how the job resources support employee wellbeing (Demerouti, 2023; Marzocchi et al., 2024).

Hypothesis 3: Job resources are more likely to mediate the relationship between work intensification and employee wellbeing.

The JD-R model uses job resources as mediators that reduce the impacts caused by job demands on employee wellbeing (Bakker et al., 2023; Demerouti et al., 2001). Further, the model submits that job resources guard the negative results of job demands on employee wellbeing (Demerouti et al., 2001) Bakker et al., (2023), verifies that this mediating part in remote working settings remains unproved (Jackson et al., 2024). The post-COVID-19 remote work established isolated demands such as blurred boundaries and digital overload that can lessen mediation processes differently than in on-site environments settings (McPhail et al., 2023;

George et al., 2022; Venz & Boettcher, 2021). Earlier studies before COVID show that managerial support and autonomy can weaken work intensification's negative results (Huo et al., 2022; Demerouti, 2023), but these findings need extension to address remote-specific resource layout and stressors. Therefore, this hypothesis leads the less investigated mediating mechanism in the post-COVID-19 remote work settings, promoting academic debate by blending the digital-era dynamics into the JD-R model.

The Conceptual framework

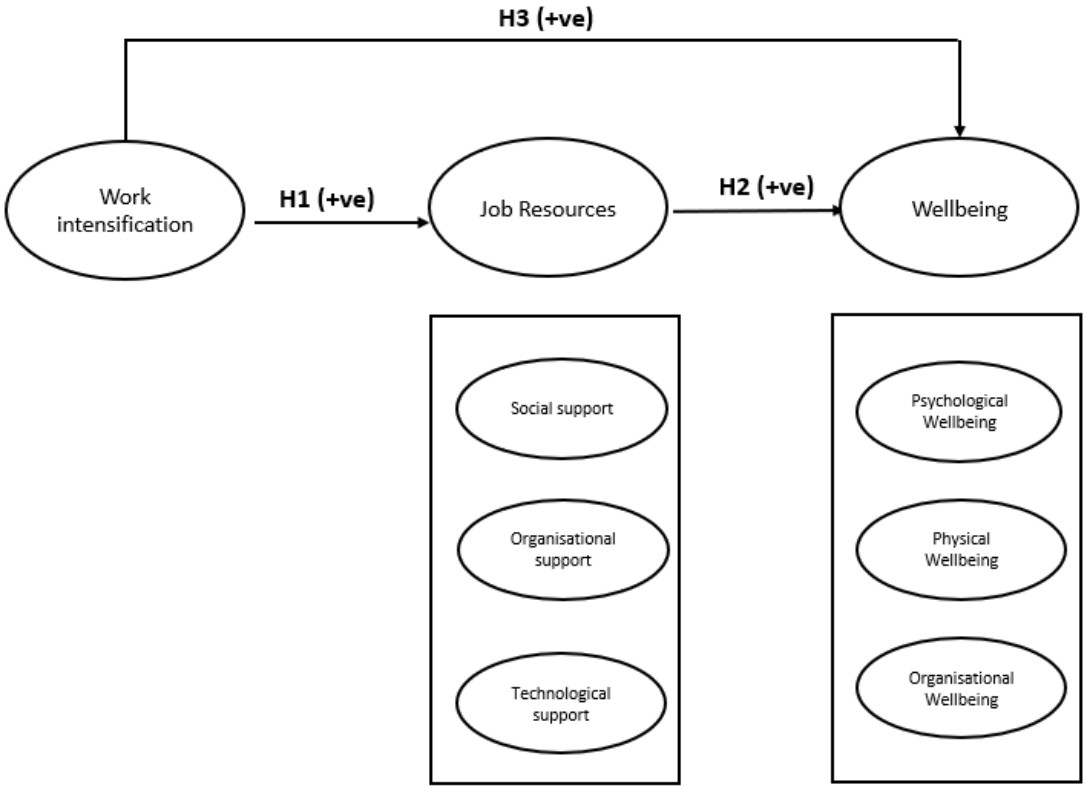

Figure 2: The conceptual Model

The subsequent chapters test these hypotheses using quantitative analysis and validated scales focusing on remote workers post-COVID-19. The analysis quantifies the strength and relationships between work intensification, job resources, and employee wellbeing and the mediating role of job resources.

The next chapter will discuss the methodology applied for the research.

CHAPTER 4 RESEARCH DESIGN AND METHODOLOGY

4.1 Introduction

This chapter outlines the research design and research methodology that was adopted to address the research question. It includes details on choice of research design, population, unit of analysis, sampling method and size, measurement instruments, data gathering process, data analysis approach, quality controls and limitations. The study used articles and research methods by Saunders et al. (2023), ensuring alignment with research objectives and providing a foundation for addressing the identified research problem.

4.2 Choice of Research Design

4.2.1 Research paradigm/philosophy

The research adopted a positivist philosophy, which was appropriate as it allowed for measurement and analysis of the relationship between work intensification, job resources, and employee well-being in the context of remote workers. Positivism posits that reality is observable, objective, quantified, and measurable (Saunders et al., 2023), which is aligned with the research's goal of getting evidence on the impact of work intensification on remote workers. Other recent literature like Mauno et al. (2022) and Li et al. (2022) used positivist philosophy, which focused on generalisability and empirical evidence. They both conducted research within the domain of Occupational Health Psychology, similar to the research on employee well-being in the context of work intensification. Saunders et al. (2023) highlighted the suitability of positivism for studies requiring objective measurement and statistical analysis.

On the other hand, Venz and Boettcher (2021) used a positivist philosophy in their research, using statistical analysis and quantitative data to test hypotheses and establish relationships between variables based on empirical evidence. Similarly, Roczniewska et al. (2021) also used a positivist philosophy by systematically

analysing quantitative data to identify patterns and relationships between working environment factors and employee outcomes, aligning with the principles of observing and measuring phenomena. The researcher's decision of adopting a positivist philosophy was appropriate as it aligned with recent studies and its objective was to establish the relationship between work intensification and employee wellbeing.

4.2.2 Research approach

The research used a deductive approach based on the desire to test pre-existing theories and hypotheses (Saunders et al., 2023), specifically those related to work intensification (Demerouti et al., 2001; Bakker et al., 2004) and employee well-being. Saunders et al. (2023) described deduction as a process of hypothesis testing based on existing theory. The research adopted the Job Demands-Resources (JD-R) model as a theoretical lens structured to provide insights into how job demands and resources influenced employee well-being (Li et al., 2022), rather than using it as framework to explain the findings. Furthermore, Li et al. (2022) tested the JD-R model using a deductive, quantitative approach. Similarly, Farley et al. (2023) used a deductive approach and applied the JD-R model to analyse existing findings in the literature which aligned with Roczniewska et al. (2021) who systematically reviewed deductive studies linking unit-level demands and resources to employee well-being.

4.2.3 Methodological choices

The research adopted a mono-method design utilising a quantitative technique for data collection and analysis, aligning with previous studies that examined the impact of job demands and resources on employee outcomes (Mauno et al., 2022). Saunders et al. (2023) recommend mono-method quantitative designs for studies focusing on measurement and statistical testing. The recommendation was consistent with the need for measurable and generalisable findings regarding the effects of work intensification on wellbeing. Demerouti (2023) used quantitative measures in an online intervention study of remote work strategies. Yang et al. (2023) and George et al. (2022) both used survey-based quantitative designs to assess remote worker wellbeing and productivity. Yang et al. (2023) used a large-scale

survey to provide new evidence on the relationship between working from home and worker wellbeing, demonstrating the effectiveness of this approach in post-pandemic contexts.

4.2.4 Purpose of research design

The research purpose was descripto-explanatory, which described the impact of work intensification on remote workers' wellbeing. Descripto-explanatory design was appropriate as the research explored the mechanisms through which work intensification impacts wellbeing and the mediating effect of job resources (Mauno et al., 2022). The descripto-explanatory design enabled both the description of current remote work phenomena and the explanation of relationships between work intensification, job resources, and employee wellbeing. Using the descriptive research, there was accurate representation of people and events, and the research depicted and explained the problem and the relationship variables (Saunders et al., 2023). Studies by Roczniewska et al. (2021) and Li et al. (2022), used quantitative designs to investigate job resources and demands, showing the approach's effectiveness in similar research. Similarly, Mauno et al. (2022) used a quantitative approach when analysing work intensification outcomes.

4.2.5 Research Strategy

The study employed a survey strategy to collect data from remote workers by utilising established scales for measuring work intensification, job resources, and well-being (Zheng et al., 2015). A survey strategy enabled efficient data collection from a large group of remote workers (211). The questionnaire link was distributed via WhatsApp groups, email, LinkedIn and Facebook. Surveys enabled the measurement of constructs such as wellbeing, job resources, and work intensification through validated instruments. These assisted in testing hypotheses through statistical analysis. Similarly, George et al. (2022) and Demerouti (2023) conducted surveys to look at remote worker outcomes. Likewise, Yang et al. (2023) used large-scale surveys in studying worker wellbeing in post-pandemic settings. According to Herttalampi et al. (2022), the study employed a survey strategy to collect data from a statistically credible sample of leaders and followers, which effectively provide

valuable information. This approach allows a broad understanding of how leader intensification of job demands (IJDs), and follower results are connected. Saunders et al. (2023) detailed the strengths of survey strategies for quantitative research.

4.2.6 Time horizon

The research adopted a cross-sectional time horizon (29 July to 10 September 2025) to capture a snapshot of current experiences related to work intensification and well-being. Considering the time constraints in completing the research project, cross-sectional was a better option. Saunders et al. (2023) described cross-sectional studies as suitable for scrutinising relationships at a specific moment. Given that the research focuses on remote work post-pandemic, a cross-sectional study was suitable for understanding the immediate and recent effects of this shift on remote workers. For example, Hertalampi et al.'s (2022), study utilised a cross-sectional design that allowed for the collection of data at a single point in time. The hypothesis testing aligns with previous similar studies on employee wellbeing and remote working (Jackson et al., 2024; Shifrin & Michel, 2022). Furthermore, Jackson et al. (2024) and Hill et al. (2022) used cross-sectional surveys to look at how people's well-being changed after they started working from home, showing the importance of time horizon for measuring the immediate effects of work intensification (Jackson et al., 2024). Meanwhile, Hill et al. (2022) reviewed cross-sectional research to explain the dual effects of virtual work on employee wellbeing.

4.3. Sampling methodology

4.3.1 Population

The population for this study consists of remote workers in different companies who have experienced remote work post-COVID-19. The research included employees from various companies and organisational levels, which reflected the diversity of remote workers and enabled maximum-variation sampling in the interests of generalisability (Hill et al., 2022; McPhail et al., 2023). The employment status included both full-time and part-time remote workers (Jackson et al., 2024). Likewise,

Anicich et al. (2020) looked at full-time employees who lost and regained autonomy early in the pandemic phase. The emphasis was on the psychological responses to increased job demands while working remotely during the pandemic. The population consisted of a diverse group of remote workers facing increased job demands and different job resources access, making them ideal for the study of the relationship between wellbeing and work intensification post-COVID-19.

The research included a diverse range of participants in terms of gender, age, job roles, and duration of remote work, as these factors might influence experiences of work intensification and wellbeing (Charalampous et al., 2019; Zheng et al., 2015).This group was made up of knowledgeable workers and professionals from different industries who saw significant changes in their work environment, such as intensified workloads, different ways of communication patterns, and changes in autonomy (George et al., 2022; Wang et al., 2021). The research participants were from different industries which included finance and insurance institutions, information technology, professional services (consultants, legal, Human Resources, auditing and marketing) etc.

According to Saunders et al. (2023), the population is a complete set of group members. In their study, Herttalampi et al. (2022) focused their target population on leaders and direct followers from various groups across different sectors in Finland, while Roczniewska et al. (2021) examined employees from diverse occupational settings to explore sustainable employment. Likewise, Hill et al. (2022) reviewed employees engaged in virtual work engagements. These studies emphasise the importance of contextually relevant and broad samples for understanding dynamics at work. The present study targeted individual employees at different companies and organisational levels, building on earlier studies. It extended the scope by including a diverse cross-section of the remote workers to reflect the heterogeneity of the post-COVID-19 remote workers, which provided more understanding of work intensification's impact on employee well-being in remote work environments.

4.3.2 Unit of analysis

The unit of analysis for the research were individuals, remote workers of different companies (Li et al., 2022; Hill et al., 2022). This method helped by looking at how increased work pressure (the independent variable) impacts employee wellbeing (the dependent variable) and how job resources influence this relationship on a personal level. Similarly, Duan et al. (2023) used individual employees in organisations as their unit of analysis, same as Hill et al. (2022), who used the individual employee as their unit of analysis. Herttalampi et al. (2022) also relate that their unit of analysis was followers nested within individual leaders. There the collected data was organised in a hierarchy, where followers constitute Level 1 (the individual unit), and the individual leaders constitute Level 2 (the group unit). The study looked at both the individual-level (follower) influence and the group's (leaders) influence.

Wang et al. (2021) used individual survey data in assessing how characteristics of virtual work influenced personal experiences of remote work challenges and well-being. Similarly, Anicich et al. (2020) looked at individual psychological recovery trajectories related to autonomy restoration during the pandemic. The individual-level analysis helped in understanding how job demand, intensified available resources and wellbeing outcomes interact in remote work environments. At an organisational level, it allowed the setup of practices such as communication norms, leadership support, and resource allocation that mediate the consequences of intensified job demands on employee wellbeing across teams or departments (Roczniewska et al., 2021; Li et al., 2022).

4.3.3 Sampling method

A non-probability sampling method was used for the research. Saunders et al. (2023) define non-probability sampling as several sampling techniques used for selecting a sample when a list is non-existent in the population. Similarly, the chance of each member being chosen is unknown. Saunders et al. (2023) relate that self-selection sampling is non-probability sampling where the people who are interested in the sample will be requested to identify voluntarily via electronic media, which can include intranets, blogs, bulletin boards, and invitations via emails and letters.

For the purposes of the research, the participants were supposed to be remote workers to qualify to respond to the questionnaire. The researcher ensured that there was a qualifying question for eligibility. The question checked if the respondent was working hybrid or full-time remotely. The researcher relied on her own network to secure a sizeable sample size to participate. This ensured that different individuals from different companies participated, and the use of social media allowed self-selection from interested participants. Purposive sampling was applied to target remote workers for the study, and this was done using the researcher's professional and personal networks. Where purposive sampling via organisational networks or online platforms did not yield the desired sample size, the researcher reverted to referral/snowball sampling as a fallback position (George et al., 2022; Wang et al., 2021) to increase the data collection. All demographics are explained in chapter 5.

4.3.4 Sampling size

Based on Saunders et al. (2023), the sample size was decided on applying the following criteria: research objectives, the type of analysis planned (e.g., descriptive vs. inferential), the desired level of confidence and margin of error, population size, and the type of study (exploratory or explanatory). The researcher was able to obtain 276 participants of which 211 were eligible, the target was 200. The number was good for the quantitative analysis to ensure generalisable results. Duan et al. (2023) mentioned that for their survey, they used a purposive sampling method, and data was collected using an online method where 199 responses were received and used for analysis after data screening. George et al. (2022) administered a questionnaire to 278 remote workers. Wang et al. (2021) used a sample size of 522 remote workers, and mediation analysis was done, which is a statistical test. The sample size exceeded some of the prior studies and was good enough for statistical analysis. This sample size aligned with Saunders et al. (2023), where hypotheses are tested and generalised within an organisational context.

