**The overburdened supply chain leader: Servant leadership and the
challenges of a demanding workplace.**

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Abstract

Over the past four years, supply chain leaders have faced volatile, uncertain, complex, and ambiguous business conditions. COVID-19, Russia's invasion of Ukraine, and fragile economics have resulted in major supply and demand imbalances around the world that impact supply and prices.

Each of these events has required supply chain leaders to make decisions on how to navigate these various issues, which has intensified their demands on their jobs. Not to mention that because of COVID-19, there has been a rise in awareness of employee well-being, and companies are requiring their leaders to become more empathetic with their team. These various demands have resulted in supply chain leaders resigning, citing that they are exhausted.

With an understanding of the above circumstances, this study was centred around the well-being of supply chain leaders. In particular, the study focused on how these dynamic business conditions are affecting the different job demands, namely, work pressure, cognitive demands, emotional demands, role conflict, and hassles, and how this relates to exhaustion. Furthermore, the study required to determine what effect does the request by organisations for leaders to make use of empathetic leadership styles such as servant leadership have on this situation.

Based on existing theory, a theoretical model was developed to look at these relationships from the 156 responses in the final sample. The study's methodology and design were a quantitative study that is positivist, deductive, and cross-sectional. Regression tests were performed to accept or reject the two main hypotheses and their respective five sub-hypotheses.

The results of the test provided insights on the various job demands, with two being significant and two being higher than the rest but not significant. In addition, the findings on servant leadership had insignificant interacting effects, highlighting the potential challenge with the self-reported measure used.

Keywords

Well-being; exhaustion; job demands; servant leadership, supply chain leaders.

Plagiarism 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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Jaycee Kent

01 November 2023

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1. Chapter 1: Research problem

1.1. Introduction

This chapter investigates the effects of the prevailing unpredictable business conditions on organisations and leaders and discusses the relationship between these conditions and burnout. Additionally, it explores the further demands placed on leaders due to the expectation of exhibiting empathy in such circumstances, which only compounds the already substantial pressures they face. Furthermore, the following subsections discuss the purpose of the study, highlighting the importance of the research within the academia and its implications for the business environment, and the scope of the study.

1.2. Background to the research problem

This study aims to investigate the escalating demands placed on leaders to deal with complex business environments and the increasing prevalence of burnout among leaders affecting their well-being. The selection of this research problem is based on direct observations of leaders experiencing burnout, exemplified by the resignation of Jacinda Ardern, the Prime Minister of New Zealand, in January 2023 (Turnbull, 2023).

1.2.1. The demanding business landscape of today

In recent years, organisations have had to deal with exceedingly dynamic business environments influenced by the COVID-19 pandemic, the invasion of Ukraine by Russia, and the labour shortage caused by the phenomena known as the Great Resignation (Marr, 2022). Amidst the pandemic and its aftermath, business leaders have been tasked with the responsibility of simultaneously considering the needs of their team and the success of the organisation, all while navigating social, environmental, geopolitical, and economic issues (Microsoft, 2022).

This dynamic business environment has caused significant challenges for global supply chains where individuals within this profession have had to contend with severe supply disruptions, soaring inflationary costs, pushes by suppliers and service providers, erratic customer demand, and low tolerance from customers for delays (Rowsell, 2022; Stalk & Mercier, 2022; Yehiav, 2021). According to a survey done by CNBC, it is evident that supply chain professionals are still facing significant supply chain challenges with over half of respondents expecting these challenges to continue in 2024 (LaRocco, 2022; Monaghan, 2023).

In addition to the challenges mentioned, companies have seen the highest resignations of supply chain professionals from 2020 to 2021 compared to prior years with 63% of companies struggling to find talent in the last twelve months (Jones, 2022). This shortage of labour has resulted in individuals having to work longer hours and take on additional responsibilities from these vacant positions (Jones, 2022).

1.2.2. Burnout affecting well-being

Based on a comprehensive global survey consisting of over 20,000 participants conducted by Microsoft in 2022, which encompassed a diverse range of sectors, countries, and organisations, it was found that just under half of the employees and over half of the surveyed managers reported instances of burnout (Microsoft, 2022). Another survey, conducted by Deloitte and Workplace Intelligence on employees and executives, found that one in three are feeling exhausted, stressed, and overwhelmed (Hatfield et al., 2022).

With substantial evidence of burnout among employees there has been a focus by organisations to improve the well-being of their employees, with less attention given to leaders' well-being (Hatfield et al., 2022). This is of concern because 70% of executives reportedly consider leaving their positions because of the increased demands placed on them as leaders and the lack of support they receive (Dennison, 2022; Hatfield et al., 2022).

The past four years have witnessed a notable increase in the pressure faced by supply chain professionals, primarily attributed to the volatile nature of business conditions they have faced. Consequently, it is unsurprising that burnout has emerged as a significant contributing factor leading to the resignation of these professionals (Jones, 2022; Sirtori-Cortina, 2022).

1.2.3. The request for empathetic leadership in challenging times

The dynamic working environmental factors, due to the various business challenges have resulted in employees burning out, which has called for many organisation leaders to become empathetic in their leadership approach towards their employees (Hatfield et al., 2022; Jones, 2022; Microsoft, 2022). The request of many organisations for their leaders to be more empathetic in understanding the challenges that the employees face will assist in reducing employee burnout and exhaustion ensuring improved performance and retention of talent (Jones, 2022).

With empirical evidence scholars and organisations are advocating for leaders to be empathetic in their leadership style due to the benefits it has for its employees and the organisations themselves (Eva et al., 2019; A. Lee et al., 2020; Zheng et al., 2023). However, there is limited information that depicts an understanding of the various factors that empathetic leadership styles, including servant leadership, have on a leader's well-being and whether it potentially contributes to burnout under different circumstances (Zheng et al., 2023).

The adoption of empathetic leadership styles, while simultaneously managing increasing demands with potentially limited resources, can be considered as another aspect that is demanded of leaders. This is because these more empathetic leadership styles might have additional cognitive and emotional demands compared to other leadership styles that a leader may employ (Inceoglu et al., 2018; Zheng et al., 2023). Jacinda Ardern is an example of this, as she has been referred to by others as an empathetic leader, who faced an array of challenges that proved overwhelming, ultimately leading to her decision to resign citing exhaustion (Turnbull, 2023).

As leaders contend with the complexity of business they must deal with the various nuances of globalisation, as well as localisation due to various economic, geopolitical, social, and environmental reasons while simultaneously being empathetic, requiring them to dig deeper than they have before (Oldfield, 2021). Because of these dynamic circumstances, leaders will have to deal with more and more problems, like the COVID-19 pandemic, the Russo-Ukrainian war, the great resignation, social movements such as Black Lives Matter, and global warming. In this situation, the fact that these various events are happening while burnout is becoming more common among leaders is an important research question that needs to be investigated.

1.3. Purpose statement

The purpose of this research study is to understand to what degree the impact of empathetic leadership styles, particularly servant leadership, contributes to the potential occurrence of burnout among supply chain leaders, mainly within the context of high job demands. By studying the relationship between servant leadership, job demands, and exhaustion, this research aims to shed light on the distinct effects of leading empathically as a leadership approach on a leader's well-being in different business contexts.

1.4. Significance of the study

1.4.1. Relevance for academia

Despite the considerable amount of research that has been completed on the influence of various leadership styles on the well-being of employees, there is still a limited amount of research that has been conducted regarding the impact of these styles on the well-being of the leaders themselves (Kaluza et al., 2020). Recent findings have indicated that there is a relationship between a leader's consistently used leadership style and their well-being, highlighting both positive and negative associations (Kaluza et al., 2020).

It has been noted by Kaluza et al. (2020),that there is a need to delve into the underlying mechanisms of the relationship between different leadership styles and a leader's well-being. This is further supported by Zheng et al. (2023), who suggested that there is still a gap in this understanding of the potential negative aspects, such as burnout and exhaustion, when leading with empathetic leadership styles such as servant leadership which require additional demands compared to other leadership styles.

By utilising the Job Demands-Resource (JD-R) model developed by Demerouti et al (2001), this study aims to examine whether proposed empathetic leadership styles have a higher or lower likelihood of leaders experiencing exhaustion compared to other leadership styles under highly demanding circumstances.

1.4.2. Relevance for business

The relevance of this study is underscored by the crucial role of leaders' organisational success. Leaders are responsible for providing vision, making strategic decisions, and building effective teams (Gavin, 2019). In addition, they are responsible for shaping the organisational culture, navigating change, and driving effective communication (B. J. Avolio et al., 2009).

It is essential to consider the well-being of leaders, as it directly influences their ability to lead effectively (Harms et al., 2017, p. 180; Kaluza et al., 2020, p. 38). Negative aspects such as exhaustion, lead to burnout that can result in a leader being disengaged, and having decreased performance, and exhaustion, which in turn has a detrimental impact on employee morale, organisational performance, and productivity (Harms et al., 2017; Schaufeli & Bakker, 2004).

Moreover, the significance of this topic is further highlighted by the current worldwide circumstances characterised by increased complexity, uncertainty, and expectations imposed on individuals in leadership positions (Microsoft, 2022). Failing to understand the underlying conditions contributing to leaders' burnout in today's complex business landscape can impede organisational success. This study will enable organisations to comprehend the impact of new job demands on their leaders and empower them to develop resources that can buffer leaders from burnout.

Additionally, this approach will likely enhance a leader's awareness of the immediate effects of their job demands in conjunction with their leadership approach, potentially intensifying burnout. This will allow them to make informed decisions regarding their well-being and better maintain organisational effectiveness.

1.4.3. Contribution of the study

This study aims to contribute to the field of leadership by examining the relationship between leadership styles, specifically servant leadership, and a leader's related exhaustion in the context of job demands. The findings will deepen our understanding of the factors that cause a leader to burnout and thus provide insights into the effectiveness of different leadership approaches in mitigating burnout risks.

The practical implications of this research extend to leadership development programs and organisational practices, enabling the design of strategies that promote leaders' well-being and foster sustainable leadership in demanding work environments.

1.5. Scope of study

A quantitative descriptive study was carried out to understand how servant leadership as a preferred leadership style moderators the relationship between a leader's job demands and exhaustion. This study focuses on leaders within various industries who are operating in dynamic and unpredictable business environments such as those posed by the COVID-19 pandemic, geopolitical conflicts, economic fluctuations, and other significant disruptions. Thus, the research was conducted on leaders who operate within the supply chain profession.

The study will focus on leaders in the supply chain profession in South Africa and will not target specific provinces or cities. The study will specifically examine the following factors that influence a leader potentially burning out: the degree of self-reported servant leadership style, job demands, and exhaustion. Data will be collected via an

adapted questionnaire to gather insights into the degree of self-reported servant leadership style, perceived job demands, and levels of exhaustion. Whilst the findings are likely to provide us with valuable information about the relationship between servant leadership, job demands, and exhaustion, it is important to be aware of the study's plausible limitations such as the possibility of sample bias. This is because the researcher is part of the supply chain profession and the fact that it was only leaders within the profession that were sampled.

Data will be collected during the second half of 2023 during a time when there are current dynamic business challenges that leaders face such as the Russo-Ukrainian war, economic pressures, and social aspects (Marr, 2022). As such there are limitations within a specific time frame. The scope of the research encompasses various regions, industries, positions, and management levels within South Africa to ensure a comprehensive understanding of the phenomenon under investigation.

1.6. Conclusion

This chapter covers various aspects of the complex relationship between empathetic leadership styles, complex business environments, and the prevalence of burnout among leaders who encounter significant job demands. By conducting a thorough investigation of the challenging and dynamic modern business environment, the occurrence of burnout, and the dynamic that leaders must exhibit empathy; a strong foundation has been laid for this research.

It can be concluded that the findings of this study have substantial implications for both the academic and the business community. This study makes an academic contribution to the existing knowledge on the relationship between leadership styles and a leader's well-being. It highlights the importance of having a comprehensive understanding of the potential adverse outcomes that may arise from employing empathetic approaches in leadership.

From a practical standpoint, this research has the potential to provide benefits for businesses as it deepens their comprehension of the causes of leader exhaustion. The study is of importance and has relevance due to the request by organisations today of their leaders to deal with global business challenges while being empathetic in their approach.

2. Chapter 2: Literature review

2.1. Introduction

This chapter presents a literature review of the primary constructs that serve as the basis for this research. The key constructs underlying this study include job demands, exhaustion, and servant leadership. This literature review aims to establish the theoretical model that underpins this study. It seeks to provide a conceptual understanding of the interrelationships between the constructs under investigation and the observed problem that has been identified. The chapter will start by providing the context of well-being for framing purposes and then elaborate on the key constructs of job demands, exhaustion, and servant leadership. Furthermore, this literature review will help to shed light on how these interrelationships between the named constructs relate to leaders within the supply chain profession.

As seen in Figure 1, shows the flow of the literature starting from well-being as the foundation then to exhaustion, job demands and job resource, and leadership and servant leadership.
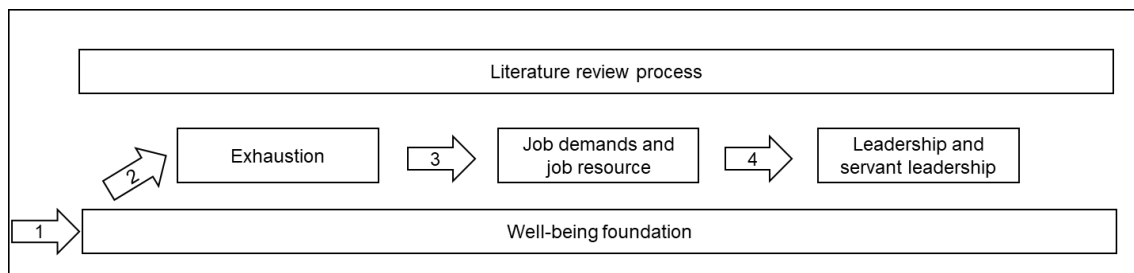
Figure 1: Literature review flow

2.2. Well-being

2.2.1. Introduction to well-being

For the context of this study, it is important to understand the concept of well-being, identify the specific dimensions of well-being that are relevant to this research objective, and understand how the varying degrees of well-being impact an individual, specifically within the context of the workplace. Furthermore, it is essential to differentiate between the well-being of employees and that of leaders and what this difference means for organisations and society.

Well-being can fall under either physical or psychological concepts. The concept of physical well-being can be described broadly as the overall function and health of

the body, while psychological well-being pertains to the personal experience and functioning of the mind (Grant et al., 2007; Inceoglu et al., 2018). For the context of this research, the focus of this section will be on psychological well-being. Within the context of the business, well-being is related to how employees assess their experience within the workplace which consequently encompasses both mental and emotional aspects (Xanthopoulou et al., 2012).

2.2.2. Dimensions of well-being

Well-being is a complex construct that is viewed from various aspects. However, for this study, well-being can be broadly described as the general quality of a person's subjective experience and performance (Deci & Ryan, 2008; Stephan et al., 2023). Psychological well-being can be broadly viewed as the effect of feelings and functioning which can be either experienced negatively or positively (Huppert, 2009). Positive well-being is associated with pleasure aspects of emotions such as happiness, vigour, contentment, and excitement (Karademas, 2007; Stephan et al., 2023). In contrast, negative well-being is associated with emotions of displeasure such as stress, nervousness, anger, depression, and unhappiness (Karademas, 2007; Stephan et al., 2023).

This positive and negative state of well-being is experienced within the workplace each resulting in distinct related effects. When employees experience positive well-being, it is often linked to aspects of the job where they are satisfied, engaged, and performing well (Inceoglu et al., 2018). Whereas negative well-being is where the employee is lacking, often leading to burnout or exhaustion, among other consequences (Inceoglu et al., 2018).

2.2.3. The impact of well-being on employees and the organisation

The well-being of employees is an important aspect for organisations to consider due to the negative outcomes associated with poor well-being that will ultimately affect an organisation's performance. An organisation's performance can be affected negatively by employees experiencing poor well-being because there is a reduction in performance. This reduction in performance presents itself in various forms such as reduced productivity, attendance, and engagement within an organisation (Inceoglu et al., 2018; Van Dierendonck et al., 2004).

In addition to reduced performance, poor well-being is also linked to high employee turnover due to the negative aspects of poor well-being such as burnout and

exhaustion (Inceoglu et al., 2018; Van Dierendonck et al., 2004). Thus, if organisations can address areas of poor well-being they will see an increase in employee performance, retention, job satisfaction, and attendance resulting in improved organisation performance and ultimately competitive advantage (Keeman et al., 2017; Peccei & Van De Voorde, 2019; Tuzovic & Kabadayi, 2021).

2.2.4. The role of leaders in employee well-being

Over the past few years, there has been extensive research by academics and organisations to improve the well-being of employees because of the aforementioned benefits to the organisation, employees, and society. It is also well-documented that leaders have a significant ability to influence an employee's well-being (Kaluza et al., 2020; Montano et al., 2017). As such, there has been extensive research completed to understand the relationship between how a leader's leadership approach affects an employee's well-being (Arnold, 2017). However, research is unclear on how the different approaches to leadership that a leader uses may influence their well-being (Kaluza et al., 2020).

The significance of employee well-being is undoubtedly an important consideration; however, it is equally, if not more important, for organisations to consider the well-being of the various leaders within their organisation. Similar to when an employee's well-being diminishes so can a leader's, which leads to decreased performance and a series of adverse consequences. However, because of the influential role that a leader occupies when their well-being diminishes, there are additional consequences compared to that of employees. This additional consequence is that their reduced performance will directly affect their employees' well-being (Inceoglu et al., 2018).

Our understanding of well-being shows that it can have profound implications if not considered for individuals, organisations, and society. As such, the focus of our research is on a specific dimension that affects well-being negatively, which is burnout. The comprehensive understanding of well-being that has been established will serve as a foundation for the in-depth analysis of burnout and job demands in the upcoming sections.

2.3. Burnout, exhaustion, and disengagement

2.3.1. Introduction to burnout

Burnout can be defined as a condition characterised by a state of mental exhaustion (Schaufeli & Bakker, 2004, p. 294). Within the work context, burnout can be defined

as when employees are in a state of exhaustion that causes them to feel that they doubt their value and the importance of their job (Guthier et al., 2020; Maslach et al., 1996). In alternative variations, burnout can be viewed as the response of employees to prolonged job stress, which has continued to grow over the last four decades due to its impact on employees and organisations and directly their performance (Halbesleben & Demerouti, 2005). This state of mental exhaustion can result in negative outcomes for employees such as getting sick, poor performance, non-attendance, resignation, and disengagement (Lesener et al., 2019a; Schaufeli, 2017; Schaufeli & Bakker, 2004)

Burnout has been well documented according to the Maslach Burnout Inventory (MBI) and can be termed as a mental condition that is characterised by different dimensions namely; emotional exhaustion, depersonalisation, and a sense of underperformance (Maslach et al., 2001). Emotional exhaustion occurs when an individual has feelings of being overwhelmed, drained, and depleted of energy. On the other hand, depersonalisation can be observed when an individual generally emotionally distancing or detaching oneself from their job (Demerouti et al., 2001; Schaufeli & Bakker, 2004). Lastly, the sense of underperformance by the individual can be a result of the effects of depersonalisation and emotional exhaustion (Maslach et al., 2001).