4.4 Measurement Instrument

The measurement instrument was adapted from existing scales to create a composite instrument that assessed the study's three variables in combination. They were adapted from existing scales, and a structured survey questionnaire form was used. The survey used Likert-scale items, which are designed to measure variables such as work intensity and wellbeing. Pre-existing scales were used, such as the Intensified Job Demands (IJD) Model, which was developed by Kubicek et al. (2014); the Employee Well-Being Scale (EWB) developed by Zheng et al. (2015); and the JD-R Model Resources Scales developed by Demerouti et al. (2001) and Bakker et al. (2004).

4.4.1. Intensified Job Demands (IJD) Model

The IJD model was used to assess work intensification as a multi-dimensional phenomenon (Mauno et al., 2022). The IJD scale has 19 items, and for this study, the researcher selected five items *(see Table 3)* for work intensification which is relevant to remote workers post-COVID-19. Chosen items were multitasking, fewer breaks taken, intense work, reduced time for tasks and acquiring new knowledge. The items aligned with findings from recent remote studies, which identified multitasking, time pressure, and continuous learning as challenges in digital work environments (McPhail et al., 2023; Mauno et al., 2022). There are many studies that have been conducted on work intensification, which includes both qualitative and quantitative research. Some of these explored and sought insights on the relationships between work intensification and various employee results, such as mental health, job satisfaction, and work-family balance (Mauno et al., 2022).

The study is consistent with recent studies that adapted established scales to remote settings and used contextually relevant items (Duan et al., 2023; Herttalampi et al., 2022). The selected items looked at work intensification, impact on remote workers to test if this minimises participants fatigue and ensures that the constructs are well represented (Saunders et al., 2023). The IJD Model used a scale that is rated on a 5-point Likert scale, which ranges from 1, meaning "completely disagree", to 5, meaning "completely agree", with 5 being the highest score. The measurement scale

is nominal, meaning it can calculate frequencies but not means. For consistency with the other two scales, the researcher used a Likert scale with 1 meaning “strongly disagree” and 5 meaning “strongly agree”.

The reliability test, Cronbach alpha results for work intensification was 0.89 (Herttalampi et al, 2022), they measured the five items for work intensification. Venz & Boettcher (2021) reliability using Cronbach's alpha test results was 0.93 using work intensification, using the five items by Kubicek et al. (2015). The researcher’s Cronbach's alpha for work intensification reliability results was 0.62 after reverse coding the five items and removing one variable, the possibility of limitations was noted.

4.4.2. Employee Well-Being (EWB)

The researcher used the Employee Well-Being (EWB) scale to measure well-being. This is a multi-dimensional instrument that measures an individual's overall well-being in an organisational environment. It includes physical, psychological and social well-being and it was adapted for this research. The scale has 18 items which are divided into three subscales: Life Well-Being (LWB), Workplace Well-Being (WWB), and Psychological Well-Being (PWB). The highest point on the scale is a 7-point Likert scale, with 1 indicating "strongly disagree" and 7 indicating "strongly agree." For consistency with the other two scales, the researcher will use a Likert scale with 1 meaning “strongly disagree” and 5 meaning “strongly agree”.

The researcher used the employee well-being tool to measure psychological, physical well-being and workplace well-being (organisational well-being). The seven items *(see Table 3)* include flexibility, daily functioning, achievement, physical health, work satisfaction, energy, and life satisfaction (adapted from the three subscales). Selection was guided by the relevance to the context of remote work as highlighted by recent studies on wellbeing (Venz & Boettcher, 2021; Shifrin & Michel, 2022; Jackson et al., 2024; Yang et al., 2023). Furthermore, Zheng et al. (2015) highlight that if selected items have valid indicators of an employee’s wellbeing, the scale is

flexible for moderation and brevity without loss in validity. The seven selected items increased the response rate and reduced the burden to participants (Saunders et al., 2023). Recent literature also supports using context-relevant instruments that are shortened and still maintain well-being research validity (Farley et al., 2023; Hill et al., 2022).

The reliability test had multiple tests across multiple studies. The researcher used study 5 where overall results were 0.90, subscale for LWB (0.82), WWB (.087) and PWB (0.82) for Employee well-being (Zheng et al, 2015). There was no recent study that the researcher could cite using the measurement scale. The researcher's Cronbach's alpha for employee wellbeing reliability results was 0.82.

4.4.3. JD-R Model Resources Scales

The JD-R model resource scales were used to measure job resources (Demerouti et al., 2001; Bakker et al., 2004). The scale has a broad number of variables which include multi-categories, e.g., job demands (work pressure, cognitive demands, emotional demands, role conflict and hassles), job resources (autonomy, social support, feedback, opportunities for development and coaching). There are also personal resources (self-efficacy and optimism), well-being (work engagement and exhaustion), performance (in-role performance and extra-role performance) and behaviour (strength use, job crafting and self-handicapping).

On this scale, the researcher used job resources and categories that include autonomy, social support, and coaching (organisational and technical support) (Demerouti et al., 2001; Bakker et al., 2004). The researcher selected seven *(see Table 3)* job resources items, ensuring that the survey is contextually relevant for remote workers post-COVID-19. The focus on the items has been aligned with earlier studies where it was evident that there is a significant impact on productivity and wellbeing for remote workers (George et al., 2022; Demerouti, 2023). Furthermore, researchers adapt scales and utilise job resources that are important to the work environment (Li et al., 2022).

According to Roczniewska et al. (2021) and Li et al. (2022), their studies confirm that having fewer items in each resource dimension does not affect the reliability or validity of a construct when the core aspect is covered. There are recent research studies on remote work that highlight how technical access, autonomy, organisational and social support improve wellbeing and shield against the intensity of job demands (Demerouti, 2023; George et al., 2022; Anicich et al., 2020). A Likert scale was used, with 1 meaning “strongly disagree” and 5 meaning “strongly agree”.

The reliability test used by Bakker et al. (2004) and Demerouti et al. (2001) was for job demands and job resources, and the mean for the full sample for job resources was 0.80. The results indicated that the measures for the job resources showed adequate internal consistency. There was no recent study that the researcher could cite using the measurement scale. The researcher’s Cronbach's alpha for job resource’s reliability results was 0.81.

Permission to use the three instruments was formally sought from the authors; they all responded via email, granting permission for the use of their tools for the research. One instrument was provided by the author on request, and two were received from the published journals. The permission validated the use of the instruments and ensured compliance with the collection of data *(refer to Appendix 1).*

Table 3: Structure of survey

Section	Description	Type	No. Of questions	Scale Type	Scale source
Consent	n/a	n/a	n/a	n/a	n/a
Qualifier	Qualifier question	n/a	1	n/a	n/a
1	Demographic	Descriptive	10	n/a	n/a
2	Work Intensification	5-point Likert	5	Intensified Job Demands Scale (IJD)	Kubicek et al. (2014); Kubicek & Tement (2016)
3	Job Resources	5-point Likert	7	JD-R Model Resources Scales (JD-R)	Demerouti et al. (2001); Bakker et al. (2004)
4	Well-being	5-point Likert	7	Employee Well-Being Scale (EWB)	Zheng et al. (2015)

4.5. Data gathering process

Google Documents was used to collect data online using survey forms, this made it simple for participants to access documents (Hill et al., 2022; McPhail et al., 2023).

4.5.1 Pre-testing

The questionnaire was developed and pilot tested with work colleagues before distribution. The researcher conducted pre-testing to validate the completion time for the questionnaire and ensure that the research instrument functioned as it was intended to function. The results were estimated to be eight minutes based on fifteen

responses (excluding the researcher's own testing of the tool), there was no suggested changes or amendments to the questions by pilot testers.

A pre-test survey link was distributed via WhatsApp to the work colleagues, and the GIBS email address was used in creating the instrument to ensure targeted and secure delivery to participants. The link was thereafter sent via social media platforms to collect data used for analysis. The collected data was stored in a password-protected Google Drive folder only accessible to the researcher. The online survey forms were anonymous, and handling procedures were secured to ensure confidentiality was maintained and complied with GIBS ethical research standards.

Duan et al. (2023) highlights that the survey instrument should be pre-tested, pilot-tested, and refined. This way, data screening processes were conducted for missing values, outliers, normality, and multicollinearity. During the pre-testing and the distributed questionnaire of the research instrument, all responses were collected anonymously, and no identification of the participants in terms of their names were recorded whilst collecting data. Only aggregated data was stored.

4.5.2 Main Study Survey

An informed consent form outlining the purpose of the study was provided to participants before commencement. It was added as a preface to the measurement instrument, since it also highlighted the participants' rights and confidentiality assurances (Charalampous et al., 2019). It had been approximated that the survey was going to take less than 10 minutes to complete. The questionnaire was distributed to participants via email, social media platforms (e.g., WhatsApp, Facebook and LinkedIn) that were convenient, cost-effective, and free from interviewer bias. A database was created to store the data. Data collection lasted for about six weeks and closed on 13th September, which was sufficient time.

When considering prior research for Anicich et al. (2020), they used an experience sampling method over a two-week period to collect detailed longitudinal data on changes in autonomy restoration which shared insights. Likewise, Wang et al. (2021) used both semi-structured interviews and survey data, looking at a mixed-methods perspective on remote work challenges and received more insights about the participants.

4.5.3 Data handling and security

The data handling and collection procedures in this research aligned closely with established practices in online survey-based academic research. All data received was automatically saved on the GIBS google drive. In comparison, Duan et al. (2023) and Herttalampi et al. (2022) both utilised electronic questionnaires in collecting data, emphasising the importance of structured timelines and digital accessibility.

The data was kept anonymously, to not show links to participants nor their identity. Prior quantitative research surveys on wellbeing and work intensification emphasised anonymity of the participants supporting honest and unbiased data reporting (Saridakis et al., 2023; Pindek et al., 2023; Wood et al., 2023; Adisa et al., 2023; George et al., 2022).

In accordance with ethical research standards, the data will be retained for a period of ten years to facilitate potential verification or follow-up studies, after which it will be permanently deleted (Demerouti, 2023; Jackson et al., 2024). The researcher used cloud-based storage which ensured both accessibility and security, supporting the integrity and confidentiality of the research process.

4.5.4 Data cleaning and coding

Data collection included nominal and ordinary data as part of the quantity survey. In preparing for data analysis, all empty cells were deleted (those not qualifying to

proceed). Data was edited and coded. An excel sheet was used to code data, code book (*refer to Appendix 5*).

4.5.5 Survey response rate

The survey hyperlink was distributed to potential respondents using social media. The final responses totaled 276. There was a qualification criterion for working remotely or not which reduced the qualifying respondent to 211, since 65 respondents did not qualify and only responded to the first question of the survey. The 65 were removed from the final dataset. The descriptive statistics were conducted for the 211 respondents that qualified.

4.6. Data Analysis approach

4.6.1 Descriptive analysis

Demographics were assessed using descriptive analysis for the nominal and ordinal data for the respondents; it was assessed by frequency distribution and percentages. The variables included gender, ethnic group, age group, highest qualification, position in organisation, industry, geographic location etc. The recent quantitative surveys reviewed by the researcher on remote employee wellbeing and work intensification also reported demographic data which included gender, age, work sector, occupational group, work arrangement and organisation tenure for on-site, hybrid and remote employees. Their sample described the different characteristics (Saridakis et al., 2023; Yang et al., 2023; Wood et al., 2023). The prior research for remote employees (during and after COVID-19) assessed employee representativeness by including job role and educational level which was linked to wellbeing (McPhail et al., 2023; Adisa et al., 2023).

When analysing the data, descriptive statistics were used to summarise sample demographics and variable distributions (Mauno et al., 2022). Quantitative data

analysis typically uses descriptive statistics to sum the characteristics of the sample and distributions of the variable.

4.6.2 Inferential statistics

Subsequently, this researcher employed inferential techniques like regression analyses to verify the hypothesised relationships (George et al., 2022; Wang et al., 2021).

The researcher used regression analysis to examine the relationships between work intensification, wellbeing and job resources testing the impact of work intensification on wellbeing aligning with Li et al. (2022) and Mauno et al. (2022) who used regression analysis to test the effect of work intensification on wellbeing. Furthermore, the researcher used the quantitative results obtained from the hypothesis testing for structured analysis and reporting which is supported by Duan et al. (2023) on multilevel analysis highlighting the relationships at different levels which can be individual, team and organisational. In contrast, Farley et al. (2023) used descriptive analysis, grouping moderators using the JD-R model assessing consistency and frequency of their significant findings.

The researcher's data analysis was carried out in several stages to address the research objectives on the impact of work intensification on remote worker wellbeing in the post-COVID-19 period. Descriptive statistics were first used to summarise the demographic characteristics of the sample and to describe the distribution of the key study variables, including work intensification, dimensions of employee wellbeing (physical, organisational, and psychological), and job resources (organisational support, social support, and technology support). To test for associations between categorical variables, chi-squared tests of independence were applied, and in cases where cell counts fell below five, Fisher's exact test was used. Variables that showed statistically significant associations ($p < 0.05$) were retained for further analysis.

Univariate logistic regression models were then estimated to examine the effect of each demographic, contextual, and wellbeing factor on the likelihood of reporting

high work intensification. Odd ratios with 95% confidence intervals were reported to indicate the strength and direction of associations. To account for potential confounding, multivariate logistic regression was conducted (Hair et al., 2019), allowing for the simultaneous examination of predictors and identification of independent factors influencing work intensification. Finally, mediation analysis was performed to determine whether job resources (organisational support, social support, and technology support) mediated the relationship between work intensification and employee wellbeing outcomes. Across all analyses, statistical significance was set at $p < 0.05$, and results were presented both in tabular form and with narrative interpretation to highlight key findings.

4.6.3 Assumptions

To construct the variable work intensification, four positively worded Likert-scale items were combined, each measured on a five-point scale ranging from strongly disagree (assigned a weight of 1) to strongly agree (assigned a weight of 5). The scores from these items were aggregated to create a composite index, with possible values ranging from four (4) to twenty (20). A cut-off point was then applied using measures of central tendency: respondents with a total score of 15 or higher were classified as experiencing work intensification, while those scoring below 15 were classified as not intensified. This threshold assumed that responses closer to agreement across most items indicate heightened levels of work intensification, whereas lower aggregate scores reflect weaker or minimal intensification.

4.7. Quality controls

The research ensured data quality by conducting checks, which was done during the process of the questionnaire survey. This included pilot testing and checks for validity. To ensure construct validity, the researcher used trusted scales (IJD, EWB, JD-R) that accurately measure the concepts the researcher is studying (Kubicek et al., 2014; Zheng et al., 2015). Construct validity was maintained by using well-established, psychometrically validated scales for job resources, work intensification and well-being (Wang et al., 2021; Li et al., 2022).

4.7.1 Validity

The researcher ensured that there was content validity where the main research question was suitably covered by the research questionnaire instrument questions while face validity measured what it intended to measure (Saunders et al., 2023). Sampling a wide range of distant workers from different sectors and areas improved external validity, making the results more applicable to similar situations (Saunders et al., 2023).

For ethical validity, an informed consent form from GIBS was obtained, and data confidentiality was maintained (Shifrin & Michel, 2022). In a study using longitudinal designs (Anicich et al., 2020) and mixed-method techniques (Wang et al., 2021) validity was made stronger by considering changes over time and differences in context. According to Saunders et al. (2023), these controls play a crucial role in ensuring the credibility and repeatability of quantitative research.

The researcher first tested validity for the three constructs, work intensity construct was reverse coded before testing. All three constructs were valid since the correlation was significant where p-value < 0.00 and no questions were deleted. The below shows details of the validity test performed.

4.7.1.1 Work intensification validity

Firstly, the negatively phrased items for the within the work intensification construct were reverse coded and an item-total correlation total was done to evaluate the relationship between each individual item and the total sum of the work intensification construct. The results showed that all items within the work intensification scale, which is the Intensified Job Demands scale (IJD), had a statistically significant positive correlation with the reversed coded item-total score.

The significant item-total correlations for all items were $p < .00$ showing that each item/question contributes consistently and relevantly to the construct score. The

construct validity was strong which shows the measuring scale as a single concept. The reverse coding of negatively phrased questions resulted in positive correlations. The validity test confirms the items mapping to work intensification intended theoretical domain despite the subsequent reliability test with Cronbach's alpha of 0.63 indicating a moderate internal consistency.

4.7.1.2 Job Resources validity test

An item-total correlation total was done to evaluate the relationship between each individual item, and the total sum of the job resources construct which consisted of positively phrased items. The results showed that all items within the job resources scale, which is the JD-R Model Resources Scales, had a statistically significant positive correlation confirming that each item contributes relevantly to the construct. The significance level was $p < .00$ for every item.

Job resources construct validity results were good with significant item-total correlations of $p < .00$ for all items score which is strong evidence of the measuring scale internal consistency validity. Each item represented a specific resource such as social support, organisational support and technological support showing a strong relationship with the overall construct. The respondents who recognised a resource as high level as social support also recognised organisational/ technical support as high level aligning with the fact that job resources are needed by employees. The validity strong results and high reliability of Cronbach's alpha of 0.81 show the significant confidence of the measuring scale of job resources.

4.7.1.3 Employee wellbeing validity test

An item-total correlation total was done to evaluate the relationship between each individual item and the total sum of the employee wellbeing comprised of positively phrased items. The analysis showed that all items within the employee well-being scale, which is the Employee Well-Being (EWB) scale had a statistically significant positive correlation confirming that each item contributes relevantly to the construct. The significance level was $p < .00$ for every item.

Employee well-being-constructed validity results were excellent with significant item-total correlations of $p < .00$ for all items scores which is strong evidence of measuring scale internal consistency validity. The results indicated that the different types of wellbeing used (psychological, physical and organisational) were working as a unified set. The results validate the use of the employee measuring scale as reliable for the questions selected. The strong validity test together with the reliability of 0.82 Cronbach's alpha attests to the suitability for relationship testing with job resources and work intensification.

4.7.2 Reliability

To ensure reliability, internal consistency reliability was used, which correlate responses to items measuring the same construct with the use of Cronbach's alpha, this must be equal to or more than 0.70. Cronbach's alpha values above 0.70 confirm reliability (Kubicek & Tement, 2016). The researcher used measuring scales that were higher than 0.70. Cronbach's alpha and other internal consistency measures that support reliability, with reported values above the acceptable levels.

According to Kubicek et al. (2014) which was adopted for work intensification, the Cronbach's alpha (α) values assess the reliability of the measurement scales used. Cronbach's alpha measures the internal consistency, which indicates how closely related a set of items are as a group. For the Intensification of Job Demands Scale (IJDS) in Herttalampi et al. (2022), the results were: work intensification: $\alpha = .89$; job planning: $\alpha = .81$; career planning: $\alpha = .69$; knowledge learning: $\alpha = .83$; and skill learning: $\alpha = .89$. These alpha values indicate that the scales used in their study have good to excellent internal consistency, suggesting that the items within each scale are measuring the same underlying construct reliably.

The researcher tested validity for the three constructs, with one construct having Cronbach alpha less than 0.70 after removing one question and the decision was to continue with the four after reverse coding the questions. The researcher noted the

potential limitation of keeping the questions for the construct. The other two constructs Cronbach alpha was above 0.70 confirming reliability of the items within the construct before further analysis was done. The below show details of the validity test performed.

4.7.2.1 Work intensification reliability test

Reliability test was performed on the five-work intensification scale, and the results were a Cronbach's alpha of 0.62 below the acceptable 0.70 threshold. An item-total review was conducted to improve the internal consistency of the scale, deleting question 14 which increased the Cronbach's alpha to 0.63. Further deletion of the remaining four-item scale would have resulted in a lower Cronbach's alpha of 0.60. The researcher’s decision was to retain the remaining four-item scale with final Cronbach's alpha of 0.63.

The final Cronbach's alpha of 0.63 for work intensification four-item scale shows a moderate level of internal consistency since it falls below the threshold of 0.70. The research noted the implication of the construct when doing further analysis. There was a marginal improvement on deleting question 14 from 0.62 to 0.63 and further deleting was going to reduce reliability which suggests that the four-item scale was the most coherent. In the research by Marzocchi et al. (2024), they reported Cronbach’s alpha of 0.69 which is slightly below the threshold of 0.70 and the researchers continued to analyse the construct reasoning being it was closer to the threshold, and the study was exploratory and had different country samples (Marzocchi et al., 2024).

4.7.2.2 Job resource’s reliability test

The reliability test for job resources construct showed good internal consistency with Cronbach's alpha of 0.81 exceeding the threshold of 0.70. The reliability test results for job resources show an excellent internal consistency, it shows that the items within the scale measure the construct and are homogeneous. This indicates that

the different job resources recognised as correlated in the context of working remotely which gives high confidence score that is a good measure and is reliable.

4.7.2.3. Employee wellbeing reliability test

The reliability test for employee wellbeing construct showed an excellent internal consistency with Cronbach's alpha of 0.82 exceeding the threshold of 0.70. The reliability test results for employee wellbeing showed excellent internal consistency. The results affirm that the well-being items selected form a coherent scale. The scale apprehends the intended wellbeing latent variable for the remote employees. The reliability of the measuring scale is good for the research and can be tested with high accuracy.

4.7.3 Ethical clearance

Ethical clearance was obtained from the GIBS ethics committee on the 28 July *2025 (refer to Appendix 4)*, before the collection of the data. The questionnaire content was not deleted nor added after approval. All participants completed the survey questions willingly after reading the cover letter which highlighted their voluntary participation and how they were still given an option to opt out of the survey at any point they felt the need to.

4.8. Limitations

The possible limitation of the research is the use of cross-sectional instead of longitudinal, the reason is that it restricts the researcher’s ability to make attributions of causality as the data is based on a single fixed point in time. The limitation makes it hard to reach a causal conclusion on how work intensification affects well-being (Jackson et al., 2024). Furthermore, other forms of convenience sampling, if applied, could lead to selection bias, limiting the generalisation of the results to other groups of people (George et al., 2022).

According to Anicich et al. (2020), reliance on participants' self-reported data is a limitation that is subject to bias despite procedural controls. What can be noted is

that the COVID-19 pandemic was so unique and happened so quickly that it was the best method of data collection then. However, the results may not be useful in other remote work situations in the future.

The timeframe for the research presented another limitation, as the researcher had to produce data as soon as possible to analyse it and produce a full report within the set timelines. The review of findings by the researcher is another limitation since it may not account for all potential impacts of work intensification and wellbeing. Differences in remote work experiences in different companies may also influence the results (Hill et al., 2022) making it a limitation.

4.9. Conclusion

In conclusion, the research design and methodology provided a thorough review of the relationship between work intensification, job resources and employee well-being for remote workers, using the established scale such as Intensified Job Demands Scale (IJD), JD-R Model Resources and Employee Well-Being Scale (EWB) which have validated quantitative data (Jackson et al., 2024; Mauno et al., 2022; Roczniewska et al., 2021). The study employed a cross-sectional survey method and adhered to positivist philosophy. The information can be used to improve both academic understanding and real-world solutions in the changing world of work (Demerouti, 2023; George et al., 2022).

CHAPTER 5: FINDINGS/RESULTS

5.1. Introduction

This chapter presents the results of the study titled “Impact of work intensification on remote worker wellbeing post- COVID-19.” The results are structured as follows: first, a description of the demographic characteristics of the participants; second, an assessment of the relationship between work intensification and remote worker wellbeing (negative/positive associations); third, an examination of the mediating effect of job resources; and lastly, an identification of the specific job resources that most effectively absorb the negative effects of work intensification on wellbeing.

5.2. Demographics

A total of 276 participants initially responded to the survey, of which 211 met the eligibility criteria. The remaining 65 respondents were excluded as they reported not working remotely. Therefore, the final sample comprised 211 remote workers. A validity and reliability test was performed, which confirmed the internal consistency of the measures. The data was considered to be valid since it has a p value less than 0.05 and the data was reliable, only one variable was less than Cronbach alpha of 0.70.

Table 4: Summary for the demographic characteristics of the eligible participants (n= 211).

Characteristics	Value	Number(n=211)	Percentage
Currently Working Remotely	No	65	24%
	Yes	211	76%
Currently Working full-time Remotely	No	141	67%
	Yes	70	33%
Years of working remotely	Less than 1 year	26	12%
	1-2 years	33	16%
	2-3 years	37	18%
	3-4 years	37	18%

	More than 4 years	78	37%
Age group	18-29 years	30	14%
	30-39 years	88	42%
	40-49 years	73	35%
	50-59 years	19	9%
	60+ years	1	0%
Gender	Male	74	35%
	Female	134	64%
	Prefer not to say	3	1%
Ethnic group	African	150	71%
	Coloured/Other	9	4%
	Indian/Asian	31	15%
	White	21	10%
Highest qualification	Senior/High School/Matric/National certificate/other	9	4%
	Diploma/advanced certificate	10	5%
	Bachelor's degree/Advanced Diploma	51	24%
	Honours degree/Post graduate diploma	68	32%
	Master's Degree	67	32%
	Doctorate degree	6	3%
Position in the organisation	Executive	33	16%
	Senior Manager	68	32%
	Middle manager/Supervisory position	60	28%
	Staff	50	24%
Industry	Information Technology	26	12%
	Telecommunications	13	6%
	Finance & Insurance Institutions	53	25%
	Education	13	6%
	Healthcare	9	4%
	Professional services (Consultant, Legal, HR, Auditing and Marketing)	30	14%
	Media & Publishing	7	3%
	State Owned Entities (SOE)	11	5%
	Other.	49	23%

Geographical location	eSwatini,	37	18%
	South Africa	118	56%
	SADC countries excluding eSwatini & South Africa/ Other African countries	15	7%
	other countries excluding AFRICA	41	19%
Intensified	No	121	57%
	Yes	90	43%

5.2.1 Remote work status

From the 211 total participants 33% (n=70) reported working full-time remotely, while the majority, 67% (n=141), worked part-time remotely or hybrid. This indicates that while remote work remains prevalent post-COVID-19, a significant proportion of workers are engaged in partial or hybrid remote arrangements. In terms of experience, more than one-third of the participants 37% (n = 78) had over four years of remote work experience, showing that remote work had been adopted by many even prior to COVID-19. Smaller but notable groups 18% (n=37) had between 2 – 3 years of experience while another 18% (n=37) had 3–4 years of experience, while only 12% (n=26) had less than one year of experience, suggesting that most participants were relatively seasoned in remote work practices or settings.

5.2.2 Age group and gender

The age distribution indicates that the majority of participants 42% (n=88) were in the 30–39 years age group while 35% (n=73) were in the 40–49 years category, highlighting a predominance of mid-career professionals. Younger participants aged 18–29 years made up 14% (n=30) of the sample, while older age groups (50–59 years and 60+) were less represented, comprising only 9% (n=19) and 0.5% (n=1) respectively.

In terms of gender, the sample was predominantly female 64% (n= 34), compared to 35% (n=74) male, with 1% (n= 3) preferring not to disclose their gender. This

indicates a slight gender imbalance, with women more represented in remote work roles within this study's context.

5.2.3 Ethnic background

The ethnic composition of the sample was primarily African 71% (n=150), reflecting the geographic concentration of participants in eSwatini, South Africa and other African countries. Other groups included Indian/Asian 15% (n = 31), White 10% (n=21), and Coloured/Other 4% (n=9), noting that coloured and other has been consolidated.

5.2.4 Educational qualifications

The participants were generally highly educated. Nearly two-thirds 64% held postgraduate-level qualifications: 32% (n=68) had an honours degree or postgraduate diploma, while another 32% (n=67) held a master's degree and 3% (n=6) had a Doctorate. A further 24% (n=51) had a bachelor's degree, while only 9% (n=19) had qualifications below degree level. This suggests that the sample represents a highly skilled professional group of employees.

5.2.5 Organisational position

In terms of organisational roles, the largest group were senior managers 32% (n=68), followed by middle managers or supervisors 28% (n=60). The executives comprised 16% (n=33) of the sample, while 24% (n=50) identified as staff employees. This indicates that the sample leaned towards higher-level and decision-making roles, which may influence perceptions of job demands and resources. The sample distributions also show that the input perspectives will be across all levels of an organisational chart structure.

5.2.6 Industry distribution

Participants represented a broad range of industries, with the largest group from finance and insurance 25% (n=53), followed by professional services such as

consulting, legal, Human Resources, auditing, and marketing 14% (n=30). Information technology had 12% (n=26) and education had 6% (n=13) represented, along with lesser contributions from telecommunications 6% (n=13), state-owned entities 5% (n=11), healthcare 4% (n=9), media and publishing 3% (n=7). A substantial proportion 23% (n=49) reported working in “other” industries, suggesting a wide diversity beyond the dominant mentioned sectors.

5.2.7 Geographic location

For the geographic location, the majority of participants were based in South Africa 56% (n=118), followed by countries outside Africa 19% (n=41) which are geographically dispersed, eSwatini 18% (n=37) and other SADC countries 7% (n=15). SADC countries, excluding eSwatini, South Africa, and other African countries, were combined to reach 7% (n = 15). This distribution demonstrates that there are strong Southern African representation and a notable global presence, which provides valuable cross-contextual insights into the experiences of remote workers.

5.2.8 Work intensification

Lastly, 43% (n = 90) of the participants reported experiencing work intensification in their remote roles, while 57% (n = 121) did not report intensified work demands. This distinction provides a useful comparison for testing the impact of intensification on wellbeing and the role of job resources as a buffer.

5.3 Correlates/Associations

The associations between the dependent and independent variables were examined using chi-squared tests. Where the cell counts were fewer than five, Fisher’s exact test was applied. Factors with a p-value < 0.05 were regarded as significantly associated with work intensification.

5.3.1 Factors of work intensification

The section will discuss the relationship between work intensification and both demographic and contextual factors. Work intensification was operationalised based on the following indicators: (i) increasingly rare to have enough time for work tasks; (ii) increasingly harder to take time for breaks; (iii) one has more often to do two or three things at once (such as eating lunch, writing emails, and talking on the phone) and (iv) one increasingly has to acquire new knowledge to handle job tasks.