However, it has been noted that there are issues relating to MBI where the sense of underperformance is less consistent in its relationship with burnout. (Halbesleben & Demerouti, 2005). This performance-related dimension of burnout has been noted as being less consistent within the burnout construct because it has been attributed to the personality of the individual (Cordes & Dougherty, 1993; Halbesleben & Demerouti, 2005)

Therefore, there is an alternative view to the MBI that has been documented as reliable and valid which is the Oldenburg Burnout Inventory (OLBI). According to the OLBI burnout occurs when employees are exposed to a workplace that is stressful because it is demanding and lacks support which may result in this psychological syndrome (Demerouti & Bakker, 2007; Halbesleben & Demerouti, 2005). This view of burnout consists of only two dimensions namely; exhaustion and depersonalisation (Guthier et al., 2020; Halbesleben & Demerouti, 2005). When an employee is confronted with aspects of the job that are excessively demanding they first become exhausted and then this leads to depersonalisation (Cheng et al., 2023).

2.3.2. Dimensions of burnout

It has been noted that there is a relationship that when the demanding aspects of a job are high it may lead to leaders burning out. Following OLBI, burnout is seen from two main dimensions namely; exhaustion and disengagement, and excludes personal efficacy which was included in other models of burnout (Demerouti et al., 2001; Demerouti & Bakker, 2007). This view of personal efficacy as not one of the main dimensions is because it is seen as rather an aspect of the individual's personality characteristic, as well as a negative consequence of burnout (Cordes & Dougherty, 1993; Demerouti & Bakker, 2007).

2.3.2.1. Exhaustion

When an individual feels depleted of energy it can be said that they are experiencing exhaustion (Bakker & Demerouti, 2007a; Lesener et al., 2019a). This depletion of energy can be seen as the consequence of excessive job demands placed upon an individual (Demerouti et al., 2001; Lesener et al., 2019a). The exhaustion is thus designed around understanding how individuals experience and feel about energy levels before, during, and after work (Bakker, 2014b).

There has been a systematic review of the various representations of burnout used in scales such as MBI and OLBI, and it was the dimension exhaustion that appeared common across each of these (Hatch et al., 2019; Seidler et al., 2014). Each of the various models of burnout concurs that exhaustion is caused by job-related demands such as work pressure, emotional demands, cognitive demands, role conflict, etc (Demerouti et al., 2001; Hatch et al., 2019; Lesener et al., 2019a; Maslach et al., 2001). These various job-related demands are the most important precursors related to the health implication of exhaustion known as burnout (Bakker et al., 2023).

When leaders or employees experience exhaustion there is a negative outcome, and the higher that feeling of exhaustion, the higher the risk associated with negative outcomes (Bakker & de Vries, 2021). However, when an individual experiences this feeling of exhaustion that is minor over a prolonged period of years results in health impairment consequences that are linked to both psychological and physiological conditions such as depression, anxiety, heart disease, and type 2 diabetes (Ahola et al., 2010; Lesener et al., 2019a).

High levels of exhaustion should not only be of concern for organisations, but equally moderate levels of exhaustion that individuals experience over an extended period.

Due to its impact can have long-term absenteeism relating to the associated health conditions (Bakker & de Vries, 2021; Schaufeli et al., 2009). Therefore, if organisations do not take into consideration what impact this sustained exhaustion has on their leaders, they risk reduced performance, and engagement potentially losing leaders who cannot cope with the new dynamics and expected business conditions of today.

2.3.2.2. Disengagement to engagement

The second dimension of burnout is disengagement where individuals detach themselves from the various aspects of their work (Demerouti et al., 2001; Demerouti & Bakker, 2007). This dimension presents itself in negative behaviours where individuals seem disinterested, unmotivated, and lack challenges (Demerouti & Bakker, 2007). This dimension is different to depersonalisation which forms part of the MBI for burnout where depersonalisation relates more to the emotional detachment from oneself, while disengagement encompasses this aspect and more specifically within the work context (Demerouti & Bakker, 2007).

When individuals experience a work context where they have low organisational resources such as the leader's support, they are more likely to become disengaged (Demerouti et al., 2001; Lesener et al., 2019a). This dimension has moved from the perspective of disengagement to engagement which views the dimension as mainly a motivational versus the inverse in well-being (Lesener et al., 2019a; Schaufeli, 2017).

Thus, job engagement is the opposite of burnout, where an individual would be emotionally engaged, have a personal connection, and feel a sense of achievement. It can be defined as a mental state that is associated with positivity and fulfilment in the context of work (Schaufeli & Bakker, 2004, p. 294). Subsequently, there are positive outcomes such as improved job performance, job satisfaction, and retention of employees (Schaufeli & Bakker, 2004, p. 298). For this reason, burnout being a negative condition of well-being takes away from the positive aspect of well-being engagement (Lesener et al., 2019a; Schaufeli, 2017; Schaufeli & Bakker, 2004).

Therefore, engagement can be seen from an aspect of motivation that has the potential to buffer exhaustion; that is a health aspect known as burnout. Even though there is a buffering effect of motivation for exhaustion, it has still been documented that prolonged moderate exhaustion is still of concern. The short-term and long-term

impacts of the discussed dimensions of burnout and their associated consequences in both personal and work aspects are critical for organisations to not only consider, and understand, but also work on reducing. The changing business conditions that individuals have been exposed to and will continue to experience that result in burnout will continue to be of importance for organisations to be sustainable and competitive.

Understanding how prolonged conditions that affect exhaustion may lead to burnout is important for organisations to understand, as well as how they might reduce the potential occurrence of this condition. Therefore, in the frame understanding how psychological well-being is impacted will be looked at about two components namely; job demands and job resources (Bakker et al., 2023; Bakker & Demerouti, 2007a; Demerouti et al., 2001; Schaufeli, 2017).

2.4. Job demands and job resources

2.4.1. Introduction to the JD-R model

The current literature indicates that when employees are in a workplace where they are required to deal with high job demands means that they are susceptible to burnout (Bakker & Costa, 2014). The application of the JD-R model was employed to understand the various factors that contribute to leadership burnout and exhaustion.

The JD-R model is a well-established framework that is used within occupational psychology and helps to explain the relationship that exists between job properties, well-being, and work-related outcomes (Demerouti et al., 2001; Lesener et al., 2019a; Schaufeli, 2017; Schaufeli & Bakker, 2004). Furthermore, this model can identify the outcomes of various workplace conditions and how this affects an individual's well-being which in turn means that we can understand how these various conditions such as war, and COVID-19 affect leaders.

At its core, the JD-R model is the idea that every job is made up of two fundamental components that can influence an employee's well-being namely, job demands and job resources (Lesener et al., 2019a; Schaufeli & Bakker, 2004). In this section, we will explore these two components to understand how they are related and how they influence a leader's propensity to exhaustion and ultimately burnout. Furthermore, it will highlight the complicated relationship between leadership roles, the demands they come with, and the effect this has on well-being.

2.4.2. Job demands

The term job demands refers to the various "physical, social, or organisational aspects of the job that require sustained physical or mental effort and are therefore associated with certain physiological and psychological costs" (Demerouti et al., 2001, p. 501). These demands can be perceived as factors that deplete individuals' energy within their work environment, including overwhelming tasks, time constraints, emotional pressures, lack of role clarity, and conflicting expectations (Lesener et al., 2019a).

According to Bakker (2014b), job demands are composed of work pressure, cognitive demands, emotional demands, role conflict, and hassles (Bakker, 2014b). Work pressure is viewed from the aspects of the job such as the speed, the amount of work, extra effort to achieve deadlines, and time pressure. Cognitive demands are viewed from the aspects of the job that require a degree of concentration, additional care, and mental strain. Emotional demands are viewed from the aspects of the job that require the degree of emotions, things that personally touch the individual, emotionally challenging situations, complaining customers, demanding customers, and rudeness of customers. Hassle demands are viewed from the aspects of the job that require the degree of administration, challenges to complete a project or assignment, red tape, unexpected hassles, and the number of hassles to get the job done. Lastly, role conflict is viewed from the aspects of the job that require the degree of the perceived achievement of targets, standards, and requirements.

Extensive research using the JD-R model indicates that elevated job demands have a detrimental effect on an individual's mental well-being, increasing the risk of exhaustion (Kaluza et al., 2020; Lesener et al., 2019a; Schaufeli, 2017). This process of high job demands leading to exhaustion is known as the health impairment process, which is an independent component within the JD-R model. It is termed as the health impairment process due to its association with health-related indicators, such as burnout which is the main health problem in the JD-R model. It is often measured as exhaustion, which is the feeling of being physically and emotionally drained (Demerouti et al., 2001; Lesener et al., 2019a). Job demands are the leading cause of exhaustion, which predicts negative outcomes relating to this dimension such as reduced performance (Bakker & Demerouti, 2007a).

When employees experience high job demands that deplete their energy levels or resources, their well-being is affected negatively. This negative aspect of well-being

shows up in the form of exhaustion (Demerouti et al., 2001; Lesener et al., 2019a). Continued exposure to elevated job demands has the potential to cause a series of psychological and physiological health-related consequences associated with burnout, as mentioned earlier (Bakker & de Vries, 2021).

To mitigate these job demands that employees experience, leaders are expected to continually provide ongoing support and closely monitor their job demands (Bakker & de Vries, 2021). The practical aspects in this context include, yet are not limited to, the act of prioritising tasks, providing emotional support, and offering feedback that can help individuals manage the stress associated with demanding job requirements. Leaders can utilise their expertise and understanding to guide employees in dealing with the challenges they face and effectively manage the stress that comes with these challenges, using coaching and mentoring (Bakker & de Vries, 2021).

It has been highlighted that in the last 4 years, leaders have faced significant external events or organisational changes, such as the COVID-19 pandemic, the Russo-Ukraine war, the Great Resignation, and the threat of economic recessions, which have intensified their job demands. These challenges have highlighted the importance of understanding when an individual faces this new set of job demands that exceed their available resources, and can lead to exhaustion (Bakker, 2014a; Bakker & de Vries, 2021).

The intensified job demands are especially evident within the supply chain profession. This situation has been further exacerbated by the need to address the various challenges because of external events such as COVID-19, which include adapting to remote work, adopting empathy within their leadership roles, and more. These external events have introduced additional demands, particularly for leaders within the supply chain profession, which include the task of effectively handling escalating inflationary costs, erratic customer requirements, and extended lead times. In addition to these challenges, there is added pressure as companies attempt to regain the lost revenue that occurred during the last four years.

The susceptibility of global supply chains to dynamic external factors has escalated, prompting supply chain leaders to expand their range of responsibilities to encompass geopolitical conditions and sustainability, in contrast to previous periods (Shih, 2022). These intensified demands that are observed within this profession and

the leadership role may raise concerns about burnout and the overall well-being of supply chain leaders.

2.4.3. Job resources

The term job resources refers to the various "aspects of the job that may do any of the following: (a) be functional in achieving work goals; (b) reduce job demands and the associated physiological and psychological costs; (c) stimulate personal growth and development" (Demerouti et al., 2001, p. 501). These resources play a vital role in replenishing and restoring individuals' energy levels. Examples of resources within the work environment include organisational support, constructive comments, supportive colleagues, and a positive work environment, among others (Schaufeli, 2017). Within the supply chain profession context, an example would involve a supply chain manager extending their assistance to buyers within their team when they face the challenges of minimising out-of-stock situations, even during exceptionally challenging periods as experienced during the last four years.

The accessibility of additional resources may serve as a buffer against the negative effects of higher demands on individuals, reducing the likelihood of burnout (Schaufeli, 2017). When employees have access to these resources, they are better equipped to effectively handle and navigate challenging work circumstances, thereby diminishing the probability of experiencing burnout. In contrast, a lack of resources combined with high demands can intensify the risk of exhaustion leading to burnout (Schaufeli, 2017).

Job resources have a positive relationship with work engagement and as such when resources increase so does engagement (Demerouti et al., 2001; Lesener et al., 2019a). This positive effect on work engagement is accompanied by positive work outcomes that relate to the positive well-being of employees such as job satisfaction, improved work performance, and engagement (Lesener et al., 2019a; Schaufeli, 2017). These positive outcomes as a result of the higher job resources are increased performance and engagement. This alternative process to the health impairment process is known as the motivational process and is another independent process contained within the JD-R model (Schaufeli, 2017).

As previously stated, negative outcomes such as depersonalisation which is an outcome of an employee experiencing negative well-being occur when high job demands are accompanied by low job resources. However, even if job demands are

at an acceptable level when employees experience a deficit of job resources this leads to disengagement (Demerouti et al., 2001).

Leaders once again are expected to assist employees in improving their well-being by either increasing their job resources that deal with high job demands or ensuring that their resources such as motivational feedback or support are not lacking (Bakker & Demerouti, 2007a). This request by leaders is required because of the known research which indicates the relationship between positive outcomes and positive well-being leads to improved organisational performance. For example, a leader who provides emotional support will not only assist an employee in reflecting on how their current job demands are affecting them but simultaneously assist them in coping with the job demands that they face.

2.4.4. Job demands and job resources interaction

The JD-R model establishes a conceptual framework that distinguishes between two independent yet interconnected processes: the process of health impairment and the process of motivation. While these two processes operate independently, their interaction impacts exhaustion and engagement affecting an individual's well-being in the workplace.

An important interaction to understand is that when job demands are high and job resources are low, an individual is at an increased risk of burning out (Bakker et al., 2023; Bakker & de Vries, 2021). However, an increase in an individual's job resources can mitigate the risk of exhaustion by enabling them to manage increased job demands more effectively, which are primarily driven by motivational factors. (Bakker et al., 2023; Bakker & de Vries, 2021).

When resources are increased but job demands are low there is only a moderate impact on the motivational process (Bakker & Demerouti, 2007a; Hobfoll, 2002). Conversely, when job demands increase they deplete an individual's resources, often leading to exhaustion that requires the replenishment of their resources (Schaufeli, 2017).

Prolonged exposure to excessive job demands impairs an individual's ability to self-regulate by utilising their mental resources to effectively deal with these job demands (Bakker et al., 2023; Bakker & Costa, 2014; Bakker & de Vries, 2021). This state of exhaustion leads to a destructive cycle in which the individual's inability to cope with their current job demands reduces their performance which further intensifies their

job demands, thereby continuing the process of depletion of resources. (Bakker, 2014a; Bakker & de Vries, 2021).

Organisations and their leaders play an important role in reducing the adverse consequences of burnout. The adoption of human resources practices and leadership behaviours that prioritise employee support can reduce the negative consequences of exhaustion arising from high job demands (Bakker & de Vries, 2021) This approach aligns with Bakker et al. (2023) proposition that employees who are experiencing burnout require extra attention and care from their organisation and leaders.

Recognising that an employee is on the verge of burnout due to excessive job demands requires additional effort and awareness from leaders. This additional cognitive effort is demonstrated in various ways such as improved listening skills, increased self-awareness and social awareness. Leadership behaviours that require this additional empathic consideration thus require additional job demands on the leaders themselves which according to the JD-R model may negatively affect their well-being (Kaluza et al., 2020).

Research has indicated that there are various interactions between job demands and job resources, such as the effect of increased job resources which may mitigate exhaustion caused by intensified job demands. Whilst there is evidence of this interaction between these two constructs, the strength of these interactions remains somewhat weak, with minimal practical significance. (Demerouti et al., 2001; Schaufeli, 2017). In contrast, the strength of the relationships within each independent process of the JD-R model is considered more substantial (Lesener et al., 2019a).

In today's dynamic work environment, the JD-R model highlights the delicate balance between job demands and job resources, especially in leadership positions. Over the past four years, due to the intensified job demands caused by events such as the COVID-19 pandemic, has been a significant focus for many companies to increase their resources to support employees from burning out. However, there has also been an increased expectation from leaders and employees alike to become more resourceful in the wake of reduced staff caused by retrenchments and resignations during the Great Resignation and the current economic conditions.

This comprehensive understanding of the JD-R model explains the complex interaction between demands and resources, which affects not only the well-being of employees but also that of leaders. It emphasises the complexity of their current situation, which is characterised by increased demands and limited resources, while simultaneously being expected to behave in a manner that is considerate to employees' well-being. In the following section, we will begin to comprehend how this leadership behaviour where organisation affects the relationship between job demands and job resources and how this affects their well-being.

2.5. Leadership and servant leadership

For the context of this study, leaders can be defined as those individuals "influencing task objectives and strategies, influencing commitment and compliance in task behaviour to achieve these objectives, influencing group maintenance and identification, and influencing the culture of an organization" (Yukl, 1989). The actions of leaders within organisations are of significant importance as they have a notable influence on the work behaviour, performance, and well-being of their subordinates (Inceoglu et al., 2018). This is because leaders are in a position where they can influence the job demands, as well as the job resources of their employees.

This understanding of the influence of leaders within the workplace in both the academic and business context has resulted in a considerable amount of effort in developing and implementing various approaches for leadership behaviour such as being more empathic (Clark et al., 2019; Wolff et al., 2002). Subsequently, this understanding has resulted in a greater expectation of leaders to lead in a way that addresses the job demands and resource conditions. However, because of this, leadership positions entail greater job demands relative to non-leadership positions, which following the JD-R model have a higher potential to negatively impact the well-being of the leader in the form of burnout (Li et al., 2018).

The majority of literature on leadership suggests that how a leader behaves is consistent over time and across various scenarios (Kaluza et al., 2020; Montano et al., 2017; Van Dierendonck et al., 2004). Each leader has a way in which they persuade their followers to complete organisational targets and these behaviours can be grouped into many different styles such as the widely known Full Range Leadership Theory (FRLT) (Bass, 1985, 1999). According to Bass (1999, p. 11), the FRLT grouped leaders into three distinct styles namely; transformational, transactional, and laissez-faire each with their own set of behaviours. However, due

to the increase in unethical business practices, there is a focus by organisations and scholars on leadership styles that gain trust such as servant leadership (A. Lee et al., 2020).

There is evidence that shows that a leader's leadership style can affect their well-being either positively or negatively (Kaluza et al., 2020, p. 36). In addition, a leader will experience mental strain which may lead to burnout when there is a misalignment between a leader's particular leadership style and the demands of the situation (Caplan & Van Harrison, 1993; Kaluza et al., 2020, p. 38). The various challenges that leaders have dealt with, particularly within the supply chain profession highlight this misalignment.