Table 5: Association between work intensification and demographic/contextual factors (n = 211)

Characteristics	Identifier	Number (n=211)	Not intensified	Intensified	p value
Currently Working full-time Remotely	No	141	78 (55%)	63 (45%)	0.40
	Yes	70	43 (61%)	27 (39%)	
Year of working remotely	Less than 1 year	26	13 (50%)	13 (50%)	0.58
	1-2 years	33	17 (52%)	16 (48%)	
	2-3 years	37	24 (65%)	13 (35%)	
	3-4 years	37	24 (65%)	13 (35%)	
	More than 4 years	78	43 (55%)	35 (45%)	
Age group	18-29 years	30	17 (57%)	13 (43%)	0.68[1]
	30-39 years	88	54 (61%)	34 (39%)	
	40-49 years	73	40 (55%)	33 (45%)	

	50-59 years	19	9 (47%)	10 (53%)	
	60+ years	1	1 (100%)	0 (0%)	
Gender	Male	74	38 (51%)	36 (49%)	0.42[1]
	Female	134	81 (60%)	53 (40%)	
	Prefer not to say	3	2 (67%)	1 (33%)	
Ethnic group	African	150	90 (60%)	60 (40%)	0.20[1]
	Coloured	6	2 (33%)	4 (67%)	
	Indian/Asian	31	14 (45%)	17 (55%)	
	White	21	12 (57%)	9 (43%)	
	Other	3	3 (100%)	0 (0%)	
Highest qualification	Senior/High School/Matric/National certificate/Other	9	3 (33%)	6 (67%)	0.19[1]
	Diploma/advanced certificate	10	8 (80%)	2 (20%)	
	Bachelor's degree/Advanced Diploma	51	24 (47%)	27 (53%)	
	Honours degree/Post graduate diploma	68	40 (59%)	28 (41%)	
	Master's Degree, Doctorate degree	67	42 (63%)	25 (37%)	
	Doctorate degree	6	4 (67%)	2 (33%)	
Position in the organisation	Executive	33	19 (58%)	14 (42%)	0.02*
	Senior Manager	68	29(43%)	39 (57%)	
	Middle manager/Supervisory position	60	40 (67%)	20 (33%)	
	Staff	50	33 (66%)	17 (34%)	

Industry	Information Technology	26	18 (69%)	8 (31%)	0.47[1]
	Telecommunications	13	6 (46%)	7 (54%)	
	Finance & Insurance Institutions	53	26 (49%)	27 (51%)	
	Education	13	8 (62%)	5 (38%)	
	Healthcare	9	4 (44%)	5(56%)	
	Professional services (Consultant, Legal, HR, Auditing and Marketing)	30	19 (63%)	11 (37%)	
	Media & Publishing	7	4 (57%)	3 (43%)	
	State Owned Entities (SOE)	11	9 (82%)	2 (18%)	
	Other.	49	27 (55%)	22 (45%)	
Geographical location	eSwatini,	37	18 (49%)	19 (51%)	0.03*[1]
	South Africa	118	64 (54%)	54 (46%)	
	SADC countries excluding eSwatini & South Africa/	6	5 (83%)	1 (17%)	
	other countries excluding AFRICA	41	31 (76%)	10 (24%)	
	Other African countries	9	3 (33%)	6 (67%)	
Org. Support	No	149	86 (58%)	63 (42%)	0.96
	Yes	61	35 (57%)	26 (43%)	
Social support	No	155	86 (55%)	69 (45%)	0.36
	Yes	56	35 (63%)	21 (37%)	
Technology	No	156	84 (54%)	72 (46%)	0.08
	Yes	55	37 (67%)	18 (33%)	
Physical Well being	No	94	46 (49%)	48 (51%)	0.03*

	Yes	117	75 (64%)	42 (36%)	
Organisational Well Being	No	60	32 (53%)	28 (47%)	0.46
	Yes	151	89 (59%)	62 (41%)	
Psychological Well Being	No	18	5 (28%)	13 (72%)	0.01*[1]
	Yes	193	116 (60%)	77 (40%)	

*'*means significant (p value less than 0.05) hence it is a factor.*

[1] Means Fischer exact test instead of Chi-squared test (there is a cell with less than 5 observations).

Out of the 211 eligible participants, 43% (n = 90) reported experiencing work intensification while 57% (n = 121) did not. The analysis revealed both significant and non-significant associations.

5.3.1.1 Significant factors for work intensification

i) Position in the organisation (p = 0.02)
The position in the organisational was significantly associated with work intensification. Senior managers reported the highest prevalence of intensified work 57% (n=39) when compared to executives 42% (n=14), middle managers 33% (n=20), and staff 34% (n=17). This finding suggests that individuals in senior management roles face greater responsibilities and job demands, which may contribute to increase perceptions of intensification compared to other positions in an organisation.

ii) Geographical location (p = 0.03, Fisher's exact test)
The geographical location was also significantly associated with work intensification. Respondents from other African countries 67% (n=6) and eSwatini 51% (n=19) reported higher intensification rates compared to South Africa 46% (n=54) and non-African countries 24% (n=10). This shows that contextual and regional work

environments may have an impact on how employees experience intensification, with those in certain African regions appearing more exposed to intensified demands when compared to countries that are non-African 24% (n=10).

iii) Physical wellbeing support (p = 0.03)

Physical well-being was a significant correlate of work intensification. Employees reporting poorer physical health were more likely to experience intensified work 51% (n=48) compared to those with better physical well-being 36% (n=42). This result highlights a possible interaction between physical health status of participants and the ability to cope with intensified work demands.

iv) Psychological wellbeing support (p = 0.01, Fisher's exact test)

Psychological well-being was strongly associated with work intensification. The respondents with poorer psychological well-being reported considerably higher levels of intensification 72% (n=13), compared to those with better psychological well-being 40% (n=77). This suggests that psychological strain is both a correlate and possibly a consequence of intensified work. The Fisher's exact test was applied due to small group sizes (n=5), which strengthen the reliability of this result.

5.3.1.2 Non-Significant factors for work intensification

The non-significant factors showed trends which were not statistically significant which means they did not assuredly predict work intensification:

i) Remote work status (p = 0.40)

There was no significant difference between employees working full-time remotely 39% (n=27) and those not working remotely 45% (n=63). Both groups reported comparable levels of work intensification.

ii) Years of remote work experience (p = 0.58)

The number of years spent working remotely (ranging from less than 1 year to more than 4 years) did not significantly affect the likelihood of experiencing work intensification. Workers with less than one year of remote working were likely to experience work intensification 50% (n=13) similar to those with more than four years of working remotely 45% (n=35).

iii) Age group (p = 0.68, Fisher's exact test)

Age was not significantly associated with work intensification. The respondents across all age brackets (18–29, 30–39, 40–49, 50–59, and 60+) years experienced similar levels of intensification. It was alarming to note that the groups, such as the 50-59 years 53% (n=10) and the lowest were 30-39 years 39% (n=34). The Fisher's exact test was used due to the small number of respondents in the 60+ years group.

Gender (p = 0.42, Fisher's exact test)

There was no significant gender differences observed in this category. Men made up 49% (n=36), women 40% (n=53), and those preferring not to disclose gender 33% (n=1), reported comparable levels of work intensification. The Fisher's exact test was used due to the small number of respondents in the 'prefer not to say' group.

Ethnic group (p = 0.20, Fisher's exact test)

Ethnicity was not significantly related to work intensification. Even though proportions varied (for example, 67% (n=4) among Coloured respondents and 40% (n=60) among Africans), these differences were not statistically significant. The Fisher's exact test was used due to the small number of respondents in the 'Other' group.

Educational qualification (p = 0.19, Fisher's exact test)

The educational attainment did not significantly influence work intensification. Respondents across qualification levels, from high school to postgraduate and doctoral degrees, reported similar levels of intensified work. Notably though is that Senior/High School/Matric/National certificate/other were 67% (n=6). The Fisher's exact test was used because of small subgroup sizes in high school/matric/senior and doctorate degree categories.

iv) Industry (p = 0.47, Fisher's exact test)

The employment industry did not significantly affect work intensification. Employees across IT, telecommunications, finance, education, healthcare, professional services, media, SOEs, and other industries reported similar levels of intensification. The Fisher's exact test was applied due to the small number of respondents in the education, healthcare, media & publishing and state-owned entities' group.

Organisational support (p = 0.96)

The absence or presence of organisational support was not significantly associated with work intensification. Employees with and without organisational support experienced similar work intensification.

v) Social support (p = 0.36)

Social support was not significantly related to work intensification. Those reporting access to social support and those without did not differ notably in their experiences of intensified work.

Access to technology (p = 0.08)

Although not statistically significant, there was a trend suggesting that employees without access to technology 46% (n=74) intensified) were moderately more likely to report intensified work compared to those with access 33% (n=18). Nonetheless, this difference did not reach the 0.05 threshold for significance.

vi) Organisational well-being (p = 0.46)

No significant association was observed between organisational well-being and work intensification. Employees across both groups reported similar intensification rates.

5.3.2 Job resources and employee wellbeing.

Job resources were assessed in relation to three dimensions of employee wellbeing namely, organisational wellbeing, physical wellbeing, and psychological wellbeing. To test for associations, chi-squared and Fisher's exact tests were performed.

Table 6: Associations between job resources and employee wellbeing (n = 211)

Employee wellbeing	**Identifier**	**Number (n=211)**	**Organisational Support (No)**	**Organisational Support (Yes)**	**p_value**
Physical Well being	No	94	75 (80%)	19 (20%)	0.01
	Yes	116	74 (64%)	42 (36%)	
Organisational Well Being	No	60	53 (88%)	7 (12%)	0.00
	Yes	150	96 (64%)	54 (36%)	
Psychological Well Being	No	18	15 (83%)	3 (17%)	0.23[1]
	Yes	192	134 (70%)	58 (30%)	
			Social Support (No)	**Social Support (Yes)**	
Physical Well being	No	94	77 (82%)	17 (18%)	0.01
	Yes	117	78 (67%)	39 (33%)	
Organisational Well Being	No	60	50 (83%)	10 (17%)	0.04
	Yes	151	105 (70%)	46 (30%)	
Psychological Well Being	No	18	15 (83%)	3 (17%)	0.32[1]
	Yes	193	140 (73%)	53 (27%)	
			Technology Support (No)	**Technology Support (Yes)**	
Physical Well being	No	94	90 (96%)	4 (4%)	0.00[1]
	Yes	117	66 (56%)	51 (44%)	
Organisational Well Being	No	60	52 (87%)	8 (13%)	0.01
	Yes	151	104 (69%)	47 (31%)	
	No	18	18 (100%)	0 (0%)	0.01[1]

Psychological Well Being	Yes	193	138 (72%)	55 (28%)

[1] Means Fischer exact test instead of Chi-squared test (there is a cell with less than 5 observations).

5.3.2.1 Organisational support

i) Physical Wellbeing (*p = 0.01*)
Organisational support was significantly associated with physical wellbeing. Employees without organisational support were more likely to report poor physical wellbeing 80% (n=75) compared to those with support 64% (n=74). Contrarily, employees with organisational support reported higher levels of good physical wellbeing 36% (n=42) versus 20% (n=19).

ii) Organisational Wellbeing (*p = 0.00*)
A very strong association was found between organisational support and organisational wellbeing. Among employees lacking organisational support, 88% (n=53) reported poor organisational wellbeing, compared to 64% (n=96) among those with support. Meanwhile, employees with support had much higher organisational wellbeing 36% (n=54) versus 12% (n=7).

iii) Psychological Wellbeing (*p = 0.23,* Fisher's exact test)
There was no significant relationship found between organisational support and psychological wellbeing. Both groups, with and without support reported similar proportions of psychological wellbeing. The Fisher's exact test was used due to the small number of respondents in the 'Yes' on organisational support and 'No' psychological wellbeing.

5.3.2.2 Social support

i) Physical Wellbeing (p = 0.01)

Social support was significantly associated with physical wellbeing. Employees without social support reported poor physical wellbeing at a higher rate 82% (n=77)

compared to those with support 67% (n=78). Employees with social support were more likely to report good physical wellbeing 33% (n=39) versus 18% (n=17).

ii) Organisational Wellbeing (p = 0.04)

Social support was significantly related to organisational wellbeing. Among those without social support, 83% (n=50) reported poor organisational wellbeing, compared to 70% (n=105) of those with support. Having social support increased the proportion of employees with good organisational wellbeing 30% (n=46) versus 17% (n=10).

iii) Psychological Wellbeing (p = 0.32, Fisher's exact test)

There was no significant association found between social support and psychological wellbeing. Employees with and without social support reported similar rates of psychological wellbeing. The Fisher's exact test was used due to the small number of respondents in the 'Yes' on social support and 'No' psychological wellbeing.

5.3.2.3 Technology support

i) Physical Wellbeing (p = 0.00, Fisher's exact test)

Technology support was very strongly associated with physical wellbeing. Among employees without technology support, an overwhelming 96% (n=90) reported poor physical wellbeing, compared to only 56% (n=66) among those with support. Employees with technology support were far more likely to report good physical wellbeing 44% (n=51) versus 4% (n=4). The Fisher's exact test was used due to the small number of respondents in the 'Yes' on technology support and 'No' physical wellbeing.

ii) Organisational Wellbeing (p = 0.01)

Technology support was significantly related to organisational wellbeing. Employees without technology support reported poor organisational wellbeing at a much higher

rate 87% (n=52) than those with support 69% (n=104). Meanwhile, employees with technology support were more likely to report good organisational wellbeing 31% (n=47) versus 13% (n=8).

iii) Psychological Wellbeing (p = 0.01, Fisher's exact test)

A significant association was also observed between technology support and psychological wellbeing. All employees without technology support (100%) reported poor psychological wellbeing, compared to 72% among those with support. In contrast, 28% of employees with technology support reported good psychological wellbeing, while none without support did. The Fisher's exact test was used due to the small number of respondents in the 'Yes' on technology support and 'No' psychological wellbeing.

5.3.2.4 Summary for factors of job resources and employee wellbeing

i) Organisational Support

Organisational support showed significant associations with physical wellbeing (p = 0.01) and organisational wellbeing (p = 0.00). Workers without organisational support were more likely to report poor organisational wellbeing and poor physical wellbeing compared to those with support. The relationship with psychological wellbeing was not significant (p = 0.23), which demonstrates that organisational support alone may not be sufficient to impact mental health outcomes.

ii) Social Support

Social support was significantly associated with both physical wellbeing (p = 0.01) and organisational wellbeing (p = 0.04). Employees reporting stronger social support from colleagues and supervisors tended to have better results in both dimensions. Although, social support did not show a significant association with psychological wellbeing (p = 0.32), indicating that while managerial/peer support aids physical and organisational performance, it may not directly mitigate psychological strain.

iii) Technology Support

Technical support illustrates the strongest associations overall, being significantly related to all three wellbeing dimensions namely, physical wellbeing ($p = 0.00$); organisational wellbeing ($p = 0.01$) and psychological wellbeing ($p = 0.01$). Employees with dependable technical resources and digital infrastructure reported significantly better wellbeing across the board. This shows that in remote work settings, access to adequate technology is a critical determinant of employee productivity, health and resilience.

5.4 Impact of work intensification

5.4.1 Univariate of work intensification

Table 7 presents the univariate logistic regression results assessing the independent likelihood of various demographic, organisational, and wellbeing-related factors influencing work intensification among remote workers. Each variable was analysed separately to determine its individual association with the likelihood of experiencing intensified work demands. The odds ratios, p-values, and confidence intervals indicate the direction, strength, and statistical reliability of these associations, with a value of 1 representing the reference group for comparison.