2.5.1. Servant leadership

There has been a request by organisations to their leaders to make use of servant leadership due to its relationship with increased employee performance and engagement (Eva et al., 2019; Liden et al., 2014). In addition, because of the associated benefits organisations want a culture of serving others and as such encourage this behavioural style (Liao et al., 2021; van Dierendonck, 2011).

Over the years, there have been poor attempts at defining servant leadership, and as such, we will be using the definition that was well defined by Eva et al. (2019), "Servant leadership is a (1) other-oriented approach to leadership (2) manifested through one-on-one prioritising of follower individual needs and interests, (3) and outward reorienting of their concern for self towards." (p. 114). This leadership style moves away from self-interest and towards serving their followers. Amongst other leader behaviours such as authentic and ethical leadership, servant leadership has been significant as of late (Eva et al., 2019; A. Lee et al., 2020; Lemoine et al., 2019).

The fundamental characteristics of servant leadership are its motivation, approach, and mindset (Eva et al., 2019). Thus, a leader's motivation lies outside of their ambitions, exemplifying their dedication to serving others. The approach prioritises the individual requirements, interests, and goals of followers over those of the leader through a one-on-one focus, which requires self-awareness and psychological maturity. This type of leadership style places a considerable amount of effort into understanding the background, fundamental values, beliefs, assumptions, and unique behaviours of each follower. It adheres to the principle of stewardship by regarding followers as individuals entrusted to the leader's care to promote their

personal development. Finally, it functions as a driving force in encouraging followers to shift their perspective from a self-centred outlook to one that prioritises others, thereby enabling them to assume active roles as productive and socially aware promoters.

Servant leadership is a desirable leadership behaviour because of the associated beneficial organisational outcomes relating to a follower's attitude, behaviours, and performance such as engagement, high performance, retention, and teamwork (Day et al., 2014; Liden et al., 2008, 2015). This style of leadership behaviour places importance on the personal development of their followers (Eva et al., 2019; Zheng et al., 2023). Thus, based on this benefit, which is supported by research proposes that this form of leadership behaviour has a positive result on organisational performance because it influences employee trust and other positive work behaviours (A. Lee et al., 2020).

2.5.2. Dimensions of servant leadership

There have been various definitions of servant leadership that incorporate various aspects of the observed behaviour with each of these definitions including inconsistent dimension. As a result of this Liden et al. (2008) completed research that validated seven different dimensions namely; conceptual skills, empowering, helping subordinates grow and succeed, putting subordinates first, behaving ethically, emotional healing, and creating value for the community (Liden et al., 2008, 2015).

According to Liden et al. (2008), the seven dimensions can be viewed from the following explanations: Conceptual skills can be defined as the ability of the leader to address work challenges while simultaneously considering the organisation's goals. Empowering can be defined as the degree to which the leader trusts their followers by delegating aspects of their work such as decision-making. Helping subordinates grow and succeed aligns with the point where these leaders focus on the development of their followers to become the best that they can be. Behaving ethically aligns with the truthfulness aspect of leadership behaviour and moral principles. Emotional healing can be defined as the behaviour that captures the extent that the leader cares for their follower such as listening to their follower on how they are struggling to deal with pressure. The last dimension creating value for the community, can be defined by to what degree is the leader involved with the community. These seven dimensions incorporate the various behaviours that portray

these leaders as being truthful, placing their needs second to their followers, assisting the community, and having the required skills to be able to assist their followers (Liden et al., 2015).

2.5.3. Servant leadership interaction on JD-R and exhaustion

There is evidence that shows a servant leadership style that is supportive in behaviour, can have a positive relationship with a leader's well-being (Eva et al., 2019; Zheng et al., 2023). However, it has been noted that these types of leadership behaviours can be taxing and if no additional support is given, could result in burnout (Arnold et al., 2015; Kaluza et al., 2020; Zwingmann et al., 2016).

Recent research has indicated that there is a paradox concerning this leadership style of resource gain and loss (Eva et al., 2019; Zheng et al., 2023). From a gain perspective, servant leadership can have a buffering effect on job demands whereby the result of serving others contributes to the leader's resources. This is because when a follower expresses thanks and praise to their leader for being supportive it in turn causes the leader to feel of value and worth (Liao et al., 2021; Sherman & Cohen, 2006).In contrast, when serving others where the leader is constantly taking the perspective of their followers specific views, beliefs, interests, and needs demands additional energy which may lead to exhaustion (Kaluza et al., 2020; Zheng et al., 2023).

The positive benefit that comes from followers' praise and thanks tends to take time and thus might not be experienced in the short term (Liao et al., 2021). In addition, the request by organisations for their leaders to be more empathic and serve their people, while they are contending with dynamic external and internal business conditions, creates a misfit (Edwards & Harrison, 1993; Kaluza et al., 2020). The misfit is that the request to be more empathic places additional constraints on the leaders in their already challenging environment, which may further contribute to them feeling exhausted leading to burnout. This paradox applies to the JD-R model where these demands may further deplete the leader's energy, which may result in a leader feeling exhausted leading to burnout (Schaufeli, 2017).

2.6. Conclusion

This chapter provided an in-depth explanation of the various factors that influence an individual's well-being, more especially what the implications of negative well-being have for an employee and the organisation highlighting its importance. The

negative aspect of well-being, known as burnout was broken down into its various dimensions. It was found that exhaustion is the main result of the health impairment process that leads to burnout. Studying these dimensions of burnout allows for an understanding of the various related consequences and how these are influenced by work-related demands.

To understand what intensified job demands have on exhaustion a review of the current literature on job demands and exhaustion was completed. The literature showed that the JD-R model was the current model being used to understand the relationship between exhaustion and intensified job demands. In addition, because of the request by organisations for leaders to behave more empathically necessitated an extensive literature review on this behaviour. The review showed that servant leadership is a leadership style known as being most empathetic. The literature provided information that this leadership style is more demanding because of its request to place the needs of the follower above the leader. This empathetic approach in their leadership style may place additional demands on a leader.

The JD-R model which is predominately used to understand the relationship between job demands and exhaustion highlights that this could affect a leader's well-being. This is because not every leader may be equipped to use servant leadership effectively, which may cause further demands leading to exhaustion. Therefore, understanding how these behaviours affect a leader's well-being within the current business context is important for organisations to be sustainable and successful.

3. Chapter 3: Research questions and hypotheses

3.1. Introduction

The objective of this study is to examine the association between servant leadership, and the likelihood of a leader experiencing exhaustion in high-demand job environments for supply chain professionals. The study aims to determine if supply chain leaders who adopt a servant leadership style are more prone to exhaustion when confronted with high job demands. In particular, the study will focus on those aspects of job demands that servant leadership behaviours may exacerbate such as work pressure, emotional demands, cognitive demands, role conflict, and hassles (Liao et al., 2021; Zheng et al., 2023).

3.2. Research questions and hypotheses

Research question 1 (RQ1): What is the relationship between job demands and exhaustion among supply chain leaders?

To answer this question and in line with the established theory of the JD-R model; which underpinned the study the below hypothesis was formulated. According to the theory, as job demands increase, so does exhaustion (Bakker & de Vries, 2021; Bakker & Demerouti, 2007b; Lesener et al., 2019b). In addition, understanding how different contexts and roles affect the link between a leader and their well-being needs to be understood (Kaluza et al., 2020).

Therefore, based on the formulated problem and review of the current literature we have two main hypotheses and five sub-hypotheses. The hypotheses are as follows:

Hypothesis 1 (H_1): Job demands are positively related to exhaustion for supply chain leaders.

> **(H_{1a}):** Work pressures are positively related to exhaustion for supply chain leaders.
>
> **($H1_b$):** Cognitive demands are positively related to exhaustion for supply chain leaders.
>
> **(H_{1c}):** Emotional demands are positively related to exhaustion for supply chain leaders.
>
> **(H_{1d}):** Role conflicts are positively related to exhaustion for supply chain leaders.

(H₁ₑ): Hassles are positively related to exhaustion for supply chain leaders.

Research question 2 (RQ2): To what extent does the use of empathetic leadership by a leader, namely servant leadership, moderate the relationship between a supply leader's job demands and exhaustion?

The basis of this hypothesis is that servant leadership requires significant demands of them within their role as a leader (Eva et al., 2019; Liao et al., 2021; Zheng et al., 2023).

Hypothesis 2 (H₂): Servant leadership positively moderates the effect of job demands on exhaustion.

The five sub-hypotheses on based on the five components that make job demands namely; work pressure, cognitive demands, emotional demands, role conflict, and hassles (Bakker, 2014b).

> **(H₂ₐ):** Servant leadership positively moderates the effect of work pressure on exhaustion.
>
> **(H₂ᵦ):** Servant leadership positively moderates the effect of cognitive demands on exhaustion.
>
> **(H₂c):** Servant leadership positively moderates the effect of emotional demands on exhaustion.
>
> **(H₂d):** Servant leadership positively moderates the effect of role conflict on exhaustion.
>
> **(H₂ₑ):** Servant leadership positively moderates the effect of hassles on exhaustion.

3.3. Theoretical model

Below in Figure 2, is the proposed theoretical model that is required for testing the various hypotheses and answering the two research questions.
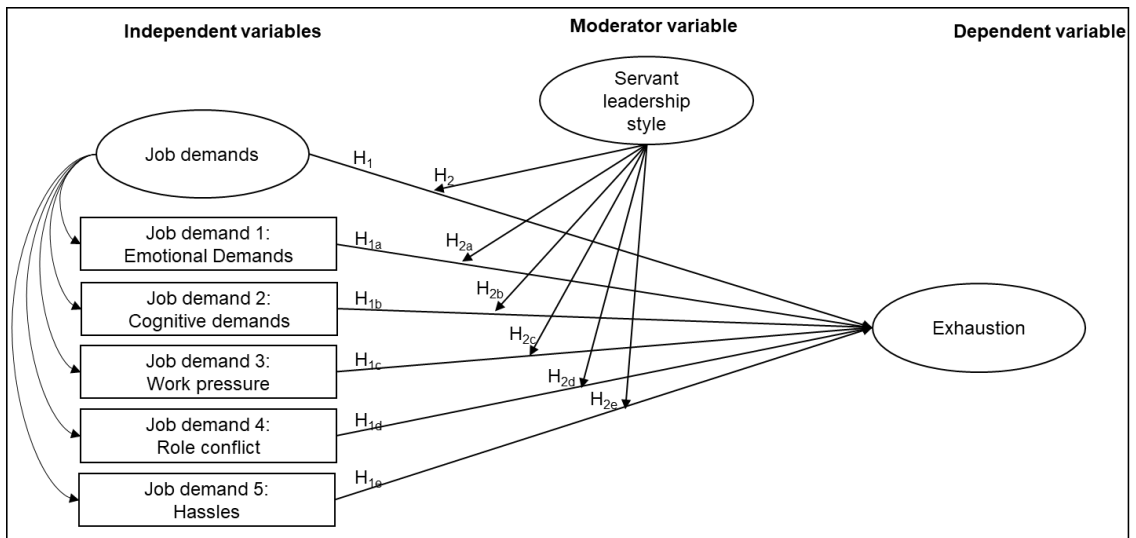
Figure 2: Theoretical model

Source: Author's complication

4. Chapter 4: Research methodology and design

4.1. Introduction

The research onion model was used to help guide the development of the chosen research methodology and design (Saunders & Lewis, 2018). As seen in Figure 3, the research onion model goes through various metaphorical onion layers starting from the outside and moving through the various layers until you get to the centre. Following this model, the below sections contained within this chapter detail the chosen philosophy, approach to theory, methodological choice, strategy, time horizon, techniques, and procedures.
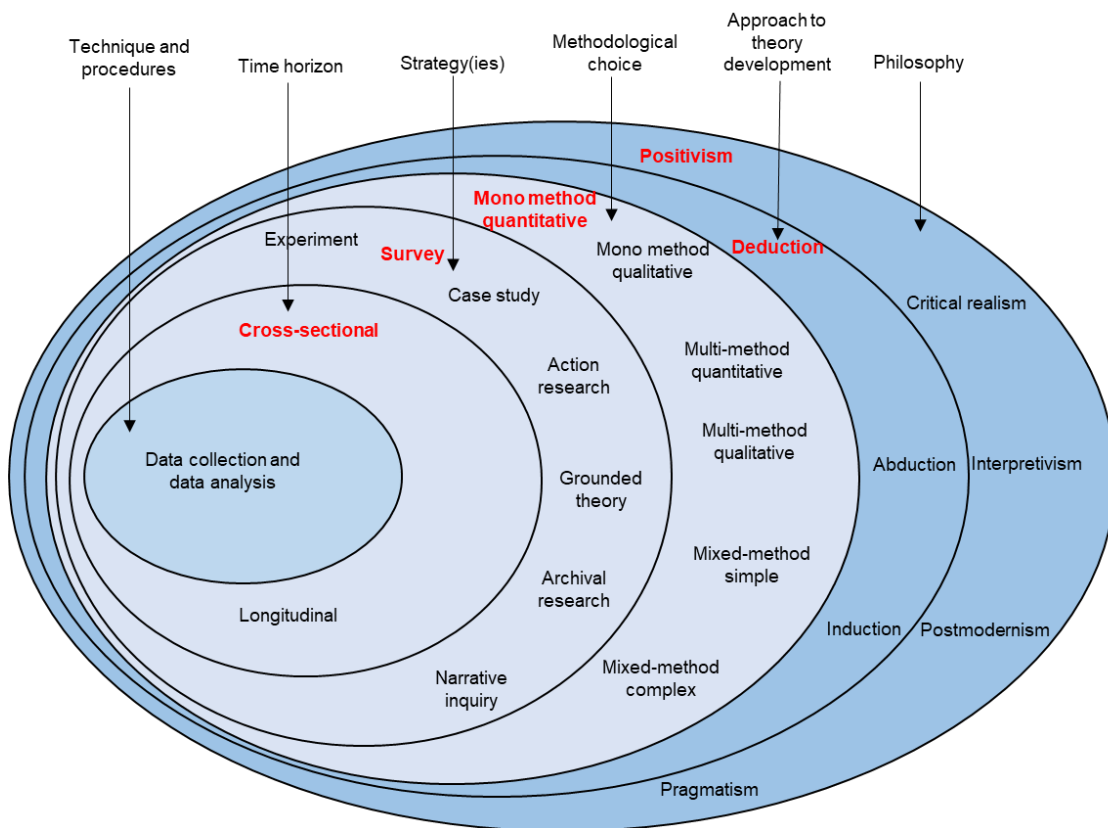
Figure 3: The research onion model

Source: (Saunders & Lewis, 2018, p. 105)

4.2. Philosophy

The research philosophy adopted for this study was positivism which aims to investigate the impact of servant leadership style on the relationship between exhaustion and job demands leading to burnout. (Demerouti et al., 2001; Lesener et al., 2019a; Zheng et al., 2023). This philosophy was chosen because it applies a structured approach in seeking to understand the relationship between different

variables and then applying a generalisation of the finding excluding human subjective interference (Bonache, 2021; Saunders & Lewis, 2018).

By employing quantitative methodologies and leveraging existing theories, this philosophy allowed for the formulation and testing of hypotheses, facilitating objective and evidence-based data analysis (Saunders & Lewis, 2018). The applied theories and frameworks were tested through statistical analysis, providing evidence of the strength of the relationship between servant leadership style, exhaustion, and job demands leading to burnout.

4.3. Approach

This study employed a deductive approach to develop a theoretical framework (Bonache, 2021). By drawing on contemporary theories, the study aimed to formulate and evaluate a hypothesis, thus justifying the choice of the chosen research approach (Saunders & Lewis, 2018). The data collection and hypothesis testing followed a deductive approach, using a theoretical framework that proposed a relationship between servant leadership style, job demands, and exhaustion.

To further support the chosen approach, this study collected and analysed data using appropriate statistical methods to verify the relationship between the identified variables. The statistical analysis provided insights into the relationship between servant leadership style, job demands, and burnout, thereby either confirming or denying the formulated hypothesis (Bonache, 2021; Saunders & Lewis, 2018). The findings contribute to a greater understanding of leadership styles and their impact on the relationship between job demands, and burnout.

4.4. Purpose of research design

Since this is a study that seeks to provide a generalisation of a situation of servant leadership, job demands, and exhaustion the research design was descriptive (Saunders & Lewis, 2018). This is because this study described to what degree servant leadership affects the relationship between job demands and exhaustion. In addition, since data was collected using an adapted questionnaire which is quantifiable and measurable further supports the classification of the study as descriptive (Saunders & Lewis, 2018).

4.5. Methodological choice

The study made use of a mono method comprising a single adapted questionnaire that was used to acquire the data for analysis that was used to answer the proposed

hypotheses (Saunders & Lewis, 2018). The use of this single measurement instrument is considered sufficient in answering the research question of this study, and ultimately rejecting or accepting the proposed hypothesis.

4.6. Strategy

The study used a deductive quantitative analysis that led to the use of a survey to gather data from the target population. Existing questionnaires that have already been developed for the chosen variables were adapted following the research objective. This adapted questionnaire was used to collect the necessary information to test the proposed hypothesis. Our study aimed to verify the strength of the proposed relationship between exhaustion and servant leadership within high job demands. Thus, the use of surveys will be essential in achieving this goal.

4.7. Time horizon

Cross-sectional research methods were used in this study to provide a snapshot of a specific research environment, at a specific moment in time (Saunders & Lewis, 2018). Data collection occurred from August to September 2023, over a seven-week time span, which is in line with cross-sectional research thus only covering only one point in time. This time horizon was selected due to the time constraints of the research business project time frame which would not allow for a longitudinal study to be completed.

4.8. Population

The chosen population of this study consists of all leaders in the supply chain management profession in South Africa.

4.9. Unit of analysis

The unit of analysis for this study would be individuals occupying a leadership position within South Africa, who have at least one subordinate reporting to them. Leaders within the supply chain profession have been selected as the focus of this study due to their direct relevance to the research objective. These leaders experience significant job demands arising from the dynamic nature of the new business environment, characterised by volatility, uncertainty, complexity, and ambiguity resulting from changes in geopolitical, macroeconomic, and microeconomic conditions.

4.10. Sampling method and size

Since there is no comprehensive list available of all supply chain leaders in South Africa the selection of a random sample from the population is unfeasible. This makes the chance of selecting each representative of the population remain unknown (Saunders & Lewis, 2018). Since it was not possible to obtain a comprehensive list of all these supply chain professional leaders within South Africa, it is appropriate to select a specific group that represents the unit of analysis.

The specific group that was selected met the criteria of the unit of analysis which was the supply chain profession in South Africa that belongs to the Professional Body of Supply Chain Management known as SAPICS (SAPICS, n.d.). In addition, participants who met the criteria of the unit of analysis were targeted through the researcher's professional network. Therefore, the sampling frame for this research will comprise all supply chain leaders who are members of SAPICS, as well as leaders who are part of the researcher's professional network.

Therefore, with a random sample being unfeasible, non-probability sampling was used. Non-probability sampling will be limited to generalising to the sample collected; however, this is considered acceptable for this study because of the limited time and resources available for this research, which is a benefit of this technique (Fricker, 2008). The specific non-probability technique used was purposive sampling (Saunders & Lewis, 2018). This technique was used because the sample was selected due to its relevance to the study. There were two approaches to the selected purposive sampling technique that were used to ensure that the minimum responses were achieved. Firstly, by accessing the SAPICS database, of which the researcher currently holds an active membership, the researcher had access to a list of leaders that meet the required profile of the study's target population. Secondly, the use of the researcher's professional network, where identified participants meet the criteria of being a supply chain leader, has individuals that report to them, thus ensuring there are no differences between the two samples collected as they had to both meet this criterion.

The use of the SAPICS database, which consists of 6000 active members, provided a manageable and accessible sample for this research. The choice allowed for practicality in terms of data collection and ensured that the study could be completed within the given time frame of 2023. Permission was granted from SAPICS to conduct the research with their members. The permission letter from SAPICS can be seen in

Appendix 1. The question was sent in the form of a survey link that was emailed by the SAPICS administration team. This email was sent out twice to the database to ensure that additional respondents could complete the survey. After the two emails further reminders were not sent out as a request from the SAPICS administrator team not to spam their users. The professional network responses were sent directly via instant messaging which contained the link.

The sample size was determined based on similar studies conducted in the field of leadership and burnout. It targeted 6030 participants, where there was a minimum of 146 respondents required. This minimum requirement was determined by referring to previous studies relating to job demands, burnout, exhaustion, and servant leaders (Bakker et al., 2023; Kaluza et al., 2020; A. Lee et al., 2020; Liao et al., 2021; Zheng et al., 2023). The average sample size across each of these similar studies was 115 with the highest at 146. This can be seen in Appendix 2, and as such it was decided to use the highest value of 146 as the minimum number of responses required for this study.

4.11. Measurement instrument

An adapted questionnaire was used as the primary data collection instrument in this research consisting of 40 questions. This was an adapted question consisting of the servant leadership scale SL-7 (Liden et al., 2015; Zheng et al., 2023), as well as the adapted job demands-resources questionnaire (Bakker, 2014b; Demerouti et al., 2001, 2003). The survey consists of a total of 40 questions that contain 7 demographic questions and 33 questions that are based on the constructs being studied.

The first section of the questionnaire starts with 7 questions that are related to the demographics of the sample data. These questions were used to describe the sample data collected and collected data such as age, experience, level with the organisation etc. In addition, contained within these questions was 1 screening question that will be used to ensure that respondents' data that is used for analysis meet the criteria as mentioned in the unit of analysis section.

The second section started with the first adapted questionnaire that was used for this study the SL-7 questionnaire. This questionnaire was originally developed for followers to report on the leader level of servant leadership. This was then adapted so that leaders themselves could respond on their level of self-reported servant

leaders. The items contained within this questionnaire were used to classify the degree of a leader's self-reported servant leadership style which consisted of 7 self-reported questions adapted from the original questionnaire (Liden et al., 2015). These questions made use of a 7-point which consisted of (1) Strongly Disagree; (2) Disagree; (3) Slightly Disagree; (4) Neutral; (5) Slightly Agree; (6) Agree; (7) Strongly Agree.

Lastly, the use of the job demands-resources questionnaire which consists of 26 questions was used to assess job demands and exhaustion (Bakker, 2014b; Demerouti et al., 2001, 2003; Demerouti & Bakker, 2007). The job demands-resources questionnaire made use of a 5-point rating scale which consisted of (1) Never; (2) Sometimes; (3) Regularly; (4) Often; and (5) Very Often (Bakker, 2014b). Only the job demands and exhaustion questions were included in the questionnaire as they were relevant to the study.

4.12. Data gathering process

As previously mentioned, an adapted self-reporting SL-6 and JD-R scale specific to job demands and a leader's exhaustion leading to burnout was used to create an adapted questionnaire. This questionnaire was used to collect data about the chosen variables namely; servant leadership style, job demands, and a leader's exhaustion.

The designed questionnaire was sent by email using the SAPICS membership database, as well as the researcher's professional network in the form of a Google Forms survey, which is an e-survey approach to data collection (Wegner, 2021). The electronic communication directed towards potential participants in the study contained a web link to the survey. The survey contained a consent statement stating anonymity and that only aggregated data will be reported, research objectives, and details concerning the utilisation of the data. No names were requested from the research participants ensuring anonymity.

Before sending out the questionnaire to the pilot sample and the sample population the existing questions were reviewed to ensure that all that were valid for this research and were adapted according if required. To this end, a pilot test was conducted with twenty-four participants. Once the pilot test was concluded which was used to establish if the potential research participants would understand the questions contained within the survey, the questionnaire was then sent by electronic mail and instant messaging to the selected sample population.

Upon achieving the required minimum responses, the survey was closed consisting of a total of 192 responses. Unprocessed data was then pulled from the online survey tool known as Google Forms. This data was then imported into a statistical analysis software tool so that it could be analysed.

4.13. Data storage method

Data will be stored for 10 years as required by the educational institution. Data is stored electronically on a private cloud account with the institutions with a service known as Microsoft SharePoint. The data that was stored was the raw collected data from the survey. Since responses were anonymous no information had to be changed that could be used to identify respondents which ensures the protection of research participants' information.

4.14. Analysis approach

Before importing the data into the statistical software, the data underwent the appropriate preparation so that it could be analysed. The process involved the coding of relevant responses according to the rating scale employed, the coding of each variable, and the subsequent formatting of the data into a matrix (Saunders & Lewis, 2018). Data that was invalid and did not meet the criteria for the study was removed. In addition, before running any inferential statistical analyses data was transformed where the average of each construct was calculated, as well as the mean centred values of each construct so that the interacting moderating values could be calculated so that it could be used for moderated regression. Once completed, the data underwent a descriptive and inferential statistical analysis using SPSS statistical software.

The collected data was subjected to a descriptive analysis method to provide a comprehensive overview of the sample population. This involved the use of pie charts, tables, and stacked bar graphs to represent categorical and nominal data such as gender, age, experience, level of education, level of management, number of persons supervised, and the various constructs response distribution (Wegner, 2021).

The subsequent statistical methodology employed for analysis was inferential statistics namely; correlation, linear regression and moderated regression (Wegner, 2021). The rationale for selecting these statistical tests in this study was based on the research objective of analysing the relationship between various independent

variables namely; servant leadership style, job demands, and their potential impact on the dependent variable of exhaustion ultimately leading to burnout.

Furthermore, inferential statistics enable the research to reveal the strength of the correlation between the various independent factors and the dependent variable (Wegner, 2021). Once completed, the test showed whether there was a statistically significant connection between servant leadership, a leader's job demands, and the occurrence of exhaustion in the leader.

4.15. Quality controls

To ensure the authenticity of the results, measures were taken to implement internal and external controls that specifically target their validity (Saunders & Lewis, 2018). In addition, it was imperative to implement various measures to ensure the consistency and reliability of the results (Saunders & Lewis, 2018).

4.15.1. Validity

To validate the credibility of the study, the researcher employed two primary forms of validity, namely content validity, and construct validity (Saunders & Lewis, 2018). As stated earlier, a quality control measure that was implemented was content validity. This involved subjecting the adapted questionnaire to a pilot group of research participants to evaluate its relevance, clarity, and comprehensiveness (Saunders & Lewis, 2018). Through the implementation of this approach, the likelihood of research participants misinterpreting the survey questions was reduced. Regarding construct validity, the pilot test employed established questionnaires that are specifically tailored to address questions related to the constructs of servant leadership style, job demands, and a leader's exhaustion (Saunders & Lewis, 2018).

The use of the SAPICS database which consists of over 6000 active members from different positions, leadership levels, industries and organisations was used. Using this database reduces the chances of incorrect generalisation of the population of supply chain leaders. This was further supported by the use of purposeful sampling from the researcher's professional network again consisting of individuals from different positions, leadership levels, industries and organisations.

In addition to the measures stated before, certain factors that may potentially compromise the study's validity were recognised. These included the potential bias of the selected research populations, such as subject selection, as well as incorrect assumptions concerning the cause-and-effect relationship (Saunders & Lewis,

2018). The use of the SAPICS database allowed for access to a sample population from various industries preventing the possibility of bias in the selection of leaders limited to a single industry. The adoption of the JD-R model minimises the likelihood of uncertainty regarding the association between the constructs, owing to the interpretation of the influence of job demands on the occurrence of exhaustion as a significant outcome (Saunders & Lewis, 2018).

Lastly, the Kaiser-Meyer-Olkin Measure (KMO), Bartlett's test, total variance explained, and the component matrix are used for each construct to determine the data appropriateness, factor extraction, and factor loading to ensure validity. If the KMO value is between 0.5 to 0.6 in a sample between 100 to 200 it is it is considered acceptable (Shrestha, 2021). Bartlett's p-value is less than 0.05 means that the sample collected is significant and thus appropriate for Exploratory Factor Analysis (EFA).

4.15.2. Reliability

To try to mitigate subject error, subject bias, observer error and bias, certain actions were implemented to address the factors that might have impacted the reliability of the research (Saunders & Lewis, 2018). To try to mitigate the likelihood of subject error, as previously indicated, questionnaires underwent testing before circulation among the intended sample population, to minimise any potential misunderstandings on the part of research participants concerning the questions asked.

To mitigate the potential influence of subject bias, whereby participants may be inclined to withhold information due to concerns about being evaluated or telling the truth, the answers to the research questions were anonymous, which was explicitly indicated at the beginning of the survey (Saunders & Lewis, 2018). To mitigate the potential for observer bias and error, standardised and modified questionnaires such as the SL-7 and JD-R were employed. This approach helped to ensure that the questions were formulated in an unbiased manner, thereby reducing the likelihood of inaccurate conclusions (Saunders & Lewis, 2018).

In addition to the quality control measure the use of the composite reliability test was used to measure the internal reliability of the scales that are greater than 0.7 are considered accepted (Shrestha, 2021). This internal consistency test has shown better true reliability results compared to other commonly used tests such as the Cronbach alpha (Peterson & Kim, 2013). Cronbach alpha can be moderate, whilst

composite reliability can be considered to be generous (Hair et al., 2019). However, composite reliability is still deemed a reliability test and will be used for this study due to the finding that it is considered a test that produces better true reliability.

4.15.3. Normality

A test for normality was conducted before statistical analysis to ensure that data followed a normal distribution. There were two checks completed to ensure normality namely; a review of the skewness and kurtosis statistic, and the plot of responses on the QQ-Plot. In terms of the skewness and kurtosis statistic any value that was deemed acceptable if they were between -2 to +2 (George & Mallery, 2010). Lastly, the visual of the QQ-Plot of the actual distribution of dots against the expected normality line with the majority of dots close to the line indicating approximate normality.

4.16. Limitations

The instruments used for data collection represent self-report questionnaires in the form of surveys. The use of self-reported questionnaires may lead to subject bias, wherein respondents may not provide truthful responses due to fear of being judged, thereby leading to inaccuracies in research results (Saunders & Lewis, 2018). In a self-reported questionnaire, respondents may have social desirability bias where respondents do not answer honestly in fear of what others might think of them or what they think society would want them to respond to. Furthermore, they might have a better-than-average bias where respondents see themselves as better than the average person even though this might not be true (Zell et al., 2019). Nevertheless, to address this anonymity was used in the opening statement of the survey questionnaire, stressing its importance to reduce the chance of this bias.

This research was a cross-sectional study that captured a singular moment in time for data collection. The study's scope is restricted as it cannot determine possible variations in a leader's resource loss and gain over time, as noted by (Kaluza et al., 2020; Zheng et al., 2023). Such changes could be better assessed through a longitudinal study. The constructs of the leadership style of servant leadership, job demands, and a leader's exhaustion leading to burnout have been subjected to extensive research and have been incorporated in several meta-analytic reviews (Harms et al., 2017; Kaluza et al., 2020; A. Lee et al., 2020; R. T. Lee & Ashforth, 1996; Lesener et al., 2019a).

Limiting the research to servant leadership style, while excluding other established leadership styles, may lead to erroneous assumptions. The use of this servant leadership may result in overgeneralisation and a lack of consideration for other recent leadership styles (Kaluza et al., 2020).

4.17. Conclusion

This chapter went into detail on the methodology and design that were used for the study. Referring back to Figure 2, the philosophy was positivism, the approach to theory development was deduction, mono method quantitative choice, the strategy was a survey, and the time horizon was cross-sectional. In addition, a detailed account of the method for collecting data and analysis was provided including quality controls and limitations.

5. Chapter 5: Results

5.1. Introduction

This chapter presents the results of the data collected from the survey questionnaire. The chapter will begin with a description of the sample data collected, which is intended to provide insights and context for this study on the various demographics of the sample population (Oh & Pyrczak, 2023). This will then be followed by three statistical quality tests namely; validity, reliability, and normality for the two questionnaires that were adapted for the survey. Lastly, the results of the statistical tests conducted will be presented that either reject or accept the proposed hypotheses covered in Chapter 3 following the methodology as indicated in Chapter 4.

5.2. Descriptive statistics results

5.2.1. Sampled data collected

The survey conducted had a total of 192 responses that were conducted over 7 weeks. As outlined in Chapter 4, the survey contained a total of 41 questions that were used to collect the data. Out of the 41 questions, 1 question was used to screen respondents to ensure that they met the criteria of the unit of analysis of being a leader, which was "How many persons do you supervise?" as seen in Appendix 3. The use of this screening question resulted in 34 responses that were deemed invalid as they did not meet the sample criteria. Consequently, a final sample of 158 responses, which represents 82% of the total collected, qualified to be used for analysis. One of the 158 responses was missing a numerical value for the age question. The remaining data for this line were all complete and would be feasible for the analysis. In contrast to deleting this line, the use of the single imputation method was where the missing value was imputed as the mean age of the 157 responses (Ren et al., 2023).

Table 1: Sample data collected summary.

Description	Value
Targeted responses	146
Actual responses	192
Invalid response	34
Total valid responses	158
% of target responses achieved	108%

5.2.2. Demographics

As outlined in Chapter 4, the survey contained a total of seven questions that were used to collect demographic information on the research participants. Out of the 7 questions, 1 question was used to screen respondents to ensure that they met the criteria of the unit of analysis, which was "How many persons do you supervise?" as seen in Appendix 3. The use of this screening question resulted in 34 responses that were deemed invalid as they did not meet the sample criteria. Consequently, a final sample of 158 responses, which represents 82% of the total collected, qualified to be used for analysis.The first demographic question of the survey is "What is your gender?". As is depicted in Figure 4, the majority of respondents are male at 65.2%.
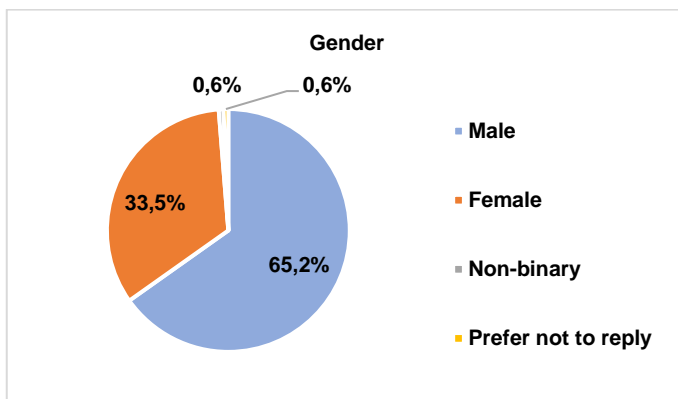
Figure 4: Demographic question 1: Gender

The second demographic question related to the age of the respondent. There is a relatively even distribution of age groups across the sample ensuring a diverse range of experience as seen in Table 3. The majority of respondents were between 45-55 years old accounting for 31.6%, whereas respondents 64 years and above were the least represented in the sample obtained. There were 0 respondents between the ages of 18-24 years which is not unexpected as the average age of a first-time manager starts from their thirties (Stahl, 2019). The average age for the 158 respondents is 44 can be seen in Table 2.

Table 2: Age descriptive statistics

What is your current age?		
N	Valid	158
	Missing	-
Mean		44
Median		44
Std. Deviation		11

Table 3: Demographic table distribution: Age

Age of respondents	No. of respondents	Percentage of sample
18-24	0	0,0%
25-34	41	25,9%
35-44	40	22,8%
45-54	50	31,6%
55-64	20	12,7%
Above 64	7	4,4%
Total	158	100,0%

The third demographic question was used to gather information on the respondent's education level. As seen in Figure 5, the majority of respondents have a postgraduate degree accounting for 50%, whereas respondents who have a doctoral degree were the least represented.
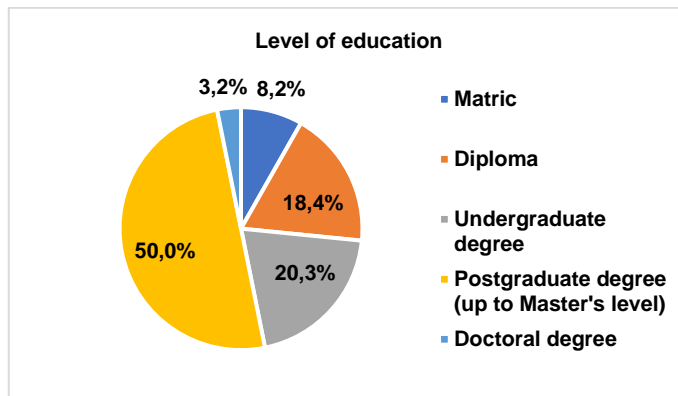
Figure 5: Demographic question 3: Level of education

The fourth demographic question was used to gather the level that respondents occupy within the organisation. As seen in Figure 6, both middle and senior managers make up the majority of the respondents each for 29.7% totalling 59.4%, whereas 1.3% of respondents did not have a level that they could select which were the least represented. In addition, Figure 5 shows that the collected data is relatively well distributed on the various levels in the organisation allowing different views based on different levels of responsibilities and perceived experiences.
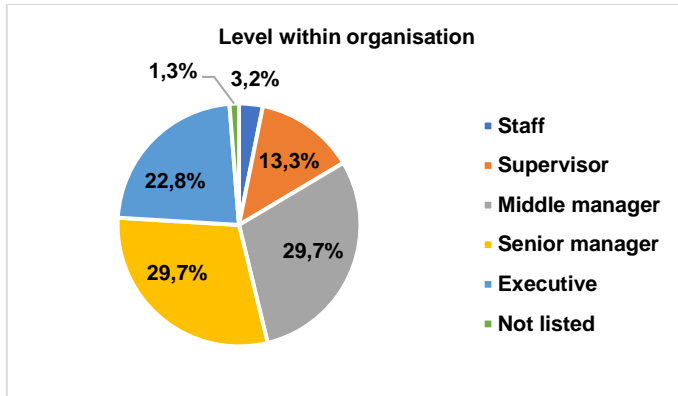
Figure 6: Demographic question 4: Level within organisation

The fifth demographic question was used to gather the various industries that respondents work in. As seen in Table 4, respondents can be from various sectors, with no section having a significantly large percentage of the total responses. The majority of respondents are represented by not listed at 16.7% with manufacturing second to this at 16.1%, whereas respondents who work in the agriculture industry were the least represented at 0.6%.