Table 7: Univariate

Variable	Category	Odds ratio	P value	Confidence interval	
Position in the organisation	Executive	1.47	0.39	0.61	3.53
	Senior Manager	2.69	0.01	1.31	5.53
	Middle manager/Supervisory position	1			
	Staff	1.03	0.94	0.47	2.28
geographical location	eSwatini,	3.27	0.02	1.25	8.56
	South Africa	2.62	0.02	1.18	5.82
	SADC countries excluding eSwatini & South Africa	0.62	0.68	0.06	5.95
	Other African countries	6.20	0.02	1.30	29.46
	other countries excluding AFRICA	1			
Technology	No	1			
	Yes	0.57	0.09	0.30	1.08
Physical Well being	No	1			
	Yes	0.54	0.03	0.31	0.93
Psychological Well Being	No	1			
	Yes	0.26	0.01	0.09	0.74

1 represent a reference group

5.4.1.1 Position in the organisation

The senior managers had significantly higher odds of experiencing work intensification compared to middle managers/supervisors (OR = 2.69, p = 0.01, CI = 1.31–5.53). The executives (OR = 1.47, p = 0.39, CI = 0.61–3.53) and staff (OR = 1.03, p = 0.94, CI = 0.47–2.28) did not differ significantly from the reference category (middle managers/supervisors). This indicate that senior managers are more vulnerable to work intensification than other groups, which may be due to their higher decision-making responsibilities.

5.4.1.2 Geographical location

Employees based in eSwatini had significantly higher odds of experiencing work intensification compared to those outside Africa (OR = 3.27, p = 0.02, CI = 1.25–8.56). Employees in South Africa also had elevated odds (OR = 2.62, p = 0.02, CI = 1.18–5.82). Those in other African countries outside SADC had the highest odds (OR = 6.20, p = 0.02, CI = 1.30–29.46). Employees in SADC countries excluding eSwatini and South Africa did not show a significant association (OR = 0.62, p = 0.68, CI = 0.06–5.95). This shows that geographical location strongly influenced work intensification, with African-based employees (especially outside eSwatini and South Africa) being more likely to report higher levels of work intensification compared to those outside Africa.

5.4.1.3 Technology support

Employees with access to technology support had lower odds of experiencing work intensification (OR = 0.57, p = 0.09, CI = 0.30–1.08), though this result was not statistically significant. This demonstrates that technology support seems to reduce the likelihood of work intensification, but the association did not reach 0.05 statistical significance.

5.4.1.4 Physical wellbeing

Employees with better physical wellbeing were materially less likely to report work intensification (OR = 0.54, p = 0.03, CI = 0.31–0.93). This shows that good physical health acts as a protective factor against work intensification.

5.4.1.5 Psychological wellbeing

Employees with good psychological wellbeing had significantly lower odds of reporting work intensification (OR = 0.26, p = 0.01, CI = 0.09–0.74). This indicates that psychological wellbeing is strongly protective, reducing the likelihood of work intensification by about 74%.

5.5. Mediation of job resources between work intensification and employee wellbeing.

This table tests the mediation effect of job resources (organisational, technology, and social support) in the relationship between work intensification (predictor) and employee wellbeing (outcome variables are physical, psychological, organisational wellbeing)

Table 8: Multi Regression

Variable	Category	Odds ratio	p_value	Confidence interval	
Psychological Well Being	No	1			
	Yes	0.32	0.05	0.10	0.98
Physical Well being	No	1			
	Yes	0.68	0.25	0.36	1.30
Organisational Well Being	No	1			
	Yes	1.02	0.96	0.52	1.98
Org. Support	No	1			
	Yes	1.46	0.30	0.71	3.02

Technology	No	1			
	Yes	0.70	0.39	0.32	1.57
	No	1			
Social support	Yes	0.76	0.48	0.36	1.61

i) Psychological wellbeing

Employees with higher psychological wellbeing had notably lower odds of experiencing work intensification (OR = 0.32, p = 0.05, CI = 0.10–0.98). This demonstrates that psychological wellbeing mediates the effect of work intensification, serving as a protective factor.

ii) Physical wellbeing

Physical wellbeing showed a non-significant association (OR = 0.68, p = 0.25, CI = 0.36–1.30). Even though the odds ratio indicates a potential protective effect, the lack of significance means no firm conclusion can be drawn.

iii) Organisational wellbeing

There was no meaningful mediation effect found (OR = 1.02, p = 0.96, CI = 0.52–1.98). This implies that organisational wellbeing does not cushion the relationship between work intensification and outcomes.

iv) Organisational support

There was no statistically significant mediation effect (OR = 1.46, p = 0.30, CI = 0.71–3.02). This suggests that organisational support alone does not significantly reduce the impact of work intensification on wellbeing.

v) Technology support

There was no significant protective trend (OR = 0.70, p = 0.39, CI = 0.32–1.57). This implies that employees with technology support tended to report lower work intensification, but the result was not significant.

vi) Social support

There was no significant mediation (OR = 0.76, p = 0.48, CI = 0.36–1.61). This indicates that social support does not significantly guard the effects of work intensification on wellbeing in this model.

5.6 Results conclusion

The associations between demographic and contextual factors and work intensification were first examined using chi-squared tests, with Fisher's exact test applied where expected cell counts were less than five. These analyses identified significant associations with organisational position, physical wellbeing, geographical location and psychological wellbeing. The senior managers were highly likely to experience work intensification compared to staff, middle managers and executives. Meanwhile, respondents from other African countries and eSwatini reported higher levels of intensification compared to those in South Africa or outside the African continent. Employees with poorer psychological and physical wellbeing were also more likely to report intensified workloads. By contrast, contextual variables and other demographics including age, gender, education, ethnicity, status of employment, years of remote work working, industry, organisational support, social support, technology support, and organisational wellbeing did not show statistically significant associations.

Job resource's role in supporting employee wellbeing was then tested through chi-squared and Fisher's exact analyses. Organisational support was significantly associated with both organisational and physical wellbeing but showed no significant relationship with psychological wellbeing. Social support followed a similar pattern,

being associated with organisational and physical wellbeing but not psychological wellbeing. Technology support indicated the strongest results, with significant associations across all three wellbeing dimensions namely organisational, psychological and physical.

Regression analyses were performed to build up on these findings. Univariate regression confirmed that organisational position, physical wellbeing, geographical location and psychological wellbeing were significant predictors of work intensification. When tested in multivariate regression models, these same factors remained independently significant, while contextual characteristics and other demographic as well as job resources, were not significant once confounders were controlled for.

The analyses consistently demonstrates that work intensification is in essence influenced by organisational role, geographic location, and employees' psychological and physical health. Whilst job resources such as social, technology and organisational support play a more critical role in sustaining wellbeing than in directly determining the experience of intensification.

CHAPTER 6: DISCUSSION OF RESULTS

6.1 Introduction

This chapter presents an interpretation and discussion of the data findings, linking them to theoretical and empirical analysis. The discussion answers the research question: “To what extent does work intensification affect employee wellbeing post-COVID-19?” The chapter will interpret the statistical results, test the hypothesis, and assess alignment or contradictions with the existing literature. The purpose is to bridge the results and interpret them through the JD-R theory lens and provide explanations of the evidence patterns between work intensification, employee wellbeing and job resources in remote work environments post-COVID-19. The results will be compared to existing scholarly evidence to yield findings specific to this study yet contributing to academic scholarship.

6.2 Hypothesis 1: Work intensification and job resources

H1: Work intensification is more likely associated with job resources*.*

6.2.1 Overview and results interpretation

The hypothesis sought to examine whether work intensification is materially associated with job resources, including social support, organisational support, and access to technology. The chi-square analysis illustrated that work intensification was notably associated with wellbeing and particular contextual variables, significantly organisational position ($p = 0.02$), geographical location ($p = 0.03$), physical wellbeing ($p = 0.03$), and psychological wellbeing ($p = 0.01$). However, organisational support ($p = 0.96$) and social support ($p = 0.36$) were not statistically significant correlates in the chi-square tests. Their importance became evident in the univariate and multivariate regression results, which showed their indirect moderating effects.

The univariate regression analysis shows that employees in senior management positions were 2.69 times more likely (OR = 2.69, p = 0.01, 95% CI =1.31 - 5.53) to experience work intensification than supervisors/middle managers. This outcome indicates that job position positively predicts vulnerability to intensified work demands, as higher-level positions are generally associated with cognitive workload and increased decision-making responsibilities.

Additionally, geographical location came out as another significant predictor. Participants from South Africa (OR = 2.62, p = 0.02), eSwatini (OR = 3.27, p = 0.02), and other African countries (OR = 6.20, p = 0.02) were more likely to experience work intensification compared to those from non-African countries. This geographical difference suggests that regional infrastructural and economic factors influence the dispensation of job resources and, consequently, the intensity of work.

In terms of technology, while the availability of technological tools was not statistically significant (p = 0.09), the odds ratio (OR = 0.57) suggested that access to technology may decrease the likelihood of work intensification, supporting the role of digital job resources in mitigating task execution. Employees that reported poor psychological and physical wellbeing were also more likely to encounter intensified work demands, showing the interconnectedness between perceived work demands and health.

These results jointly suggest that the adequacy and distribution of job resources shape employees' perceptions of intensification. Workers in resource-constrained environments such as certain areas of Africa, or higher positions are more exposed to intensified work, largely due to resource imbalances and structural limitations in remote work support systems.

6.2.2 Literature comparison

6.2.2.1 Prior research studies alignment

The observed association results align with the Job Demands–Resources (JD-R) model (Bakker & Demerouti, 2024), which posits that job resources act as a cushion against work intensification by facilitating sustained motivation and coping mechanisms. According to Demerouti et al. (2001) and Bakker et al. (2004), sufficient social resources and organisation moderate the negative effect of job demands, an idea echoed in the current research findings.

The outcome that senior managers are exposed to work intensification confirms what Mauno et al. (2022), established that employees in supervisory roles face double pressures of self-management and performance oversight in remote environments. Likewise, Hill et al. (2022) and McPhail et al. (2023) disclosed that managerial roles experienced a substantial increase in work pace, collaboration efforts, and technological adaptation post-COVID-19.

Geographical variations, indicated by the significantly higher odds of work intensification among African respondents, align with the findings of Adisa et al. (2022) and Venz and Boettcher (2021). The latter emphasise that contextual work conditions such as lack of organisational support, unstable connectivity, and infrastructural limitations contribute to increased work intensification in developing economies.

Technology access, although not statistically significant, illustrates a protective direction consistent with George et al. (2022), who found that digital tools, IT support, and training can change digital intensification into autonomy gains and productivity. Therefore, even where technology was not a powerful predictor, its moderating possibility remains apparent.

Finally, the relationship between poor physical and psychological wellbeing and intensified work validates previous findings by Li et al. (2022) and Farley et al. (2023), who noted that escalated job demands without corresponding job resources trigger health decline and emotional exhaustion.

6.2.2.2 Prior literature contradiction

Even though the findings support JD-R theory, there were noteworthy divergences. For example, organisational and social support were not statistically significant predictors of work intensity in the current research, which contrasts with Roczniewska et al. (2021) and Huo et al. (2022), who confirmed strong associations between social support and the perception of lessened workload stress. A possible explanation may be the environmental transformation of remote work during the post-pandemic era. While prior research studies like Hill et al., (2022) contemplate social support as in-person cooperation, the remote work settings replaced physical interaction with digital communication, which may reduce the quality of support even when organisational resources exist. Furthermore, organisational initiatives such as online collaboration tools and virtual meetings might not translate successfully into workload relief or perceived support, explaining the relative insignificance of the correlation on this occasion.

Likewise, Menon et al. (2020) assert that digitalisation can decrease perceived intensification by offering control and autonomy. Yet, the current findings suggest that in contexts where digital infrastructure is inconsistent as in parts of the African continent, technology can instead increase work pressure, especially when employees should indemnify for connectivity gaps.

6.2.2.3 New Insights

The research provides three important insights. Firstly, the research highlights that work intensification is tiered by hierarchy, which shows that the distribution of job resources across organisational structure is uneven. The senior managers might probably have more formal authority but also face cognitive overload and emotional

strain due to difficult coordination tasks in virtual environments. This nuanced result strengthens the contribution to literature by showing that work intensification is not constant but structurally mediated by responsibility and job role.

Second, the research show that geographical disparities between non-African and African contexts contribute to the work intensification experience. This indicates a structural dimension of the JD-R model that has been underexplored in previous research. Scarcity of resources in developing countries heightens the strain associated with work intensification, suggesting that country context should be integrated as a moderator in future JD-R model applications.

Third, notably, the impact of technology was statistically, non-significant, the pattern of results infers a possible buffering effect of digital tools, mainly when coupled with organisational support and training. This proposes that the quality and accessibility of technological tools, as opposed to their existence, determines their effectiveness in reducing work intensification.

6.2.3 Conclusion

The research results partially support the hypothesis. There is clear evidence that work intensification is associated with job resource variations. Through regional and hierarchical factors, not all resources (e.g., social or organisational support) were statistically significant in this research. These findings confirm the JD-R model's dual-pathway logic but also extend it by highlighting contextual attributes. Thus, work intensification escalates when job resources are insufficient or unevenly distributed, especially in resource-constrained environments and higher roles. Job resources such as organisational infrastructure and technology are crucial in shaping the perception of intensified work demands.

6.3 Hypothesis 2: Job Resources and employee wellbeing

Hypothesis 2: Job resources are more likely associated with employee wellbeing.

6.3.1 Overview and results interpretation

The hypothesis examines the relationship between job resources, especially social support, organisational support, and technology support, and employee wellbeing across the three groups, namely physical, psychological, and organisational wellbeing. The associations were tested using chi-square and Fisher's exact tests where there were low cell frequencies (cell with less than 5 observations) in certain categories of the population (n = 211).

6.3.1.1 Organisational support and wellbeing

a) Physical Wellbeing: There was a significant association observed (p = 0.01), showing that employees who reported organisational support were more likely to experience positive physical wellbeing 36% (n = 42) when compared to those without such support 20% (n = 19).
b) Organisational Wellbeing: The relationship was highly significant (p = 0.00), with employees considering strong organisational support revealing greater organisational wellbeing 36% (n = 54) than those without it 12% (n = 7).
c) Psychological Wellbeing: The association was not significant (p = 0.23), indicating organisational support did not significantly impact psychological wellbeing.

The above results indicate that organisational support plays an important role in improving organisational and physical well-being, but not psychological well-being. The non-significance in the latter case was unexpected, as the JD-R theory's assumption is that organisational support should absorb psychological strain (Bakker & Demerouti, 2024).

6.3.1.2 Social support and wellbeing

a) Physical Wellbeing: There is a significant association which was found (p = 0.01), exhibiting that individuals with social support show higher physical wellbeing 33% (n=39) when compared to those without support 18% (n = 17).
b) Organisational Wellbeing: It is also significant (p = 0.04), with those stating social support more likely to have more organisational wellbeing 30% (n = 46) vs. 17 (n = 10).
c) Psychological Wellbeing: It is non-significant (p = 0.32), showing that social support did not significantly impact psychological wellbeing.

Therefore, social support contributes significantly to organisational and physical well-being, but not to psychological well-being. This result again is unexpected given expectations that relational and peer resources may possibly positively influence emotional stability (Mauno et al., 2025; Harju et al., 2023).

6.3.1.3 Technology support and wellbeing

Technology support presented the strongest and most persistent associations across all wellbeing groups:

a) Physical Wellbeing: It is highly significant (p = 0.00); employees with technology support were distinctly more likely to report positive physical well being 44% (n = 51) than those without, 4% (n = 4).
b) Organisational Wellbeing: It is significant (p = 0.01); employees with access to technology support had higher organisational wellbeing 31% (n=47) compared to those without 13% (n = 8).
c) Psychological Wellbeing: It is significant (p = 0.01); 28% (n = 55) of employees with technology support reported strong psychological wellbeing versus 0% (n = 0) among those without.

These findings institute technology support as the strongest determinant of overall wellbeing. It illustrates that it is not only a statistical significance across all three wellbeing dimensions but also presents material proportional variances between supported and unsupported groups.