Table 4: Demographic question 5: In which industry is your organisation?

Experience of respondents	No. of respondents	Percentage of sample
Agriculture	1	0.6%
Automotive	5	2.9%
Construction	3	1.7%
Education	4	2.3%
Fast Moving Consumer Goods	19	10.9%
Financial services	2	1.1%
Healthcare	16	9.2%
Hospitality and Tourism	3	1.7%
Manufacturing	28	16.1%
Mining	10	5.7%
Professional Services	9	5.2%
Retail	10	5.7%
Security	2	1.1%
Technology	9	5.2%
Wholesale	8	4.6%
Not listed	29	16.7%
Total	158	100.0%

The sixth demographic question was used to gather information on the number of people that the leader supervises. As seen in Figure 7, the majority of respondents

have 3 to 5 people they supervise accounting for 28.5%, whereas respondents who supervise 1 to 2 people were the least represented at 12.7%.
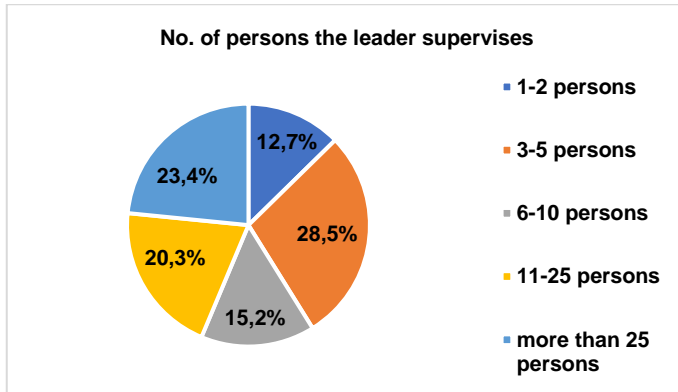
Figure 7: Demographic question 7: How many people do you supervise?

The last demographic question was used to gather information on the number of years of experience that each respondent has had in a leadership position. As seen in Table 5, the average year of experience is 13 years. However, if you refer to Table 6, the majority of respondents have 20 and above years of experience in a leadership position accounting for 23%, whereas respondents who have 16 to 20 years of leadership experience were the least represented at 14.4%. The experience was relatively evenly distributed across the various years allowing for rich data due to the variety of views, opinions, and experience this is represented by the standard deviation of 9 years as seen in Table 5.

Table 5: Leadership experience descriptive statistics

How many years of experience do you have in a leadership position?		
N	Valid	158
	Missing	-
Mean		13
Median		12
Std. Deviation		9

Table 6: Demographic question 6: Years of leadership experience

Leadership experience of respondents	No. of respondents	Percentage of sample
0	0	0.0%
1-5	38	21.8%
6-10	39	22.4%
11-15	32	18.4%
16-20	25	14.4%

Above 20	24	23.0%
Total	158	100.0%

5.2.3. Job demands

Job demands consist of 5 different areas as previously mentioned namely; work pressure, cognitive demands, emotional demands, role conflict, and hassles. Each of the job demand stacking bar graphs has graphically grouped responses to show which side they are pulling towards. The grouped areas are 1 to 2 as left (Sometimes), 3 as neutral (Regularly), and 4 to 5 as right (Often).

As seen in Figure 8, work pressure (WP) item 3 WP3 which was "Do you have too much work to do?" with the least agreement on, whereas WP1 which was "Do you work under time pressure?" with the greatest agreement on.
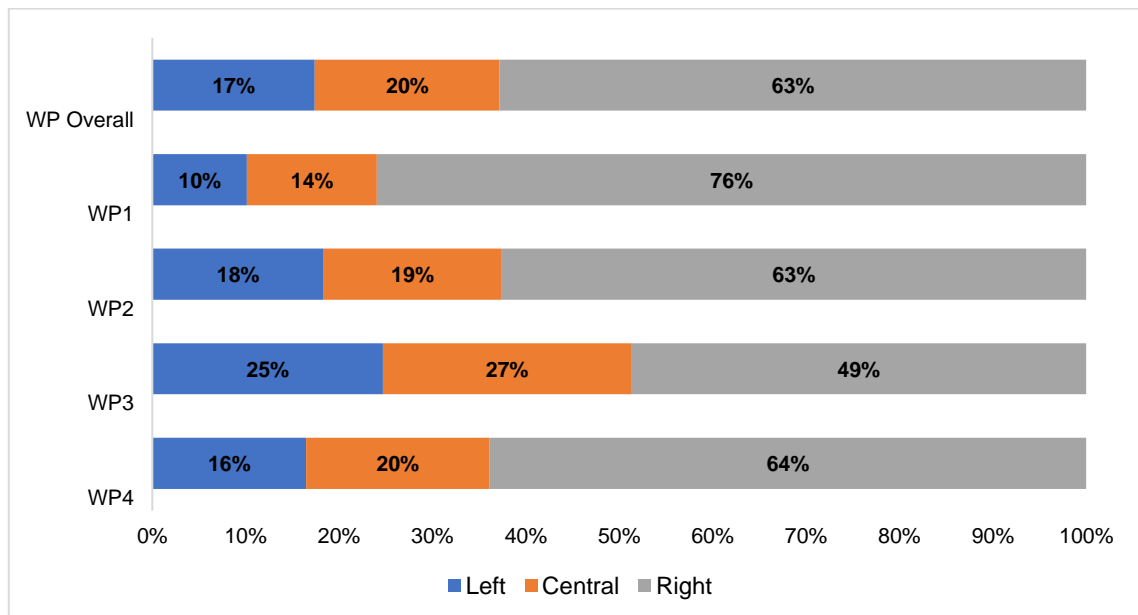
Figure 8: Work Pressure relating to an individual's work situation

As seen in Figure 9, cognitive demands (CD) item 3 CD3 which was "Do you regard your work as mentally very straining?" with the least agreement, whereas CD1 which was "Does your work require a lot of concentration?" with the greatest agreement on.
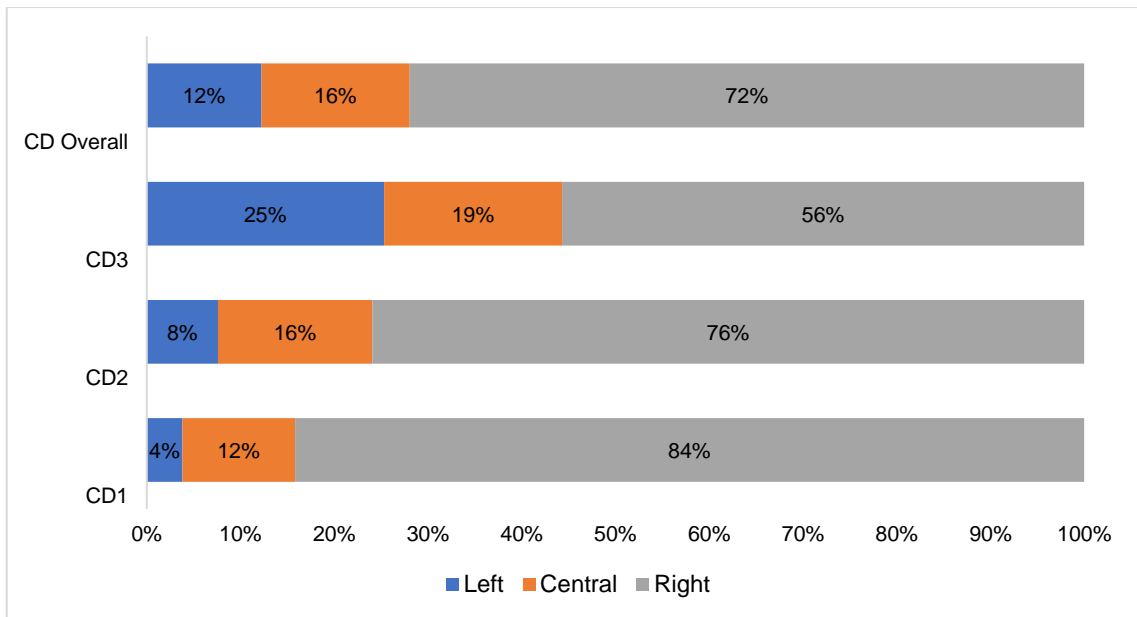
Figure 9: Cognitive demands relating to an individual's work situation

As seen in Figure 10, emotional demands (ED) item 6 ED6 which was "Do you have to deal with clients who do not treat you with the appropriate respect and politeness?" with the least agreement, whereas ED5 which was "In your work, do you have to deal with demanding clients?" with the greatest agreement on.
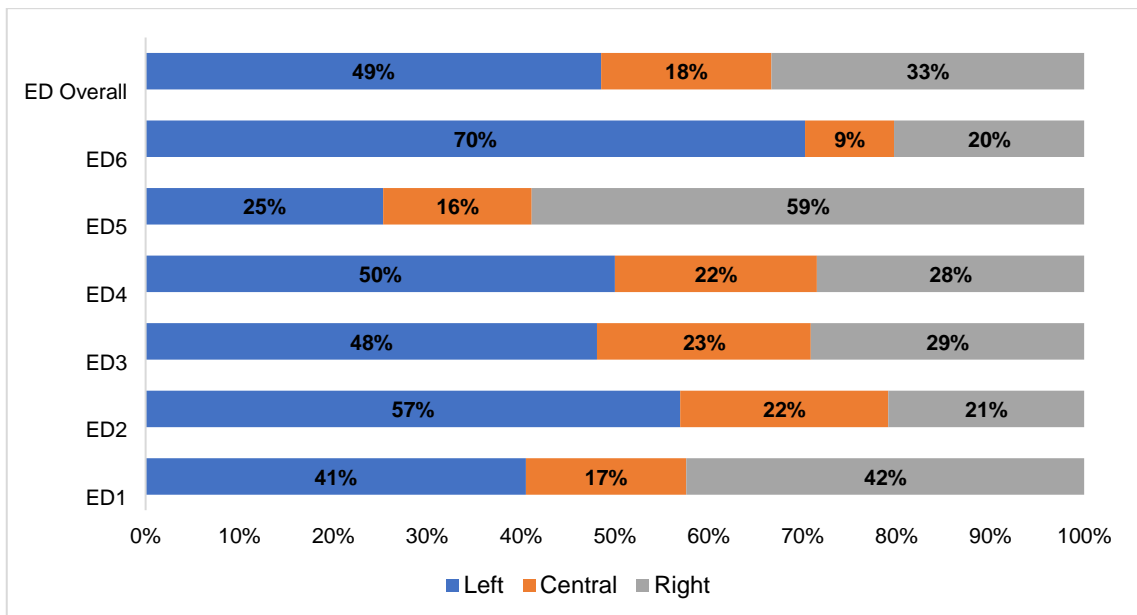
Figure 10: Emotional demands relating to an individual's emotions at work

As seen in Figure 11, role conflict (RC) item 3 RC3 which was "The expectations of my colleagues are in conflict." with the least agreement, whereas RC1 which was "I receive conflicting requests from two or more people." and RC4 "At my work, different

groups of people expect opposite things from me." with the greatest equal agreement on.
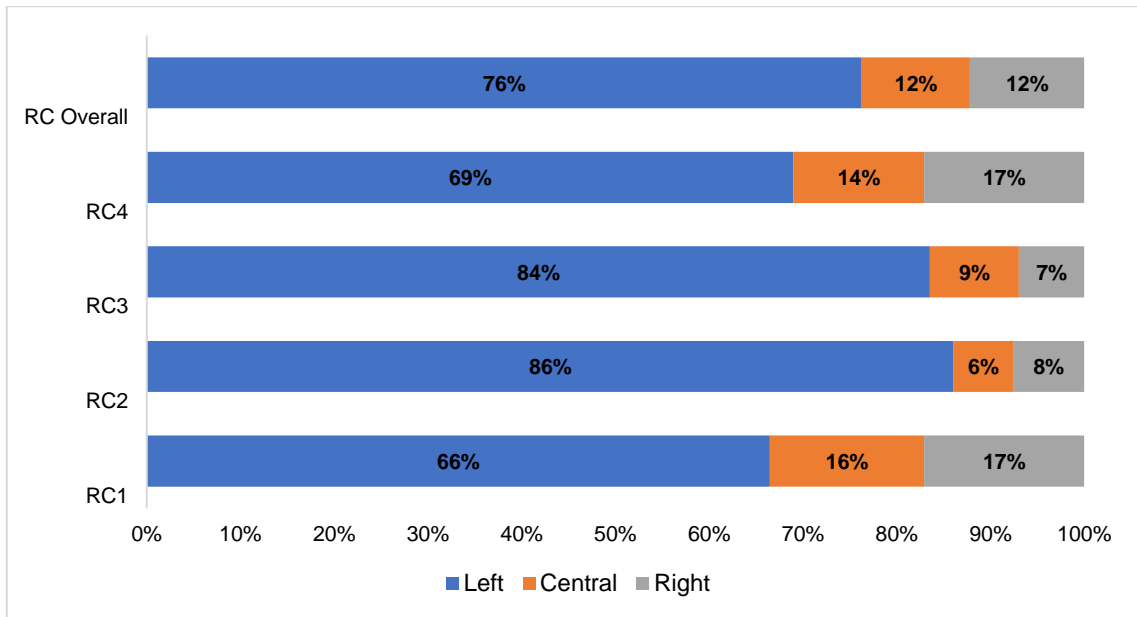
Figure 11: Conflicting expectations in the work situation

As seen in Figure 12, hassle demands (HD) item 5 HD5 which was "I have many hassles to go through to get my work done." with the least agreement, whereas HD1 which was "I have to deal with administrative hassles." with the greatest agreement on.
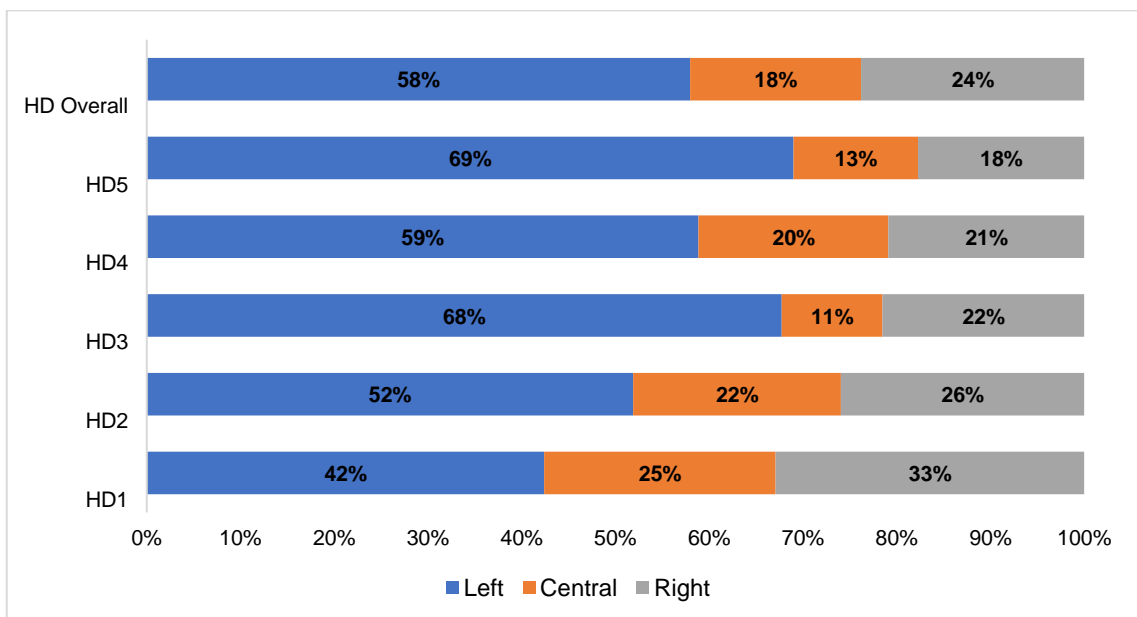
Figure 12: Hassle demands that an individual experiences at work.

5.2.4. Exhaustion

As seen in Figure 13, exhaustion (EX) item 2 EX1 which was "There are days when I feel tired before I arrive at work." with the least agreement, whereas EX2 which was "After work, I tend to need more time than in the past in order to relax and feel better." with the greatest agreement on.
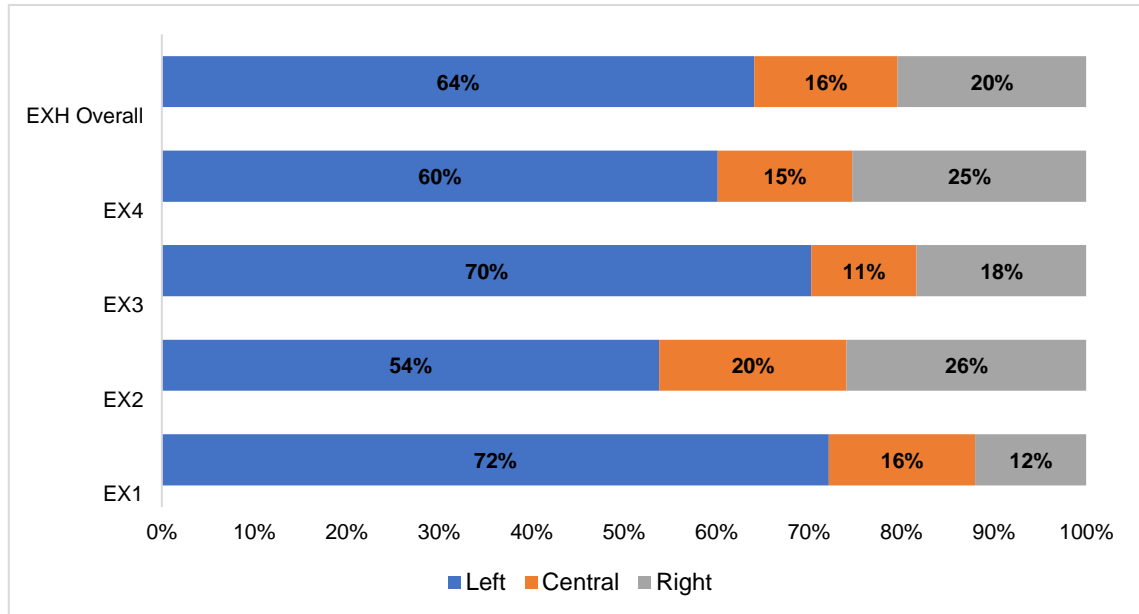
Figure 13: Exhaustion as experienced by an individual at work.

5.2.5. Servant leadership

Figure 14 displays the SL-7 items displayed in a stacking bar graph by grouped responses to show which side they are pulling towards. The grouped areas are 1 to 3 as being left (Disagree), 4 as neutral (Neutral), and 5 to 7 as right (Agree). As depicted below there is a strong sense of self-reported servant leadership amongst the various respondents. Item SL5 which was "I put my subordinates' best interests ahead of my own" with the least agreement, whereas SL1 which was "I can tell if something work-related is going wrong" with the greatest agreement. However, these cannot be analysed individually and would need the full servant leadership questionnaire to analyse each of the dimensions of servant leadership (Liden et al., 2015).
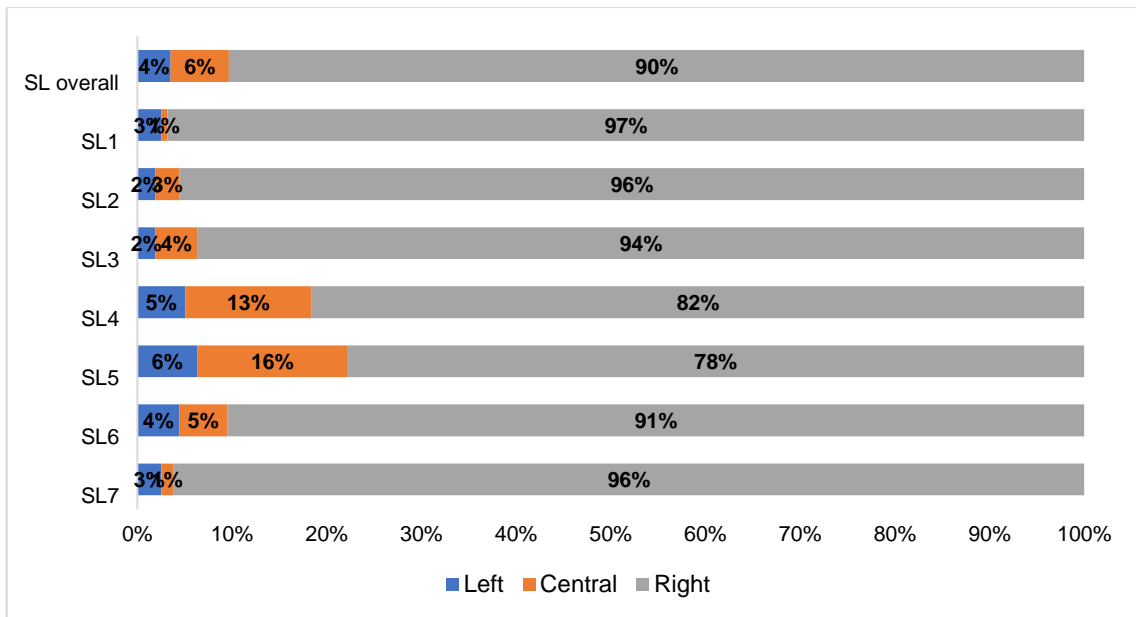
Figure 14: SL-7 items distributed in groupings

5.3. Validity test results

The KMO, Bartlett's test, total variance explained, and the component matrix are used for each construct to determine the data appropriateness, factor extraction, and factor loading.

5.3.1. Servant leadership

Based on the results seen in Table 7, the KMO measure is less than 0.6 at 0.554 which can be considered terrible, however, because the sample size is between 100 to 200 and the value is between 0.5 to 0.6 it is considered acceptable (Shrestha, 2021). Bartlett's p-value is less than 0.05 at 0.000, which means that the sample collected is significant and thus appropriate for Exploratory Factor Analysis (EFA).

Table 7: Servant leadership sample data appropriateness

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.554
Bartlett's Test of Sphericity	Approx. Chi-Square	26.391
	df	3
	Sig.	0,000

Table 8 shows the number of factors extracted by using the principles component analysis (PCA). There are three components identified prior to extraction and one component identified after extraction with an eigenvalue > 1 at 1.467. The one component accounts for 48.9% of the total variance.

Table 8: Servant leadership factors extracted

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	1,467	48,901	48,901	1,467	48,901	48,901
2	0,886	29,548	78,449			
3	0,647	21,551	100,000			

Extraction Method: Principal Component Analysis.

Table 9 illustrates the factor loading for each item. All items are loaded onto one component meaning that the construct is unidimensional. Each of the items has a coefficient value greater than 0.5 which is deemed acceptable. Therefore, it can be concluded that servant leadership exhibits acceptable validity. There are three out of the seven questions that relate to the servant leadership construct. The other four items were excluded as part of the dimension reduction effort to improve reliability as responses by participants showed that the construct had different dimensions contained within the scale. The initial loadings can be seen in Appendix 4, which shows three different dimensions where the scale is supposed to be unidimensional.

Table 9: Servant leadership factor loading

Component Matrix[a]

	Component 1
I make my subordinates' career development a priority.	0,599
I emphasise the importance of giving back to the community.	0,793
I would not compromise ethical principles in order to achieve success.	0,692

Extraction Method: Principal Component Analysis.

a. 1 components extracted.

5.3.2. Job demands

5.3.2.1.   Work pressure

Based on the results seen in Table 10, the KMO measure is greater than 0.6 at 0.710 which is considered acceptable. Bartlett's p-value is less than 0.05 at 0.000, which means that the sample collected is significant and thus appropriate EFA.

Table 10: Work pressure sample data appropriateness

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0,710
Bartlett's Test of Sphericity	Approx. Chi-Square	207,942
	df	6
	Sig.	0,000

Table 11 shows the number of factors extracted by using PCA. There are four components identified prior to extraction and one component identified after extraction with an eigenvalue > 1 at 2.483. The one component accounts for 62.07% of the total variance.

Table 11: Work pressure factors extracted

		Total Variance Explained				
	Initial Eigenvalues			Extraction Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2,483	62,068	62,068	2,483	62,068	62,068
2	0,756	18,904	80,971			
3	0,478	11,940	92,911			
4	0,284	7,089	100,000			

Extraction Method: Principal Component Analysis.

Table 12 illustrates the factor loading for each item. All items are loaded onto one component, meaning that the work pressure construct is unidimensional. Only one item is below 0.8: "Do you have to work at speed?"; however, this is above 0.5 and does not affect validity and is deemed acceptable. Therefore, it can be concluded that work pressure exhibits acceptable validity.

Table 12: Work pressure factor loading

Component Matrix[a]	Component
	1
Do you have to work at speed?	0,629
Do you have too much work to do?	0,807
How often do you have to work extra hard in order to reach a deadline?	0,843
Do you work under time pressure?	0,852

Extraction Method: Principal Component Analysis.

a. 1 components extracted.

5.3.2.2. Cognitive demands

Based on the results seen in Table 13, the KMO measure is greater than 0.6 at 0.616 which is considered acceptable. Bartlett's p-value is less than 0.05 at 0.000, which means that the sample collected is significant and thus appropriate for EFA.

Table 13: Cognitive demands sample data appropriateness

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.616
Bartlett's Test of Sphericity	Approx. Chi-Square	68.646
	df	3
	Sig.	0.000

Table 14 shows the number of factors extracted by using PCA. There are three components identified prior to extraction and one component identified after extraction with an eigenvalue > 1 at 1.769. The one component accounts for 58.98% of the total variance.

Table 14: Cognitive demands factors extracted

Total Variance Explained						
	Initial Eigenvalues			Extraction Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	1,769	58,977	58,977	1,769	58,977	58,977
2	0,752	25,066	84,043			
3	0,479	15,957	100,000			

Extraction Method: Principal Component Analysis.

Table 15 illustrates the factor loading for each item. All items are loaded onto one component, meaning that the cognitive demands construct is unidimensional. Only one item is below 0,8: "Do you regard your work as mentally very straining?"; however, this is above 0,5 and does not affect validity and is deemed acceptable. Therefore, it can be concluded that cognitive demands exhibit acceptable validity.

Table 15: Cognitive demands factor loading

Component Matrix[a]	Component
	2
Does your work require a lot of concentration?	0,810
Does your work demand enhanced care or precision?	0,824
Do you regard your work as mentally very straining?	0,658

Extraction Method: Principal Component Analysis.

a. 1 components extracted.

5.3.2.3.   Emotional demands

Based on the results seen in Table 16, the KMO measure is greater than 0.6 at 0.655 which is considered acceptable. Bartlett's p-value is less than 0.05 at 0.000, which means that the sample collected is significant and thus appropriate for EFA.

Table 16: Emotional demands sample data appropriateness

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0,655
Bartlett's Test of Sphericity	Approx. Chi-Square	113,985
	df	3
	Sig.	0,000

Table 17 shows the number of factors extracted by using PCA. There are three components identified prior to extraction and one component identified after extraction with an eigenvalue > 1 at 2.000. The one component accounts for 66.7% of the total variance.

Table 17: Emotional demands factors extracted

	Total Variance Explained					
	Initial Eigenvalues			Extraction Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2,000	66,670	66,670	2,000	66,670	66,670
2	0,616	20,547	87,217			
3	0,383	12,783	100,000			

Extraction Method: Principal Component Analysis.

Table 18 illustrates the factor loading for each item. All items are loaded onto one component, meaning that the emotional construct is unidimensional. Only one item is below 0.8: "Do you face emotionally charged situations in your work?"; however, this is above 0.5 and does not affect validity and is deemed acceptable. Therefore, it can be concluded that emotional demands exhibit acceptable validity.

Table 18: Emotional demands factor loading

Component Matrixᵃ

	Component 3
Is your work emotionally demanding?	0,870
In your work, are you confronted with things that personally touch you?	0,815
Do you face emotionally charged situations in your work?	0,761

Extraction Method: Principal Component Analysis.

a. 1 components extracted.

5.3.2.4. Emotional client demands

Based on the results seen in Table 19, the KMO measure is greater than 0.6 at 0.659 which is considered acceptable. Bartlett's p-value is less than 0.05 at 0.000, which means that the sample collected is significant and thus appropriate for EFA.

Table 19: Emotional client demands sample data appropriateness

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0,659
Bartlett's Test of Sphericity	Approx. Chi-Square	145,525
	df	3
	Sig.	0,000

Table 20 shows the number of factors extracted by using the principles component analysis (PCA). There are three components identified prior to extraction and one component identified after extraction with an eigenvalue > 1 at 2.108. The one component accounts for 70.26% of the total variance.

Table 20: Emotional client demands factors extracted

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2,108	70,256	70,256	2,108	70,256	70,256
2	0,575	19,183	89,439			
3	0,317	10,561	100,000			

Extraction Method: Principal Component Analysis.

Table 21 illustrates the factor loading for each item. All items are loaded onto one component, meaning that the emotional client demands construct is unidimensional. Only one item is below 0.8: "Do you have to deal with clients who do not treat you

with the appropriate respect and politeness?"; however, this is above 0.5 and does not affect validity and is deemed acceptable. Therefore, it can be concluded that emotional client demands exhibit acceptable validity.

Table 21: Emotional client demands factor loading

Component Matrix[a]

	Component 4
In your work, do you deal with clients who incessantly complain?	0,893
In your work, do you have to deal with demanding clients?	0,834
Do you have to deal with clients who do not treat you with the appropriate respect and politeness?	0,783

Extraction Method: Principal Component Analysis.

a. 1 components extracted.

5.3.2.5. Role conflict

Based on the results seen in Table 22, the KMO measure is greater than 0.6 at 0.747 which is considered acceptable. Bartlett's p-value is less than 0.05 at 0,000, which means that the sample collected is significant and thus appropriate for EFA.

Table 22: Role conflict sample data appropriateness

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0,747
Bartlett's Test of Sphericity	Approx. Chi-Square	155,266
	df	6
	Sig.	0,000

Table 23 shows the number of factors extracted by using the PCA. There are four components identified prior to extraction and one component identified after extraction with an eigenvalue > 1 at 2.342. The one component accounts for 58.54% of the total variance.

Table 23: Role conflict factors extracted

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2,342	58,543	58,543	2,342	58,543	58,543
2	0,749	18,724	77,267			
3	0,495	12,380	89,647			
4	0,414	10,353	100,000			

Extraction Method: Principal Component Analysis.

Table 24 illustrates the factor loading for each item. All items are loaded onto one component, meaning that the role conflict construct is unidimensional. Only one item is below 0.7: "I am unable to fulfill the conflicting expectations of my coworkers."; however, this is above 0.5 and does not affect validity and is deemed acceptable. Therefore, it can be concluded that this work pressure exhibits acceptable validity.

Table 24: Role conflict factor loading

Component Matrix[a]

	Component 5
I receive conflicting requests from two or more people.	0,792
I am unable to fulfill the conflicting expectations of my coworkers.	0,636
The expectations of my colleagues are in conflict.	0,811
At my work, different groups of people expect opposite things from me.	0,808

Extraction Method: Principal Component Analysis.

a. 1 components extracted.

5.3.2.6. Hassles

Based on the results seen in Table 25, the KMO measure is greater than 0.6 at 0.830 which is considered meritorious. Bartlett's p-value is less than 0.05 at 0.000, which means that the sample collected is significant and thus appropriate for EFA.

Table 25: Hassles sample data appropriateness

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0,830
Bartlett's Test of Sphericity	Approx. Chi-Square	325,157
	df	10
	Sig.	0,000

Table 26 shows the number of factors extracted by using PCA. There are five components identified prior to extraction and one component identified after extraction with an eigenvalue > 1 at 3.141. The one component accounts for 62.82% of the total variance.

Table 26: Hassles factors extracted

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3,141	62,816	62,816	3,141	62,816	62,816
2	0,673	13,466	76,282			

3	0,498	9,964	86,246			
4	0,429	8,580	94,826			
5	0,259	5,174	100,000			

Extraction Method: Principal Component Analysis.

Table 27 illustrates the factor loading for each item. All items are loaded onto one component, meaning that the hassles construct is unidimensional. Only one item is below 0.7: "I have to deal with administrative hassles."; however, this is above 0.5 and does not affect validity and is deemed acceptable. Therefore, it can be concluded that hassles exhibit acceptable validity.

Table 27: Hassles factor loading

Component Matrix[a]

	Component 6
I have to deal with administrative hassles.	0,677
I have many hassles to go through to get projects/assignments done.	0,810
I have to go through a lot of red tape to get my job done.	0,787
I am confronted with unexpected hassles at work.	0,806
I have many hassles to go through to get my work done.	0,871

Extraction Method: Principal Component Analysis.

a. 1 components extracted.

5.3.2.7.   Total job demands

Based on the results seen in Table 28, the KMO measure is greater than 0.6 at 0.840 which is considered meritorious. Bartlett's p-value is less than 0.05 at 0.000, which means that the sample collected is significant and thus appropriate for EFA.

Table 28: Total demands sample data appropriateness

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0,840
Bartlett's Test of Sphericity	Approx. Chi-Square	1452.156
	df	231
	Sig.	<,001

Table 29 shows the number of factors extracted by using the PCA. There are six components identified each with an eigenvalue > 1. The six component accounts for 65.59% of the total variance and aligns with the six components that have been discussed above.

Table 29: Total job demands extracted

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	7,145	32,475	32,475	7,145	32,475	32,475
2	2,206	10,028	42,503	2,206	10,028	42,503
3	1,512	6,872	49,376	1,512	6,872	49,376
4	1,313	5,967	55,342	1,313	5,967	55,342
5	1,151	5,232	60,575	1,151	5,232	60,575
6	1,104	5,019	65,594	1,104	5,019	65,594
7	0,825	3,751	69,345			
8	0,796	3,619	72,964			
9	0,744	3,383	76,347			
10	0,633	2,877	79,224			
11	0,592	2,692	81,916			
12	0,528	2,399	84,315			
13	0,474	2,152	86,468			
14	0,467	2,122	88,590			
15	0,439	1,997	90,587			
16	0,417	1,894	92,481			
17	0,381	1,731	94,211			
18	0,326	1,481	95,692			
19	0,305	1,388	97,080			
20	0,291	1,321	98,401			
21	0,213	0,966	99,368			
22	0,139	0,632	100,000			

Extraction Method: Principal Component Analysis.

5.3.3. Exhaustion

Based on the results seen in Table 30, the KMO measure is greater than 0.6 at 0.808 which is considered meritorious. Bartlett's p-value is less than 0.05 at 0,000, which means that the sample collected is significant and thus appropriate for EFA.

Table 30: Exhaustion sample data appropriateness

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0,808
Bartlett's Test of Sphericity	Approx. Chi-Square	364,024
	df	6
	Sig.	0,000

Table 31 shows the number of factors extracted by using PCA. There are four components identified prior to extraction and one component identified after

extraction with an eigenvalue > 1 at 3.011. The one component accounts for 75.27% of the total variance.

Table 31: Exhaustion factors extracted

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3,011	75,272	75,272	3,011	75,272	75,272
2	0,443	11,072	86,344			
3	0,353	8,827	95,171			
4	0,193	4,829	100,000			

Extraction Method: Principal Component Analysis.

Table 32 illustrates the factor loading for each item. All items are loaded onto one component, meaning that the exhaustion construct is unidimensional. No items are below 0.8 with both "There are days when I feel tired before I arrive at work."; and "After work, I tend to need more time than in the past in order to relax and feel better." at the lowest value of 0.841. Therefore, it can be concluded that this work pressure exhibits acceptable validity.

Table 32: Exhaustion factor loading

Component Matrix[a]

	Component 1
There are days when I feel tired before I arrive at work.	0,841
After work, I tend to need more time than in the past in order to relax and feel better.	0,841
During my work, I often feel emotionally drained.	0,884
After my work, I usually feel worn out and weary.	0,903

Extraction Method: Principal Component Analysis.

a. 1 components extracted.

5.4. Reliability test results

5.4.1. Servant leadership

The internal consistency and reliability of servant leadership were determined by calculating the composite reliability (CR) statistic which is required to be greater than 0,7. As seen in Table 33, after the dimension reduction of items SL1, SL3, SL5, and SL6 the CR increased from 0,646 to 0,740 which is deemed acceptable.

Table 33: Servant leadership composite reliability

Construct		Measured variables	Loadings	
			Initial	Final
Servant leadership	SL1	I can tell if something work-related is going wrong.	-.074	-
	SL2	I make my subordinates' career development a priority.	0.630	0.599
	SL3	I would offer help to my subordinates if they had a personal problem.	0.420	-
	SL4	I emphasise the importance of giving back to the community.	0.701	0.793
	SL5	I put my subordinates' best interests ahead of my own.	0.584	-
	SL6	I give my subordinates the freedom to handle difficult situations in the way that they feel is best.	0.393	-
	SL7	I would not compromise ethical principles in order to achieve success.	0.442	0.692
		Composite reliability (CR)	0.646	0.740

5.4.2. Job demands

5.4.2.1. Work pressure

The internal consistency and reliability of work pressure were determined by calculating the CR statistic which is required to be greater than 0,7. Table 34 demonstrates a CR statistic of 0,866 which is deemed acceptable.