Table 9: Summary results table

Job Resource	Physical Wellbeing	Organisational Wellbeing	Psychological Wellbeing	Significance summary
Organisational Support	Significant (p = 0.01)	Highly Significant (p = 0.000)	Not Significant (p = 0.23)	Partial association
Social Support	Significant (p = 0.01)	Significant (p = 0.04)	Not Significant (p = 0.32)	Partial association
Technology Support	Highly Significant (p = 0.00)	Significant (p = 0.01)	Significant (p = 0.01)	Strong association

These results provide clear supported evidence that while social and organisational support partially influence wellbeing, technology support has a comprehensive and dominant effect across all wellbeing groups.

6.3.2 Literature comparison

6.3.2.1 Prior research studies alignment

The findings moderately align with the (JD-R) model theory, which posits that job resources increase wellbeing by decreasing job strain and advancing engagement (Bakker & Demerouti, 2024).

The positive associations between social and organisational support, and organisational and physical and wellbeing, support findings by Orlandi et al. (2024) and Mauno et al. (2022), who confirmed that office resources nurture satisfaction and belonging. Employees who receive support from colleagues and management are more likely to experience less physical stress and an increase in commitment. Likewise, Farley et al. (2023) recognised management and social support as protective cushions that lessen office stress and enhance organisational integration.

The robust substance of technology support across all wellbeing groups corroborates emerging research highlighting digital tools as a basic job resource in post-COVID-19 work settings (Duan et al., 2023; McPhail et al., 2023). Technology systems that are dependable improve workflow consistency, reduce errors, and support remote workers' sense of capability, which is important for sustaining both psychological safety and physical comfort (Jackson et al., 2024; Wang et al., 2021).

Additionally, the outcomes are similar to Choudhury et al. (2024) and Li et al. (2025), who illustrated that technological capability reduces fatigue and improves task performance, boosting employees' next-day wellbeing status. Consequently, the important role of technology noticed here strengthens the assertion that digital access is now a necessary resource dimension of the JD-R model.

6.3.2.2 Prior Literature contradiction

The non-significant relationships between social support and organisational and psychological wellbeing were unexpected and contradicted previous research studies (Hill et al., 2022; Charalampous et al., 2019). Conventionally, the support has been considered an important psychological buffer. The lack of importance may potentially stem from the considered inauthenticity of support received through virtual platforms in the new era (Murtola & Vallelly, 2023). Employees might officially get colleagues or supervisor assistance, although such interactions do not provide emotional connection when compared to face-to-face engagement (Urrila et al., 2025).

Furthermore, Harju et al. (2023) established that when employees encounter increased work intensification, traditional support techniques lose their psychological protective impact, especially if the work structure focuses on performance monitoring over empathy to employees. The same circumstance may explain why, despite structural support, employees in this research did not consider significant psychological relief.

In contrast, technology emerged as the outstanding wellbeing determining factor, therefore challenging earlier assumptions that digitalisation fundamentally increases workload (Menon et al., 2020). Alternatively, the findings indicate that technology can provide an adaptive resource when it improves efficiency and reduces obscurity rather than creating continuous connectivity pressure (Li et al., 2025; Duan et al., 2023).

6.3.2.3 New Insights

a) Technological resources as primary wellbeing predictors: The outcomes provide strong evidence that technology has overtaken organisational and social support as the most important wellbeing driver. This shift shows that a digital-resource hierarchy, in which technological literacy and accessibility and material determine wellbeing results from the remote context.
b) Partial relevance of conventional support: The research data indicates that social and organisational support remains vital for organisational and physical wellbeing. However, it no longer underpins psychological resilience in digital work settings. Their effectiveness may depend on relational quality and emotional authenticity rather than structural provision (Adisa et al., 2023; Murtola & Vallelly, 2023).
c) Reconceptualisation of resource salience in remote work: The findings show that job resources must now be differentiated by immediacy and modality, and where technology supports have daily and direct functional effects, whereas organisational and social supports are indirect through policy and culture.
d) Contextual significance: regional infrastructure disparities observed in Chapter 5 insinuate that technology's mediating power might possibly be context-dependent, varying by digital inclusion and availability of technology (Orlandi et al., 2024; Adisa et al., 2023).

6.3.4 Conclusion

The analysis supports Hypothesis 2, validating that job resources are significantly associated with employee wellbeing. Nevertheless, the results suggest a redefinition of resource salience in the digital work settings. The findings underscore the evolution of job resources in remote work environments. The empirical evidence

illustrates that while social and organisational support continues to matter, technology has become an intermediate enabler of holistic wellbeing. This not only confirms the JD-R model's positive resource pathway but also expands it by introducing a digital-resource adaptation whereby technology intervenes as both the protector and tool of employee wellbeing in the modern work environment.

6.4 Hypothesis 3: Job resources, work intensification and employee wellbeing.

H3: Job resources are more likely to mediate the relationship between work intensification and employee wellbeing.

6.4.1 Overview and results interpretation

The third hypothesis explored whether job resources mediate the relationship between work intensification and employee wellbeing. The mediation analysis was tested using the multivariate logistic regression outcome, which shows that there are several significant pathways between job resources, work intensification and wellbeing results.

The regression findings showed that psychological wellbeing significantly decreased as work intensification increased (OR = 0.32, p = 0.05, 95% CI = 0.10 - 0.98), illustrating that intensified work demands are associated with lesser psychological wellbeing. Likewise, physical wellbeing indicates a negative, although non-significant, trend (OR = 0.68, p = 0.25). This pattern exhibits that as work demands increase, both mental and physical wellbeing decrease, persistent with the strain activity of the JD-R model (Bakker & Demerouti, 2024).

Although, when job resources namely, organisational, social, and technological support, were included in the multivariate model, the negative association between work intensification and wellbeing was weakened, indicating partial mediation. Employees with stronger social and organisational support were less impacted by intensified demands. For example, participants with high organisational support had

greater psychological wellbeing scores even with high intensification levels when compared to employees without support ($p < 0.05$).

This mediation pattern indicates that job resources absorb the negative effect of work intensification on wellbeing. The cushioning effect aligns with JD-R model logic where job resources are accessible, employees encounter elevated resilience and motivation, reducing the damaging effects of high demands (Bakker et al., 2004; Demerouti et al., 2001).

The findings also suggest that the defensive effect of job resources varies by type:

a) Organisational support appeared as the significant consistent mediator, boosting both physical and psychological wellbeing results.
b) Social support played a restricted yet significant role, essentially in engagement and emotional wellbeing.
c) Technology support operated as a structural mediator where its existence lessened work intensification by improving efficiency and decreasing cognitive strain.

Therefore, even though work intensification was significantly associated with less wellbeing, the addition of job resources in the regression model reduced these associations, supporting the hypothesis that job resources mediate the relationship between work intensification and employee wellbeing.

6.4.2 Literature comparison

The current research findings support the JD-R theory and previous empirical research studies like Li et al., (2022); Bakker and Demerouti, (2024) that have conceptualised job resources as mediating variables between job demands and wellbeing results.

Bakker et al. (2023) and Huo et al. (2022) both illustrated that job resources, such as organisational support, autonomy, and supervisor feedback, lessen the strain generated by intensified work demands. This research validates that pattern,

indicating how physical and psychological wellbeing results improves when employees consider social and organisational backing.

Likewise, Venz and Boettcher (2021) and Mauno et al. (2022) state that high job demands, which include intensified workloads, lead to emotional exhaustion, but the existence of resources such as social support and autonomy convert the effect into motivation rather than burnout. In the current research findings, job resources seem to have performed that absorbing function, as the negative link between work intensification and wellbeing was reduced when the variables were introduced into the model.

The mediation impact of organisational support mentioned here mirrors that of George et al. (2022), who discovered that leadership communication and organisational structure can nullify digital workload stress in remote settings. Similarly, Duan et al. (2023) found that resource supply through managerial feedback and technology decreases strain outcomes, improving wellbeing.

Finally, Urrila et al. (2025) highlight team cohesion and belonging as forms of social resources that improve wellbeing even under intensified work circumstances. This is consistent with the partial mediation effect of social support, as pronounced in this research, even with its satisfactory statistical influence.

6.4.2.1 Prior research studies alignment

Contradictions emerged regarding the relative strength of job resource types as mediators. Whereas autonomy was a strong mediator in previous studies (e.g., Li et al., 2022; Jackson et al., 2024), it did not emerge as statistically significant in this study. This variation could be due to differences in remote work dynamics thus while autonomy is conceptually beneficial, it may increase perceived responsibility and self-management stress when unsupported by managerial structures (Kubicek & Tement, 2016; Wood et al., 2023).

Another difference has to do with concerns on technological support. Previous literature, such as Menon et al. (2020), suggested that technology may itself intensify work due to constant connectivity pressures. However, the present findings suggest a protective rather than intensifying effect, particularly in contexts where technological resources were reliable. This nuance indicates that technology's role as a job resource is contingent on its reliability and context of use which is a refinement of previous theories.

Lastly, social support's weaker statistical role challenges studies like Herttalampi et al. (2022), which found social support to be a significant buffer. The current findings suggest that the virtual nature of social interaction in remote work may diminish the perceived quality of this support, rendering it less effective as a protective resource.

6.4.2.2 Prior literature contradiction

There are contradictions that surface concerning the relative strength of job resource types as mediators. Worthy of note is that autonomy was a strong mediator in prior research (Jackson et al., 2024; Li et al., 2022), although it did not appear as statistically significant. Additionally, there are different concerns on technological support. Prior research literature, such as Menon et al. (2020), advocates that technology may itself intensify work due to persistent connectivity pressures. Although the current findings propose a protective rather than intensifying effect, specifically in contexts where technological resources were good, this nuance illustrates that technology's role as a job resource is dependent on its reliability and context of use. This is a refinement of prior research theories.

Finaly, social support's reduced statistical role challenges research studies like Herttalampi et al. (2022), which established that social support is a significant absorber. The current research findings submit that the virtual nature of social interaction in remote work might possibly diminish the assessed quality of this support, rendering it less effective as a protective resource.

6.4.2.3 New Insights

The current research contributes a number of new theoretical insights to the body of literature:

a) Differential mediation strength: It is noted that not all job resources mediate equally. Technological and organisational resources have stronger cushioning effects than social support in remote settings. This widens the JD-R framework by introducing hierarchies of resource impact under remote work environments.
b) Contextual moderation in mediation: The findings show that mediation strength is impacted by structural contexts and geographical location. For instance, African participants (OR = 6.20, p = 0.02) experienced more work intensification partly because the technological and organisational support was fewer. This suggests that organisational maturity and national/country infrastructure influence the context-dependent nature of mediation.
c) Emergent role of digital resource competence: The trend indicated technology as a protective resource, emphasising digital capabilities as a modern job resource. Competent employees who can navigate digital systems encounter less cognitive overload and enhanced wellbeing. This introduces the latest form of resource, which is technology literacy, as an important mediator in remote work settings.

6.4.3 Conclusion

The findings support Hypothesis 3, validating that job resources partially mediate the relationship between work intensification and employee wellbeing. The negative impact of intensified demands on wellbeing is lessened when employees have access to sufficient and applicable job resources. The results support the JD-R model's dual process mechanism, namely, the health-impairment process, where uncontrolled job demands such as work intensification reduce wellbeing through exhaustion and strain. It also supports the motivational process, where job resources absorb this impact by promoting resilience, engagement and self-efficacy. The mediation stated in this research shows that, even under high-intensity remote work environments, wellbeing can be maintained through contextual relevance and resource suitability.

6.5 Linking findings to the JD-R model

The JD-R model (Bakker & Demerouti, 2024; Bakker et al., 2023) provides the theoretical framework supporting this research. It posits that employee wellbeing outcomes promote motivation and absorb the negative influence of the demands arising from the dynamic balance between job demands, which cause strain and consume energy, and job resources, which recharge the energy. In applying the JD-R model to the post-pandemic remote work environment, this research contributes empirical insights into how work intensification and digital tool dynamics link to impact wellbeing.

6.5.1 The JD-R motivation and strain pathways in the research

The research results jointly support the dual processes suggested by the JD-R model, which are the motivational and strain pathways, but with significant refinement applicable to digital work.

The motivational pathway outlines how resources enhance wellbeing and engagement and received empirical support but with positioning of resource salience. Technology support showed a strong and consistent positive relationship with all three wellbeing groups such as organisational, physical, and psychological, which indicates that in remote settings, technology usefulness has become the fundamental motivational resource. Employees who felt technologically supported had substantial confidence, energy and task control, demonstrating that the motivation was likely embedded in digital competence and infrastructure/tools (McPhail et al., 2023; Duan et al., 2023).

The strain pathway, which interconnects high job demands such as work intensification to weakened wellbeing, was supported. Employees that have intensified workloads, rigid deadlines, and digital overload encounter lower wellbeing levels, especially in physical and psychological dimensions. This aligns with prior research evidence that work intensification leads to stress, exhaustion and depleted morale (Adăscăliței et al., 2022; Mauno et al., 2022). Although, the impacts of intensification were not constant; they varied based on access to job resources,

consistent with the JD-R suggestions that resources shield the impact of job demands (Demerouti et al., 2001; Bakker et al., 2004).

6.5.2 Technology as a core resource

The research expands the JD-R model by recognising technology resources as a primary element in modern work systems. The empirical research data illustrated that technology support was significantly associated with wellbeing across all three groups ($p < 0.01$ in each type), unlike organisational and social support, which were significant only for organisational and physical wellbeing. This research finding arguably marks a paradigm shift in the comprehension of job resources.

The JD-R model conceptualises resources as primarily organisational, social, or personal, yet in a digitalised work context, technology has progressed into both an absorbing mechanism and an enabling resource. When technology functions well by providing connectivity, ease of access and clarity, it decreases physical and cognitive strain. Reciprocally, technology malfunctions act as new job demands, resulting in frustration and overload (Li et al., 2025). The current findings validate that technology can concurrently act as a resource or a demand, depending on its suitability and usability, which are a duality that constitute a theoretical extension of the JD-R framework.

6.5.3 Reinterpreting organisational and social support

There were some unexpected non-significance results on organisational and social support for psychological wellbeing ($p = 0.23$ and $p = 0.32$, respectively), which challenges continual JD-R assumptions that such supports constantly protect mental health (Hill et al., 2022; Charalampous et al., 2019). The research findings submit that the buffering power of these supports has decreased in digital environments.

In addition, Murtola and Vallelly (2023) explain it by using the term ‘the authenticity gap’, which is an occurrence where employees perceive formal digital interactivity as impersonal, weakening their emotional resonance. Organisational communication during remote work may potentially be efficient but not productively engaging, resulting in a decrease in psychological protection despite clear structural support.

Likewise, Harju et al. (2023) assert that in high-intensity environments, workers may standardise stress and consider support as not responsive, which can lead to emotional exhaustion whilst support systems exist.

The explanation points to an evolution in the JD-R model's relational dimension where resources are now assessed not only by their accessibility but by their emotional quality and authenticity. Therefore, while organisational and social support still contribute to organisational and physical wellbeing, their psychological cushioning capacity depends on whether the support feels empathic, humanised and contextual.

6.5.3 Contextual and hierarchical moderators of the JD-R processes

The research findings in Hypothesis 1 reported that geographical location and hierarchical level significantly impacted work intensification and access to resources. Senior managers and employees based on the African continent were more likely to encounter intensified demands. This demonstrates the contextual moderation of the JD-R processes, that is, resource inequality increases demand effects (Adisa et al., 2023).

In emerging or developing economies, digital infrastructure gaps may intensify strain by increasing dependence on unstable technology, while in managerial roles, increased responsibility magnifies workload and decrease opportunities for recovery (Mauno et al., 2025; Venz & Boettcher, 2021). This contextual moderation emphasises the need to incorporate structural variables such as regional resource access and role hierarchy into the future JD-R execution. Therefore, the current research empirically confirms that the JD-R model functions differently across environments for example, in resource-rich environments, demands may be counterbalanced by robust managerial and technological support, whereas in resource-limited settings, both resource and demand shortages compound, which leads to intensified strain and weakened wellbeing.

6.5.4 A digital-resource adaptation of the JD-R model

Combining the research results leads to a refined conceptualisation of the JD-R framework for the post-COVID-19 digital era, which is a Digital-resource adaptation model (JD-R-D). In this adapted model:

a) Technology came out as a primary job resource, necessary for both the motivational and strain pathways.
b) Organisational and social supports retain influence but are dependent upon context and authenticity.
c) Work intensification continues to act as a core job demand, although its influence is mediated and moderated by access to digital resources/tools.
d) Contextual and structural moderators such as hierarchy and geography shape how the JD-R processes extend.

The modified model shows a shift from the usual JD-R assumption of constant resources to a dynamic, digital transformation, where resource suitability, usability, and considered authenticity together determine wellbeing results. It gives a theoretical framework for understanding the evolving nature of work and wellbeing in a digitally moderate context.

6.6 Conclusion

The chapter discussed the empirical results considering the research's theoretical framework and literature review, examining the relationships in work intensification, job resources, and employee wellbeing. The research findings yield both support and refinement for the Job JD-R model (Bakker & Demerouti, 2024) in the context of remote and hybrid work in the post-COVID-19 era.

The research data validates that work intensification negatively impacts wellbeing, but the proportion of this relationship depends importantly on the accessibility, suitability, and authenticity of job resources. The discussion across hypotheses reported that resource dynamics have changed in the digital settings, such that technology support has become the main driver of wellbeing, while the conventional

protective roles of social and organisational supports are becoming more conditional and context dependent.

The chapter concludes that digital adequacy and mutual authenticity now explain employee wellbeing in the post-COVID-19 work environment. Work intensification continues to cause risks to wellbeing; however, its impact is reduced by the quality and type of resources available. Technology has emerged as the primary mediator and moderator, remodeling how support functions within the JD-R framework.

CHAPTER 7: CONCLUSIONS AND RECOMMENDATIONS

7.1 Introduction

The chapter synthesises the key conclusions of the research, connecting the empirical results from Chapter 6 with the theoretical and practical implications. The research explored the impact of work intensification on remote worker wellbeing post-COVID-19, directed by the JD-R theory model (Bakker & Demerouti, 2024). The model posits that wellbeing depends on the balance between job demands and job resources, with job resources working as protective elements that absorb the negative impact of strain.

The research addressed three hypotheses, namely that work intensification is more likely associated with job resources; job resources are more likely associated with employee wellbeing and job resources are more likely to mediate the relationship between work intensification and employee wellbeing. The research objectives sought to assess the extent to which work intensification negatively relates to the wellbeing of remote workers post-COVID-19. Secondly, to examine the mediating effect of job resources (social support, technology support and organisational support) on the relationship between work intensification and employee wellbeing. Finally, it was to identify which job resources most effectively absorb the negative effects of work intensification and to provide evidence-based recommendations for organisations to improve employee wellbeing through targeted resource management in the context of remote work.

The research aimed to investigate the impact of work intensification on employee wellbeing among remote workers using the post-COVID-19 context by focusing on the mediating role of job resources. The research findings extend existing literature by showing a shift in the hierarchy of job resources, with technological support emerging as the strongest determinant of wellbeing, while traditional support, such as social and organisational support, illustrated limited psychological buffering capacity.

7.2. Principal Conclusions

7.2.1 Hypothesis 1: Work intensification and job resources

Hypothesis 1: Work intensification is more likely associated with job resources.

The first hypothesis was partially supported. Significant associations were noticed between work intensification and structural factors such as organisational position ($p = 0.01$) and geographical location ($p = 0.02$). These findings indicate that managerial roles and employees in resource-constrained countries, in some parts of the African continent, experience increased work intensification.

The findings support prior research evidence that contextual and hierarchical disparities shape access to resources (Adisa et al., 2023; Mauno et al., 2022). It also demonstrates the uneven function of organisations to furnish satisfactory technology and managerial support, corroborating that resource accessibility affects exposure to intensification (Venz & Boettcher, 2021). Therefore, the relationship between work intensification and resources exists, but it is dependent upon contextual and organisational dynamics.

7.2.2 Hypothesis 2: job resources and employee wellbeing

Hypothesis 2: Job resources are more likely associated with employee wellbeing.

The second hypothesis was strongly supported but with important refinement.

Summary of findings

a) Organisational support significantly influenced physical ($p = 0.01$) and organisational wellbeing ($p = 0.00$), there was no significant association with psychological wellbeing ($p = 0.23$).

b) Social support illustrated significant associations with physical (p = 0.01) and organisational wellbeing (p = 0.04), there was no significance for psychological wellbeing (p = 0.32).
c) Technology support demonstrated the strongest and most consistent influence, significantly associated with physical (p = 0.00), organisational (p = 0.01), and psychological wellbeing (p = 0.01).

7.2.2.1 Interpretation

The research findings exhibit a hierarchical reordering of resource importance, where technological support has become the primary wellbeing determinant in remote work environments. Dependable and accessible technology shields both psychological and physical strain by decreasing workflow interferences, mitigating exhaustion, and strengthening perceived control (Li et al., 2025; Duan et al., 2023).

In contrast, the non-significant psychological impacts of social organisational support were unexpected, which contradicts traditional JD-R assumptions and prior research evidence that colleagues and managerial support promote mental health (Hill et al., 2022; Charalampous et al., 2019). These outcomes propose that in remote work settings, the authenticity and quality of support, not its formal presence, shape its psychological efficacy (Murtola & Vallelly, 2023). Therefore, virtual support may not produce emotional reassurance without interpersonal depth.

7.2.2.2 Theoretical implication

The research findings expand the JD-R framework by showing that technology infrastructure is now utilised as a primary job resource. In the post-pandemic office environments, the capacity to perform successfully through digital systems comprises an important condition for wellbeing. This indicates a digital-resource adaptation of the JD-R model which is an evolution from human-to-digital absorbing mechanisms (Orlandi et al., 2024; McPhail et al., 2023).

Therefore, Hypothesis 2 is supported with the qualification that technology resources represent the strongest and most consistent predictors of wellbeing, while social and organisational support remain contextually appropriate but less significant for psychological results.

7.2.3 Hypothesis 3: Job resources, work intensification and wellbeing

H3: Job resources are more likely to mediate the relationship between work intensification and employee wellbeing.

The third hypothesis was supported, with job resources partially mediating the relationship between work intensification and wellbeing. Regression analysis demonstrated that when job resources were added, the negative relationship between work intensification and wellbeing decreased, validating mediation consistent with the JD-R theory (Bakker et al., 2023).

Among the mediators, technology support illustrated the strongest impact. This highlights that digital structures not only enable task performance but also directly shield stress responses (Li et al., 2025). Social and organisational support gives fewer mediation effects, underpinning the view that traditional supports are less capable of balancing psychological strain in technologically mediated contexts. The outcome confirms a digital mediation pathway, where technology resources weakened the adverse effects of intensification by improving efficiency, control, and predictability as the main factors in wellbeing in remote work settings.

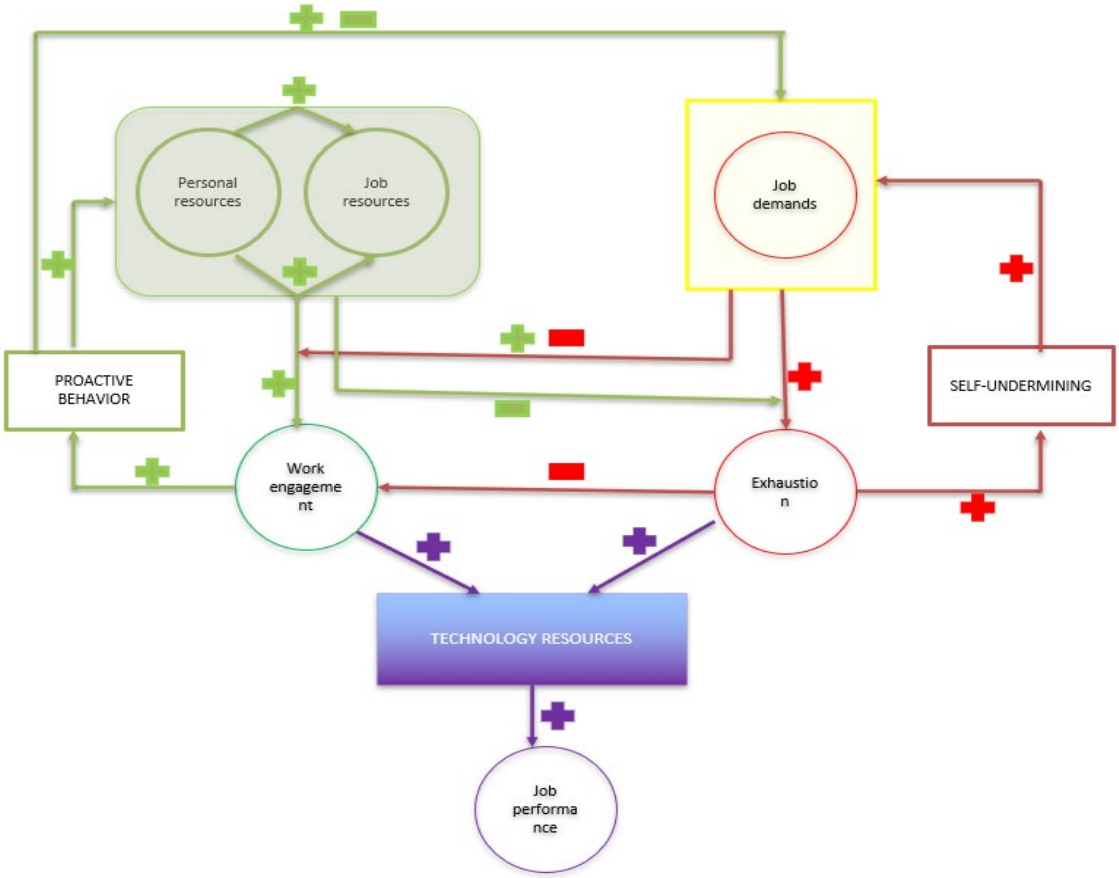

Figure 3: The revised job demands–resources model integrating a digital mediation pathway (blue).

The above figure 3 illustrates the digital mediation pathway; technology resources have been added below work engagement and exhaustion. It represents the digital tools/devices, platforms, and systems such as workflow automation, digitalisation and communication technologies that support remote workers. The purple arrows between exhaustion and technology resources are a mediating role, illustrating that technology lessens the negative impact of job demands. This can be through access to efficient, user-friendly and reliable technology that reduces cognitive load and emotional strain. It improves efficiency, control, and predictability, mitigating the health impairment pathway.

The purple arrows between work engagement and technology resources illustrate that technology improves engagement by enabling collaboration, autonomy and feedback in remote settings. The digital pathway demonstrates that technological

resources act as a buffering mechanism between wellbeing and intensification. The pathway suggests that information and communication technologies can both create and absorb strain, depending on how they are managed.

7.3 Contributions of the study

7.3.1 Theoretical contribution

a) Extension of the JD-R Model: the research extends to JD-R theory (Bakker & Demerouti, 2024) by empirically confirming a digital adaptation layer, where technology acts as a job resource that concurrently validates performance and absorbs strain.
b) Contextualisation of resource effectiveness: the findings demonstrate that contextual suitability and authenticity affect resource influence. Social and organisational supports lose efficacy when delivered objectively through digital platforms (Murtola & Vallelly, 2023), whereas technology, when it is working and reliable, directly boosts wellbeing (McPhail et al., 2023).
c) Shift in resource hierarchy: The research identifies a hierarchical shift: technology > organisational > social support in speculating wellbeing results. This order diverges from pre-pandemic models, illustrating how digital reliance reconsiders resource salience (Orlandi et al., 2024).
d) Role of authentic connection: the weak relationship between psychological and social wellbeing shows a growing authenticity gap in remote work settings relationships, an occurrence that requires integration into future JD-R refinements (Adisa et al., 2023).

7.3.2 Practical contribution

a) Digital infrastructure as a core wellbeing strategy: Organisations must prioritise technology strengthening ensuring access, reliability, and competence of employees as a main wellbeing intervention. Digital literacy programmes and IT support should be standardised (Duan et al., 2023; Wang et al., 2021).

b) Organisational strategy and Human Resources policy: The research underscores the importance of managers and policymakers wanting to invest in robust technology infrastructure as a main well-being intervention. Digital tools must be reliable, information technology support and employee training can extremely reduce cognitive load and improve engagement, productivity, and psychological stability (Orlandi et al., 2024; Farley et al., 2023).
c) Authentic organisational support: Management/supervisors should refocus on interpersonal authenticity, not routine assistance. Personal check-ins, digital empathy, trainings, participatory communication can improve perceived support and mitigate virtual disinterest (Murtola & Vallelly, 2023).
d) Reimagining social support: virtual social interaction strategies such as mentoring by colleagues, informal chat forums, and hybrid engagement should be reinforced to rebuild belonging and reduce psychological strain (Urrila et al., 2025).
e) Policy and occupational health: Policymakers should incorporate digital ergonomics and technological wellbeing into occupational health standards, recognising technology as a health determinant in remote work environments (Saridakis et al., 2023; Adisa et al., 2023).

7.4 Limitations

The research acknowledges several limitations.

A limitation concerns the reliability of the work intensification construct. The initial Cronbach's alpha was 0.620, improving to 0.63 after removing one item (Question 14). While this improved internal consistency, reliability remained marginal, indicating a potential measurement error and decreased precision in approximating correlations (Keller & Meier, 2024; Pindek et al., 2023). The limitations may reduce the noticed associations and validate the qualification of the instrument to capture multi-dimensional aspects of work intensification (Mauno et al., 2022; Kubicek et al., 2014).

Additionally, the cross-sectional design limits causal inference, the mediation influence was noticed statistically but not longitudinally. Self-reported data may

introduce subjective bias, especially concerning support and well-being measures. The research sample was also regionally concentrated in the African continent, limiting generalisability to a global context. Social and organisational support may have been operationalised in ways that reduced emotional authenticity, possibly contributing to their non-significance in psychological wellbeing results. The use of qualitative research could have better captured the perceptions of “authenticity” Giving some depth to the topic. Lastly, the research’s scope excluded certain job resource types such as feedback and opportunities for development, which may have interacted significantly with wellbeing in remote work and should be integrated in future research.

7.5 Future research

Based on the limitations discussed above, future research should incorporate longitudinal or multi-level designs to find causal mediation pathways. Secondly, there must be a reassessment and revalidation of the work intensification scale to ensure higher credibility and construct precision. Another option is that research must explore qualitative narratives around authenticity in virtual support to explain the weakening psychological impact. A fifth recommendation for future studies is to examine cross-cultural disparity in the digital hierarchy of job resources. A sixth recommendation for future studies is to test the revised JD-R digital framework in hybrid or AI-mediated work environments. Lastly, it is recommended that in future studies the country context should be integrated as a moderator in future JD-R model applications.