Table 34: Work pressure composite reliability

Construct		Measured variables	Loadings	
			Initial	Final
Job Demands: Work Pressure	WP1	Do you have to work at speed?	0.629	
	WP2	Do you have too much work to do?	0.807	
	WP3	How often do you have to work extra hard in order to reach a deadline?	0.843	
	WP4	Do you work under time pressure?	0.852	
		Composite reliability (CR)	0.866	

5.4.2.2. Cognitive demands

The internal consistency and reliability of work pressure were determined by calculating the CR statistic which is required to be greater than 0,7. Table 35 demonstrates a CR statistic of 0,810 which is deemed acceptable.

Table 35: Cognitive demands composite reliability

Construct		Measured variables	Loadings	
			Initial	Final
Job Demands: Cognitive Demands	CD1	Does your work require a lot of concentration?	0.810	
	CD2	Does your work demand enhanced care or precision?	0.824	
	CD3	Do you regard your work as mentally very straining?	0.658	
		Composite reliability (CR)	0.810	

5.4.2.3. Emotional demands

The internal consistency and reliability of emotional demands were determined by calculating the CR statistic which is required to be greater than 0,7. Table 36 demonstrates a CR statistic of 0,857 which is deemed acceptable.

Table 36: Emotional demands composite reliability

Construct		Measured variables	Loadings	
			Initial	Final
Job Demands: Emotional Demands	ED1	Is your work emotionally demanding?	0.870	
	ED2	In your work, are you confronted with things that personally touch you?	0.815	
	ED3	Do you face emotionally charged situations in your work?	0.761	
		Composite reliability (CR)	0.857	

5.4.2.4. Emotional client demands

The internal consistency and reliability of emotional client demands were determined by calculating the CR statistic which is required to be greater than 0,7. Table 37 demonstrates a CR statistic of 0,876 which is deemed acceptable.

Table 37: Emotional client demands composite reliability

Construct		Measured variables	Loadings	
			Initial	Final
Job Demands: Emotional Client Demands	ED4	In your work, do you deal with clients who incessantly complain?	0.893	
	ED5	In your work, do you have to deal with demanding clients?	0.834	
	ED6	Do you have to deal with clients who do not treat you with the appropriate respect and politeness?	0.783	
		Composite reliability (CR)	0.876	

5.4.2.5. Role conflict

The internal consistency and reliability of role conflict demands were determined by calculating the CR statistic which is required to be greater than 0,7. Table 38 demonstrates a CR statistic of 0,849 which is deemed acceptable.

Table 38: Role conflict composite reliability

Construct		Measured variables	Loadings	
			Initial	Final
Job Demands: Role Conflict	RC1	I receive conflicting requests from two or more people.	0.792	
	RC2	I am unable to fulfill the conflicting expectations of my coworkers.	0.636	
	RC3	The expectations of my colleagues are in conflict.	0.811	
	RC4	At my work, different groups of people expect opposite things from me.	0.808	
		Composite reliability (CR)	0.849	

5.4.2.6. Hassles

The internal consistency and reliability of role conflict demands were determined by calculating the CR statistic which is required to be greater than 0,7. Table 39 demonstrates a CR statistic of 0,894 which is deemed acceptable.

Table 39: Hassles composite reliability

Construct		Measured variables	Loadings	
			Initial	Final
Job Demands: Hassles	HD1	I have to deal with administrative hassles.	0.677	
	HD2	I have many hassles to go through to get projects/assignments done.	0.810	
	HD3	I have to go through a lot of red tape to get my job done.	0.787	
	HD4	I am confronted with unexpected hassles at work.	0.806	
	HD5	I have many hassles to go through to get my work done.	0.871	
		Composite reliability (CR)	0.894	

5.4.2.7. Total job demands

The internal consistency and reliability of the total construct job demands were determined by calculating the CR statistic which is required to be greater than 0,7. Table 40 demonstrates a CR statistic of 0.974 which is deemed acceptable.

Table 40: Job demands composite reliability

Construct		Measured variables	Loadings	
			Initial	Final
Total job demands	WP1	Do you have to work at speed?	0.629	
	WP2	Do you have too much work to do?	0.807	
	WP3	How often do you have to work extra hard in order to reach a deadline?	0.843	
	WP4	Do you work under time pressure?	0.852	
	CD1	Does your work require a lot of concentration?	0.810	
	CD2	Does your work demand enhanced care or precision?	0.824	
	CD3	Do you regard your work as mentally very straining?	0.658	
	ED1	Is your work emotionally demanding?	0.870	
	ED2	In your work, are you confronted with things that personally touch you?	0.815	
	ED3	Do you face emotionally charged situations in your work?	0.761	
	ED4	In your work, do you deal with clients who incessantly complain?	0.893	
	ED5	In your work, do you have to deal with demanding clients?	0.834	
	ED6	Do you have to deal with clients who do not treat you with the appropriate respect and politeness?	0.783	
	RC1	I receive conflicting requests from two or more people.	0.792	
	RC2	I am unable to fulfill the conflicting expectations of my coworkers.	0.636	
	RC3	The expectations of my colleagues are in conflict.	0.811	
	RC4	At my work, different groups of people expect opposite things from me.	0.808	
	HD1	I have to deal with administrative hassles.	0.677	
	HD2	I have many hassles to go through to get projects/assignments done.	0.810	
	HD3	I have to go through a lot of red tape to get my job done.	0.787	
	HD4	I am confronted with unexpected hassles at work.	0.806	
	HD5	I have many hassles to go through to get my work done.	0.871	
		Composite reliability (CR)	0.974	

5.4.3. Exhaustion

The internal consistency and reliability of role conflict demands were determined by calculating the CR statistic which is required to be greater than 0,7. Table 41 demonstrates a CR statistic of 0,924 which is deemed acceptable.

Table 41: Exhaustion composite reliability

Construct		Measured variables	Loadings	
			Initial	Final
Well-being: Exhaustion	EX1	There are days when I feel tired before I arrive at work.	0.841	
	EX2	After work, I tend to need more time than in the past in order to relax and feel better.	0.841	
	EX3	During my work, I often feel emotionally drained.	0.884	
	EX4	After my work, I usually feel worn out and weary.	0.903	
		Composite reliability (CR)	0.924	

5.5. Normality test results

A review of the skewness and kurtosis statistics was conducted to determine if the data for each of the constructs within the scales were normally distributed. These two statistics are required to fall within the range of -2 to +2 to be considered acceptable.

5.5.1. Servant leadership

As seen in Table 42 below, the skewness statistics are -1,105 and the kurtosis statistic is 1,746, both of which fall within the acceptable range. This suggests that the data for servant leadership follows a normal distribution within the acceptable range and can be used for inferential statistics. Two responses that were significant outliers had to be removed as seen in Appendix 5 the Box and Whisker plot to ensure normality for servant leadership.

Table 42: Servant leadership normality descriptives

Descriptives

			Statistic	Std. Error
Servant_Leadership	Mean		6,16558	0,050711
	95% Confidence Interval for Mean	Lower Bound	6,06539	
		Upper Bound	6,26577	
	5% Trimmed Mean		6,21302	
	Median		6,33333	
	Variance		0,393	
	Std. Deviation		0,627261	
	Minimum		4,000	
	Maximum		7,000	
	Range		3,000	
	Interquartile Range		0,667	
	Skewness		-1,105	0,196
	Kurtosis		1,746	0,390

As seen in Figure 15 below, shows that the actual distribution is close to the expected normality indicating an approximately normal distribution.

Figure 15: Q-Q Plot servant leadership

5.5.2. Job demands

5.5.2.1. Work pressure

As seen in Table 43, the skewness statistics are -0,211 and the kurtosis statistic is -0,843, both of which fall within the acceptable range. This suggests that the data for work pressure follows a normal distribution within the acceptable range and can be used for inferential statistics.

Table 43: Work pressure normality descriptives

Descriptives

			Statistic	Std. Error
Work_Pressure	Mean		3.7179	.06636
	95% Confidence Interval for Mean	Lower Bound	3.5869	
		Upper Bound	3.8490	
	5% Trimmed Mean		3.7354	
	Median		3.7500	
	Variance		.687	
	Std. Deviation		.82878	
	Minimum		1.75	
	Maximum		5.00	
	Range		3.25	
	Interquartile Range		1.25	
	Skewness		-.211	.194
	Kurtosis		-.843	.386

As seen in Figure 15 below, shows that the actual distribution is close to the expected normality indicating an approximately normal distribution.

Figure 16: Q-Q Plot work pressure

5.5.2.2.   Cognitive demands

As seen in Table 44, the skewness statistics are -0,567 and the kurtosis statistic is -0,345, both of which fall within the acceptable range. This suggests that the data for cognitive demands follows a normal distribution within the acceptable range and can be used for inferential statistics.

Table 44: Cognitive demands normality descriptives

Descriptives

			Statistic	Std. Error
Cognitive_Demand	Mean		3.9423	.05957
	95% Confidence Interval for Mean	Lower Bound	3.8246	
		Upper Bound	4.0600	
	5% Trimmed Mean		3.9758	
	Median		4.0000	
	Variance		.554	
	Std. Deviation		.74407	
	Minimum		2.00	
	Maximum		5.00	
	Range		3.00	
	Interquartile Range		1.17	
	Skewness		-.555	.194
	Kurtosis		-.347	.386

As seen in Figure 17 below, shows that the actual distribution is close to the expected normality indicating an approximately normal distribution.
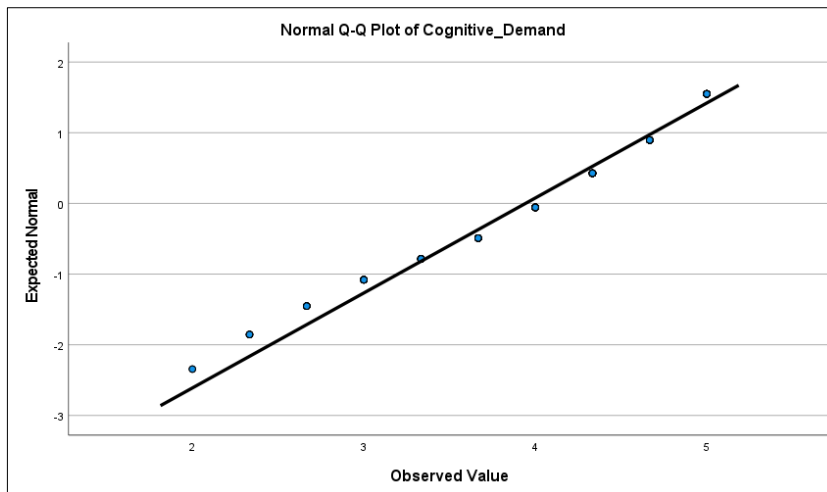
Figure 17: Q-Q Plot cognitive demands

5.5.2.3.   Emotional demands

As seen in Table 45, the skewness statistics are 0,458 and the kurtosis statistic is -0,462, both of which fall within the acceptable range. This suggests that the data for emotional demands follows a normal distribution within the acceptable range and can be used for inferential statistics.

Table 45: Emotional demands normality descriptives

Descriptives

			Statistic	Std. Error
Emotionally_Demanding	Mean		2.8590	.07038
	95% Confidence Interval for Mean	Lower Bound	2.7199	
		Upper Bound	2.9980	
	5% Trimmed Mean		2.8314	
	Median		2.6667	
	Variance		.773	
	Std. Deviation		.87910	
	Minimum		1.00	
	Maximum		5.00	
	Range		4.00	
	Interquartile Range		1.33	
	Skewness		.458	.194
	Kurtosis		-.462	.386

As seen in Figure 18 below, shows that the actual distribution is close to the expected normality indicating an approximately normal distribution.
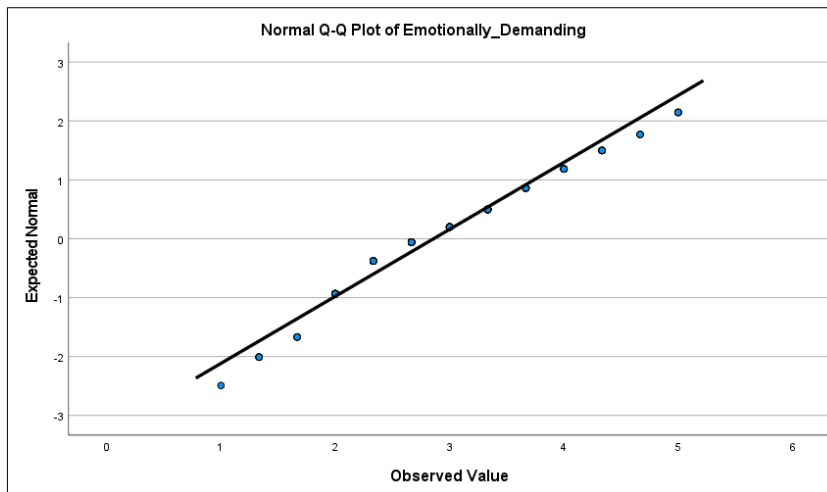
Figure 18: Q-Q Plot emotional demands

5.5.2.4.   Emotional Client demands

As seen in Table 46, the skewness statistics are 0,304 and the kurtosis statistic is -0,495, both of which fall within the acceptable range. This suggests that the data for emotional client demands follows a normal distribution within the acceptable range and can be used for inferential statistics.

Table 46: Emotional client demands normality descriptives

Descriptives

			Statistic	Std. Error
Client_Demands	Mean		2.9402	.07612
	95% Confidence Interval for Mean	Lower Bound	2.7898	
		Upper Bound	3.0905	
	5% Trimmed Mean		2.9264	
	Median		2.8333	
	Variance		.904	
	Std. Deviation		.95075	
	Minimum		1.00	
	Maximum		5.00	
	Range		4.00	
	Interquartile Range		1.33	
	Skewness		.304	.194
	Kurtosis		-.495	.386

As seen in Figure 19 below, shows that the actual distribution is close to the expected normality indicating an approximately normal distribution.
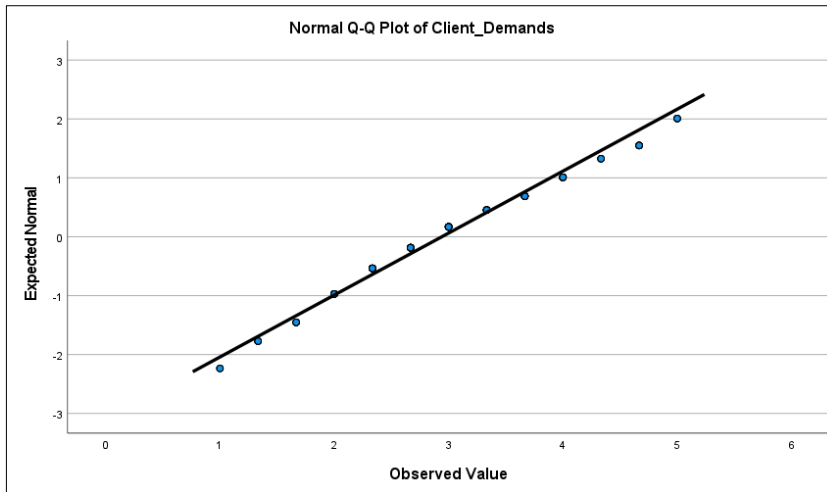
Figure 19: Q-Q Plot emotional client demands

5.5.2.5. Role conflict

As seen in Table 47, the skewness statistics are 0,969 and the kurtosis statistic is 0,850, both of which fall within the acceptable range. This suggests that the data for role conflict follows a normal distribution within the acceptable range and can be used for inferential statistics.

Table 47: Role conflict normality descriptives

Descriptives

			Statistic	Std. Error
Role_Conflicts	Mean		2.1923	.05499
	95% Confidence Interval for Mean	Lower Bound	2.0837	
		Upper Bound	2.3009	
	5% Trimmed Mean		2.1524	
	Median		2.0000	
	Variance		.472	
	Std. Deviation		.68677	
	Minimum		1.00	
	Maximum		4.50	
	Range		3.50	
	Interquartile Range		.75	
	Skewness		.969	.194
	Kurtosis		.850	.386

As seen in Figure 20 below, shows that the actual distribution is close to the expected normality indicating an approximately normal distribution.
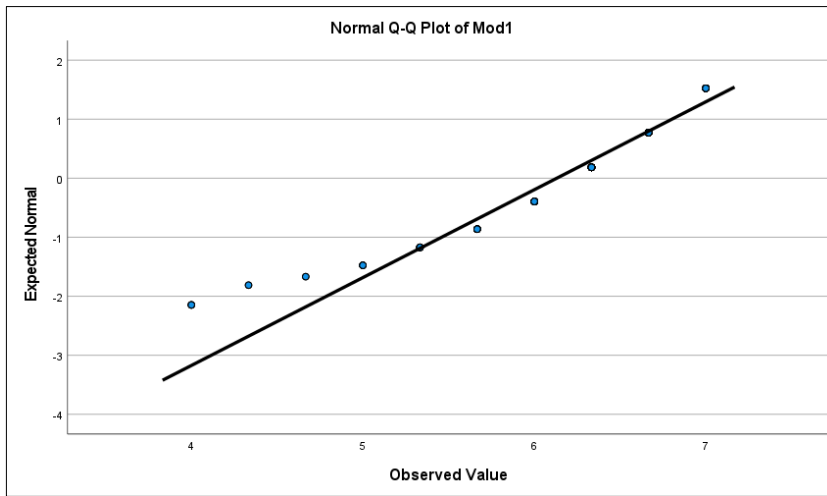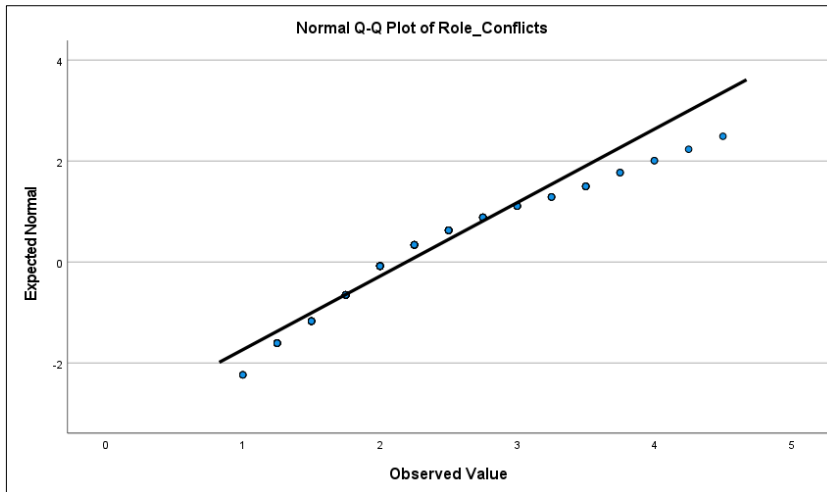
Figure 20: Q-Q Plot role conflict

5.5.2.6. Hassles

As seen in Table 48, the skewness statistics are 0,794 and the kurtosis statistic is 0,333, both of which fall within the acceptable range. This suggests that the data for hassles follows a normal distribution within the acceptable range and can be used for inferential statistics.