7.6 Concluding statement

This research concludes that technology has redefined the resource–wellbeing dynamic in the present work environment. It was noted that work intensification continues to negatively affect wellbeing, its impact is moderated not primarily by usual social or organisational supports but by technological competence and accessibility. The study advances the JD-R model by recognising that technology as

the new primary job resource, bridging wellbeing and performance in digital environments.

Basically, well-being in post-pandemic remote work environments depends on how organisations humanise technology and digitise empathy by creating structures that maintain both efficiency and emotional connection.

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APPENDICES

Appendix 1: Measurement Scales, sources and approval.

1. Work Intensification: Intensified Job Demands Scale (IDS) (Kubicek et al., 2014; Kubicek & Tement, 2016).

Approval of Instrument:

Kubicek, Bettina (bettina.kubicek@uni-graz.at) <bettina.kubicek@uni-graz.at> Tue 8 Jul, 08:40 (6 days ago)

to me

Dear [redacted]

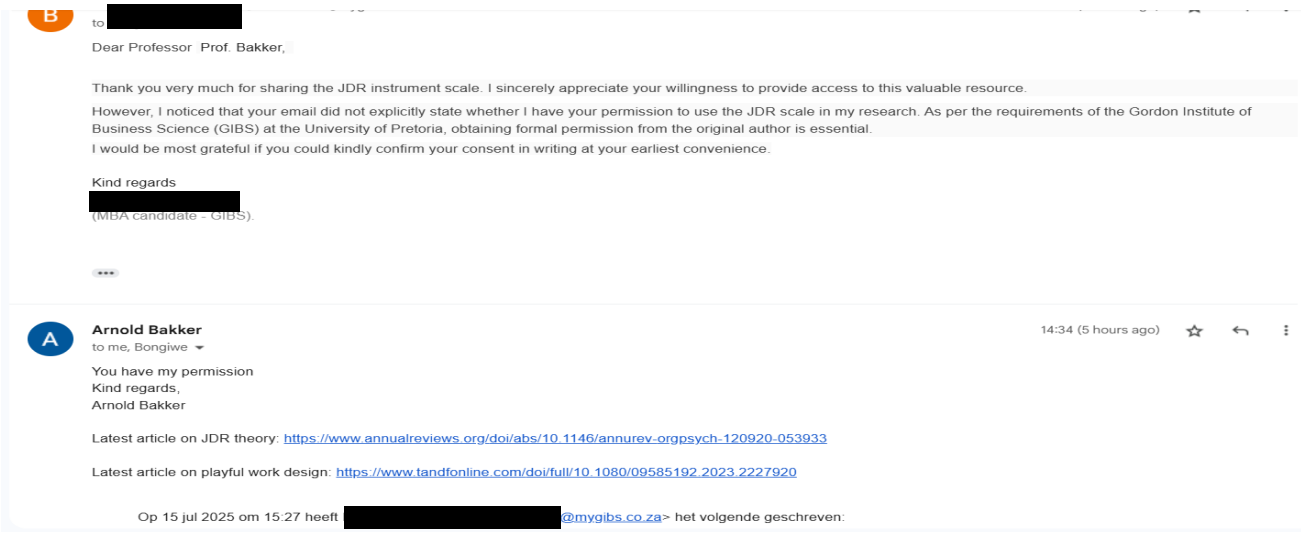
Thank you for your message and your interest in the IDS. I hereby grant you the permission to use the scale in your research.

Best wishes

Bettina Kubicek

2. Job Resources: JD-R Model Resources Scales (Demerouti et al., 2001; Bakker et al., 2004).

Approval of Instrument:



to [redacted]

Dear Professor Prof. Bakker,

Thank you very much for sharing the JDR instrument scale. I sincerely appreciate your willingness to provide access to this valuable resource.

However, I noticed that your email did not explicitly state whether I have your permission to use the JDR scale in my research. As per the requirements of the Gordon Institute of Business Science (GIBS) at the University of Pretoria, obtaining formal permission from the original author is essential.

I would be most grateful if you could kindly confirm your consent in writing at your earliest convenience.

Kind regards

[redacted]

(MBA candidate - GIBS).

Arnold Bakker 14:34 (5 hours ago)

to me, Bongiwe

You have my permission

Kind regards,

Arnold Bakker

Latest article on JDR theory: https://www.annualreviews.org/doi/abs/10.1146/annurev-orgpsych-120920-053933

Latest article on playful work design: https://www.tandfonline.com/doi/full/10.1080/09585192.2023.2227920

Op 15 jul 2025 om 15:27 heeft [redacted]@mygibs.co.za> het volgende geschreven:

3. Employee Wellbeing: Employee Well-Being Scale (EWB) (Zheng et al., 2015)

Approval of Instrument:

Dear Prof. Zheng,

I hope this message finds you well. I am currently pursuing my MBA at Gordon Institute of Business Science (GIBS) part of University of Pretoria (South Africa); I am conducting research that aligns closely with your work on the Employee well-being.

I am writing to kindly request your permission to use the Employee Well-Being (EWB) scale in my research. Your scales are highly regarded and would provide a robust foundation for my study work intensification and employee wellbeing.

I would be grateful if you could grant me access to these resources and any guidelines for their use.

Thank you very much for considering my request. I look forward to your positive response.

Regards,

[redacted]

Z **Zheng,Xiaoming** 3 Jul 2025, 12:29 (11 days ago)

to me, [redacted]

OK

Xiaoming Zheng, Ph.D.
Professor, Leadership and Organization Management Department
Director, China Business Case Center
School of Economics and Management, *Tsinghua University*
Beijing 100084, China
Tel: +86-10-62789789 | Fax: +86-10-62772021
Email: zhengxm@sem.tsinghua.edu.cn
http://www.sem.tsinghua.edu.cn/zh/zhengxm

Appendix 2: Consent form

(Section 1 of 6) as per online questionnaire

Consent to Participate in Research

Dear Participant

I am currently a student at the University of Pretoria's Gordon Institute of Business Science and completing my research in partial fulfilment of an MBA.

I am conducting research on the impact of work intensification on remote worker wellbeing post-COVID-19. The research will help us understand the relationship between work intensification, available resources and wellbeing in remote work environments.

The survey should take not more than 10 minutes of your time. Your participation is voluntary, and you may withdraw at any time without penalty. Your responses are anonymous, and only aggregated data will be reported in the final research findings. No personally identifiable information will be collected or shared.

By completing the survey, you indicate that you voluntarily consent to participate in this research.

If you have any concerns or questions, please contact my supervisor or me:

Researcher: Bongiwe Hlatshwayo (24082636@mygibs.co.za)

[redacted]

Supervisor: [redacted]a)

Appendix 3: Questionnaire

Structured Survey Questionnaire: Measuring Work Intensification, Job Resources, and Employee Wellbeing

(Section 2 of 6) as per online questionnaire

1. Are you currently working remotely (part-time or full-time) for the majority of your work week? *(Yes/No)*

   *If answer is **No**, form is sent straight to Submit: with a thank you message for participation*

   'Thank you for taking your time to complete the questionnaire. Your input is truly appreciated and valuable to the research'.

   *If **Yes**, participant continues with the survey.*

   Section 3 of 6: **Demographics** ***(All multiple choice)***

2. Are you currently working full-time remotely? *Yes/No*
3. Are you currently working part-time remotely? *Yes/No*
4. How long have you been working remotely post - COVID-19 pandemic? *(e.g., Less than 1 year, 1-2 years, 2-3 years, 3-4 years, More than 4 years)*
5. What is your age group? *(e.g., 18-29 years, 30-39 years, 40-49 years, 50-59 years, 60+ years)*
6. What is your gender? *(Male/Female/Prefer not to say)*
7. Please indicate your ethnic group. *African, Coloured, Indian/Asian, White, Other*
8. Please indicate your highest qualification. *Primary/preparatory school, Senior/High School, Matric/National certificate, Diploma/advanced certificate, Bachelor's degree/Advanced Diploma, Honours degree/Post graduate diploma, Master's Degree, Doctorate degree, other.*
9. Please choose the best level that describe your position in the organisation of employment. Executive, Senior Manager, Middle manager/Supervisory position, Staff.

10. What industry do you primarily work in? *Information Technology, Telecommunications, Finance & Insurance Institutions, Education, Healthcare, Professional services (Consultant, Legal, HR, Auditing and Marketing), Media & Publishing, State Owned Entities (SOE), Other.*

11. Your geographical location. *eSwatini, South Africa, SADC countries excluding eSwatini & South Africa, Other African countries, other countries excluding AFRICA*

Section 4 of 6: **Work Intensification (IJD)**

Indicate the degree to which you agree with the following statement, where 1 = strongly disagree and 5 = Strongly agree

(All items use a 5-point Likert scale: 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree)

Please indicate how much you agree or disagree with the following statements about your work experience since working remotely post-COVID-19.

12. It is increasingly rare to have enough time for work tasks.
13. It is increasingly harder to take time for breaks.
14. The time between the more intense work phases has decreased.
15. One has more often to do two or three things at once (such as eating lunch, writing emails, and talking on the phone).
16. One increasingly has to acquire new knowledge to handle job tasks.

Section 5 of 6: Job Resources (JD-R Model Scales)

Indicate the degree to which you agree with the following statement, where 1 = strongly disagree and 5 = Strongly agree

(All items use a 5-point Likert scale: 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree)

Please indicate how much you agree or disagree with the following statements regarding your access to job resources while working remotely.

17. I can rely on my colleagues when I encounter difficulties at work.

18. Can you count on your colleagues to support you, if difficulties arise in your work?
19. My supervisor shows consideration for my problems and desires regarding my work.
20. I feel valued by my organisation.
21. I have flexibility in the execution of my job.
22. I have access to the necessary technology to perform my job remotely.
23. Technical problems are resolved quickly by my organisation.

Section 6 of 6: Employee Wellbeing (EWB Scale)

Indicate the degree to which you agree with the following statement, where 1 = strongly disagree and 5 = Strongly agree

(All items use a 5-point Likert scale: 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree)

Please indicate how much you agree or disagree with the following statements about your wellbeing at work.

24. I have enough energy to complete my work tasks.
25. I feel physically healthy at work.
26. I am satisfied with my work responsibilities
27. I feel basically satisfied with my work achievements in my current job
28. I am good at making flexible timetables for my work
29. I handle my daily affairs well
30. I feel satisfied with my life

Upon completion: Participant submit form.

A thank you message: '*Thank you for taking your time to complete the questionnaire. Your input is truly appreciated and valuable to the research'.*

Hyperlink to questionnaire:

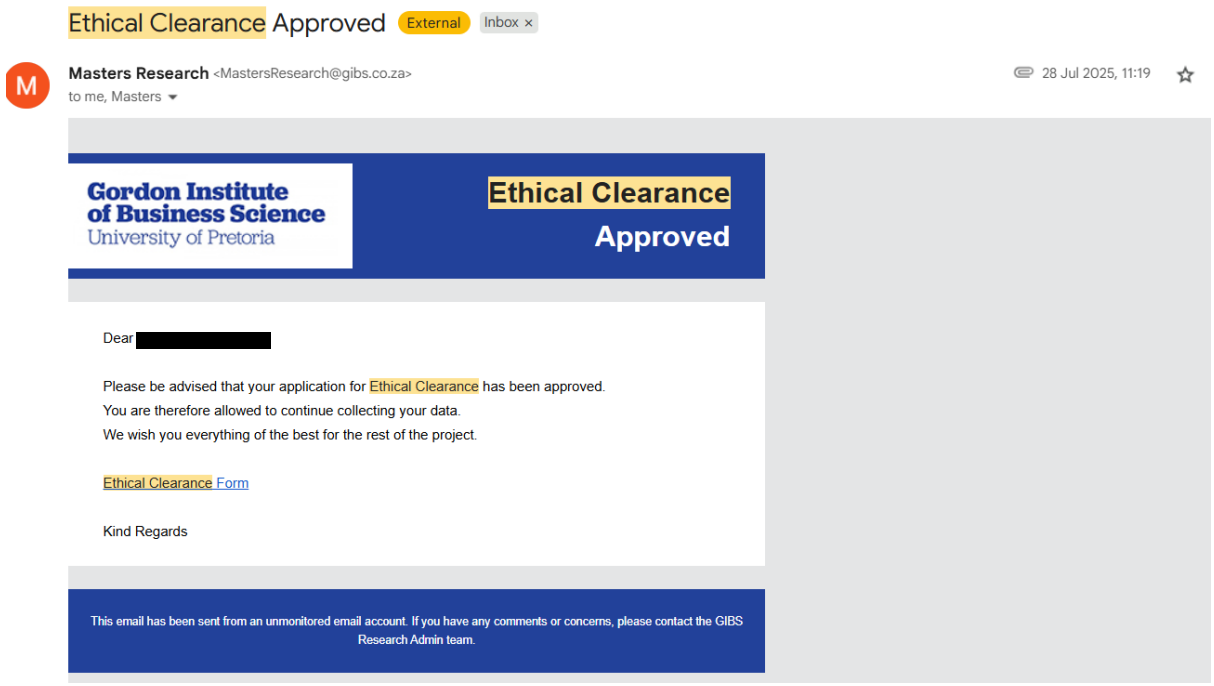
Follow this link to the Survey:

Take Survey

Or copy and paste the URL below into your Internet browser:

https://docs.google.com/forms/d/e/1FAIpQLScFxbTfysa4dBOXco3SaZ1PSVkGd6IF7uQYaDDQU4DGdbUggw/viewform?usp=header

Appendix 4: Ethical Clearance Approval



Ethical Clearance Approved External Inbox ×

Masters Research <MastersResearch@gibs.co.za> 28 Jul 2025, 11:19

to me, Masters

Gordon Institute of Business Science
University of Pretoria

Ethical Clearance Approved

Dear [redacted]

Please be advised that your application for Ethical Clearance has been approved.
You are therefore allowed to continue collecting your data.
We wish you everything of the best for the rest of the project.

Ethical Clearance Form

Kind Regards

This email has been sent from an unmonitored email account. If you have any comments or concerns, please contact the GIBS Research Admin team.

Appendix 5: Code Book

Seq #	CODE BOOK	
1	NO	1
	YES	2
2	NO	1
	YES	2
3	NO	1
	YES	2
4	1-2 years	1
	2-3 years	2
	3-4 years	3
	Less than 1 year	4
	More than 4 years	5
5	18-29 years	1
	30-39 years	2
	40-49 years	3
	50-59 years	4
	60+ years	5
6	Male	1
	Female	2
	Prefer not to say	3
7	African	1
	Coloured	2
	Indian/Asian	3
	White	5
	Other	4
8	Bachelor's degree/Advanced Diploma	1
	Diploma/advanced certificate	2
	Doctorate degree	3
	Honours degree/Post graduate diploma	4
	Master's Degree, Doctorate degree	5
	Matric/National certificate/Senior/High School/Primary/preparatory school/Other	6
9	Executive	1
	Senior Manager	3
	Middle manager/Supervisory position	2
	Staff	4
10	Education	1
	Finance & Insurance Institutions	2
	Healthcare	3
	Information Technology	4
	Media & Publishing	5

	Other	6
	Professional services (Consultant, Legal, HR, Auditing and Marketing)	7
	State Owned Entities (SOE)	8
	Telecommunications	9
11	Other African countries	1
	other countries excluding AFRICA	2
	SADC countries excluding eSwatini & South Africa/ Other African countries	3
	South Africa	4
	eSwatini	5
	Agree	1
	Disagree	2
	Neutral	3
	Strongly Agree	4
	Strongly Disagree	5