Table 48: Hassles normality descriptives

Descriptives

			Statistic	Std. Error
Hassles	Mean		2.6346	.06569
	95% Confidence Interval for Mean	Lower Bound	2.5049	
		Upper Bound	2.7644	
	5% Trimmed Mean		2.5912	
	Median		2.4000	
	Variance		.673	
	Std. Deviation		.82044	
	Minimum		1.00	
	Maximum		5.00	
	Range		4.00	
	Interquartile Range		1.20	
	Skewness		.794	.194
	Kurtosis		.333	.386

As seen in Figure 21 below, shows that the actual distribution is close to the expected normality indicating an approximately normal distribution.
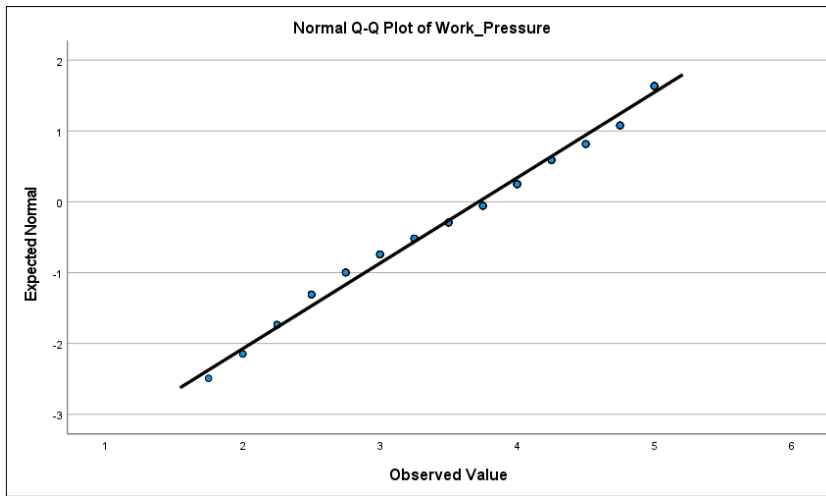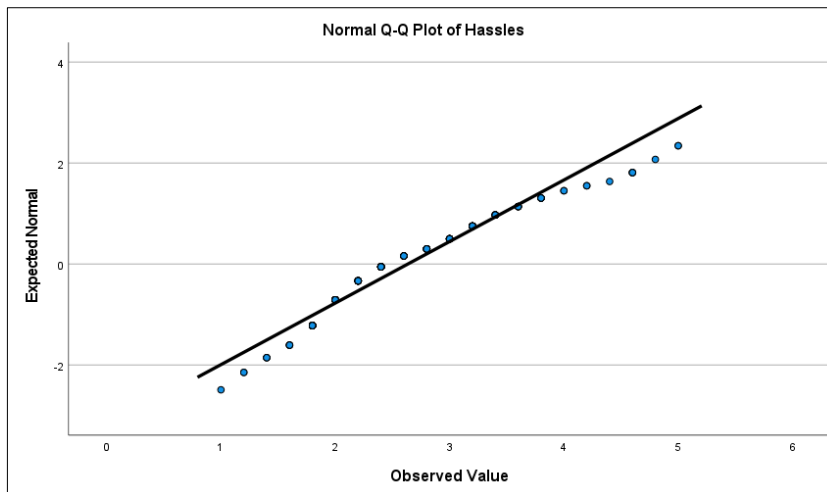
Figure 21: Q-Q Plot hassles

5.5.3. Exhaustion

As seen in Table 49, the skewness statistics are 0.902 and the kurtosis statistic is 0.118, both of which fall within the acceptable range. This suggests that the data for exhaustion follows a normal distribution within the acceptable range and can be used for inferential statistics.

Table 49: Exhaustion normality descriptives

Descriptives

			Statistic	Std. Error
Exhaustion	Mean		2.4712	.07599
	95% Confidence Interval for Mean	Lower Bound	2.3210	
		Upper Bound	2.6213	
	5% Trimmed Mean		2.4192	
	Median		2.2500	
	Variance		.901	
	Std. Deviation		.94909	
	Minimum		1.00	
	Maximum		5.00	
	Range		4.00	
	Interquartile Range		1.19	
	Skewness		.902	.194
	Kurtosis		.118	.386

As seen in Figure 22 below, shows that the actual distribution is close to the expected normality indicating an approximately normal distribution.
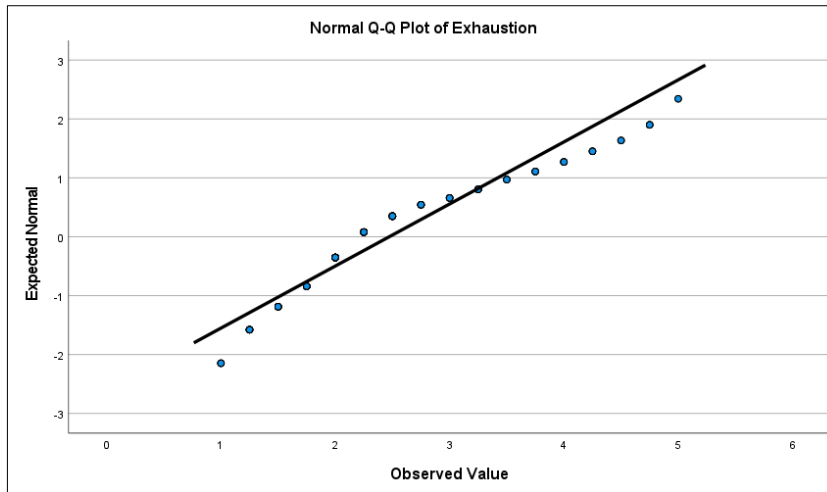
Figure 22: Q-Q Plot exhaustion

5.6. Correlation

As seen in Table 50, all variables are correlated with exhaustion in column 1 with respective Pearson correlation coefficients. Work pressure at 0.317 has a moderate correlation with exhaustion. Cognitive demands at 0.255 have a low correlation with exhaustion. Emotional demands at 0.482 have a moderate correlation with exhaustion. Emotional client demands at 0.233 have a low correlation with exhaustion. Role conflict at 0.396 has a moderate correlation with exhaustion. Hassles at 0.509 has a high correlation with exhaustion. Servant leadership at -0.040 does not correlate with exhaustion. It can be concluded, that all job demands have a positive correlation with exhaustion and the moderator servant leadership does not which is expected. The full correlation table can be found in Appendix 6.

Table 50: Correlation results table

		Mean	SD	1	2	3	4	5	6	7	8
1	Exhaustion	2.47	0.95	(.924)							
2	Work Pressure	3.72	0.83	.317**	(.894)						
3	Cognitive Demands	3.94	0.74	.255**	.541**	(.849)					
4	Emotional Demands	2.86	0.88	.482**	.413**	.403**	(.876)				
5	Emotional Client Demands	2.94	0.95	.233**	.296**	.254**	.462**	(.857)			
6	Role Conflicts	2.19	0.69	.396**	.341**	.226**	.427**	.420**	(.810)		
7	Hassles	2.64	0.82	.509**	.430**	.312**	.526**	.440**	.552**	(.866)	
8	Mod1: SL			-0.040	.160*	0.057	0.036	.168*	.161*	0.052	(.740)

Numbers in parentheses on the diagonal are composite reliability. All correlations above |.20| are significant at p<0.05. *. Correlation is significant at the 0.05 level (2-tailed). **. Correlation is significant at the 0.01 level (2-tailed).

5.7.   Individual regressions

As seen in Table 51, the enter method was used and there were no variables removed.

Table 51: Variables entered/removed regression

Variables Entered/Removed[a]

Model	Variables Entered	Variables Removed	Method
1	Job_Demands[b]	.	Enter

a. Dependent Variable: Exhaustion

b. All requested variables entered.

As seen in Table 52, the Adjusted R Square is 0,276. This means that 27.6% of the factor job demands can be predicted.

Table 52: Model summary regression

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.525[a]	.276	.271	.81043	1.595

a. Predictors: (Constant), Job_Demands

b. Dependent Variable: Exhaustion

As seen in Table 53, the significant value is less than 0.05 making this a good useable model.

Table 53: ANOVA job regression

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	38.475	1	38.475	58.580	<,001[b]
	Residual	101.146	154	.657		
	Total	139.620	155			

a. Dependent Variable: Exhaustion

b. Predictors: (Constant), Job_Demands

As seen in Table 54, the independent variable job demands are less than 0.05 making it significant. The Beta is 0.525 indicating a large positive relationship. It can

be concluded and stated with 95% confidence that the independent variable job demands are a significant contributor to the dependent variable exhaustion.

Table 54: Coefficients regression

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.094	.341		-.276	.783
	Job_Demands	.855	.112	.525	7.654	<,001

a. Dependent Variable: Exhaustion

5.8. Moderated regressions

As seen in Table 55, the enter method was used and there were no variables removed.

Table 55: Variables entered/removed moderated regression

Variables Entered/Removed[a]

Model	Variables Entered	Variables Removed	Method
1	MC_Hassles, MC_Cognitive_Demands, MC_Client_Demands, MC_Role_Conflicts, MC_Work_Pressure, MC_Emotionally_Demanding[b]	.	Enter
2	MC_Mod1[b]	.	Enter
3	Mod1_MC_Cognitive_Demands, Mod1_MC_Client_Demands, Mod1_MC_Work_Pressure, Mod1_MC_Hassles, Mod1_MC_Role_Conflicts, Mod1_MC_Emotionally_Demanding[b]	.	Enter

a. Dependent Variable: MC_Exhaustion

b. All requested variables entered.

As seen in Table 56, for model 1 the Adjusted R Square is 0.314. This means that 31.4% of the factors can be predicted. For model 2, the Adjusted R Square is 0.316, which means that 31.6% of the factors can be predicted. For model 3, the Adjusted R Square is 0.294, which means that 29.4% of the factors can be predicted.

Table 56: Model summary moderated regression

Model Summary[d]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change	Durbin-Watson
1	.584[a]	.341	.314	.786092	.341	12.824	6	149	<,001	
2	.589[b]	.347	.316	.784882	.006	1.460	1	148	.229	
3	.595[c]	.354	.294	.797250	.007	.241	6	142	.962	1.557

a. Predictors: (Constant), MC_Hassles, MC_Cognitive_Demands, MC_Client_Demands, MC_Role_Conflicts, MC_Work_Pressure, MC_Emotionally_Demanding

b. Predictors: (Constant), MC_Hassles, MC_Cognitive_Demands, MC_Client_Demands, MC_Role_Conflicts, MC_Work_Pressure, MC_Emotionally_Demanding, MC_Mod1

c. Predictors: (Constant), MC_Hassles, MC_Cognitive_Demands, MC_Client_Demands, MC_Role_Conflicts, MC_Work_Pressure, MC_Emotionally_Demanding, MC_Mod1, Mod1_MC_Cognitive_Demands, Mod1_MC_Client_Demands, Mod1_MC_Work_Pressure, Mod1_MC_Hassles, Mod1_MC_Role_Conflicts, Mod1_MC_Emotionally_Demanding

d. Dependent Variable: MC_Exhaustion

As seen in Table 57, all three models have a significant value that is less than 0.05 making this a good useable model.

Table 57: ANOVA moderated regression

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	47.547	6	7.925	12.824	<,001[b]
	Residual	92.073	149	.618		
	Total	139.620	155			
2	Regression	48.446	7	6.921	11.234	<,001[c]
	Residual	91.174	148	.616		
	Total	139.620	155			
3	Regression	49.364	13	3.797	5.974	<,001[d]
	Residual	90.256	142	.636		
	Total	139.620	155			

a. Dependent Variable: MC_Exhaustion

b. Predictors: (Constant), MC_Hassles, MC_Cognitive_Demands, MC_Client_Demands, MC_Role_Conflicts, MC_Work_Pressure, MC_Emotionally_Demanding

c. Predictors: (Constant), MC_Hassles, MC_Cognitive_Demands, MC_Client_Demands, MC_Role_Conflicts, MC_Work_Pressure, MC_Emotionally_Demanding, MC_Mod1

d. Predictors: (Constant), MC_Hassles, MC_Cognitive_Demands, MC_Client_Demands, MC_Role_Conflicts, MC_Work_Pressure, MC_Emotionally_Demanding, MC_Mod1, Mod1_MC_Cognitive_Demands, Mod1_MC_Client_Demands, Mod1_MC_Work_Pressure, Mod1_MC_Hassles, Mod1_MC_Role_Conflicts, Mod1_MC_Emotionally_Demanding

As seen in Table 58, model 1 shows that only emotional demands and hassles are significant with a p-value less than 0.05. In model 2, emotional demands and hassles are significant, whereas role conflict is marginally significant. In model 3, emotional demands and hassles are significant, whereas role conflict is marginally significant. There is no interaction effect for any of the job demands with servant leadership that are significant. It can be concluded that servant leadership does not have any moderator effect on the various job demands and exhaustion that is of significance. Appendix 7 comprises the full output with applicable p-values.

Table 58: Moderation regression results table

	Exhaustion		
	Model 1	Model 2	Model 3
Job Demands			
Work Pressure	0.044	0.058	0.047
Cognitive Demands	0.017	0.014	0.024
Emotional Demands	0.289**	0.281**	0.291**
Emotional Client Demands	-0.108	-0.094	-0.099
Role Conflicts	0.129	0.141†	0.155†
Hassles	0.309**	0.300**	0.285**
Servant Leadership			
Mod1		-0.083	-0.093
Interaction Effects			
Mod1*Work Pressure			0.02
Mod1*Cognitive Demands			-0.036
Mod1*Emotional Demands			0.029
Mod1*Client Demands			-0.028
Mod1*Role Conflicts			-0.08
Mod1*Hassles			0.083
F-Statistic	12.824	11.234	5.974
R2	0.341	0.347	0.354
Δ R2		0.006	0.007

†p<.10, *p<.05, **<.01, ***<.001

5.9. Model results

Table 59 summarises the results of the various statistical results stipulated.

Table 59: Hypotheses summarised result

Hypothesis	Supported	Comment
H_1	Fully	The significance of the regression results thus hypothesis was accepted
H_{2a}	None	No significance of the moderation results thus hypothesis was rejected
H_{2b}	None	No significance of the moderation results thus hypothesis was rejected
H_{2c}	Fully	The significance of the regression results thus hypothesis was accepted
H_{2d}	None	No significance of the moderation results thus hypothesis was rejected
H_{2e}	Fully	The significance of the regression results thus hypothesis was accepted
H_2	None	No significance of the moderation results thus hypothesis was rejected
H_{2a}	None	No significance of the moderation results thus hypothesis was rejected
H_{2b}	None	No significance of the moderation results thus hypothesis was rejected
H_{2c}	None	No significance of the moderation results thus hypothesis was rejected
H_{2d}	None	No significance of the moderation results thus hypothesis was rejected
H_{2e}	None	No significance of the moderation results thus hypothesis was rejected

5.10. Conclusion

In this chapter, results were presented that described the data, reviewed the quality of the data, and answered the seven hypotheses proposed. The data collected and that was subject to the test first went through various quality checks such as validity, reliability, and normality to ensure that it was suitable for the different statistical testing. Correlation, simple regression, and moderator regression tests were used to answer each of the hypotheses presented in Chapter 3. The study resulted in two sets of hypotheses of which each contained 5 sub-set of hypotheses. H_1 hypothesised that job demands have a positive effect on exhaustion each with. H_2 hypothesised that the moderator servant leadership would strengthen the relationship between the independent variable job demands and exhaustion.

According to the results, there is evidence which supports the hypothesis that a leader's job demands positively relate to exhaustion, however, there we specific job demands that were only accepted there is no evidence that servant leadership positively moderators the relationship between a supply chain leader's job demands and exhaustion. These results will be discussed in more detail in the next chapter referring back to literature covered in Chapter 2.

6. Chapter 6: Discussion of results

6.1. Introduction

This chapter provides a comprehensive discussion of the results presented in Chapter 5. The chapter will begin with a discussion of the descriptive statistics of the 156 responses analysed; providing an overview of the sample data collected. Following this, there is a detailed discussion of the two primary hypotheses, as well as, the five sub-hypotheses which examined the relationship between job demands, servant leadership, and exhaustion. Each hypothesis will be used to compare the results to the literature and assist in determining whether they corroborate, extend, or deviate from the JD-R and servant leadership theories.

6.2. Descriptive statistics overview

The descriptive statistics were able to provide interesting insights into the sample collected. Out of the 192, a total of 156 responses were valid for the study to be able to answer the research question and seven hypotheses. The sample obtained shows a certain degree of diversity across the various demographics data collected, except for gender and level of education, which had notable disparities.

The two questions where the data had a noticeable skew were gender and level of education. Gender was notably skewed towards male respondents constituting 65% of the total sample valid. This skew may suggest that there could be a possibility of bias where gender-related behavioural differences may affect results. The second noticeable skew in the demographics was the level of education. The majority, of which were 50% of the respondents, had post-graduate degrees, which may affect results compared to a more split education level for this study. It is noted that these skews may create biases in the findings, however, this is not the focus of the study and their impact will not be unpacked further.

The other demographics namely: age, number of years of leadership experience, number of people supervised, level of education, and the industry in which they work were more evenly distributed. For example, the average age of the sample collected was 44 years; however, this was relatively evenly spread across age groups where ages from 25 to 54 constituted 80% of the total sample collected. Similarly, the average number of years of leadership experience was 13; however, this was relatively evenly distributed amongst the years of experience, allowing different views to be incorporated into the data. Therefore, the data collected, except for gender and

level of education, was relatively unbiased and balanced in demographics ensuring a diverse array of perspectives and minimising potential biases in the data.

6.3. Hypothesis discussions

6.3.1. Hypothesis 1: Job demands and exhaustion discussion

The first hypothesis that was formulated was to ensure that the collected data aligned with the established theory of the JD-R model; which underpinned the study. According to the theory, as job demands increase, so does exhaustion (Bakker & de Vries, 2021; Bakker & Demerouti, 2007b; Lesener et al., 2019b). Therefore, to establish that this was evident within the data collected, the following hypothesis was formulated:

H_1: Job demands are positively related to exhaustion for supply chain leaders.

The statistical summary seen in Table 60 shows that job demands are significant in predicting exhaustion among supply chain leaders. This is further supported by the beta value of 0.525, signifying a strong positive correlation. Based on the findings, it can be concluded that there is a positive relationship between job demands and exhaustion. Therefore, H1 can be accepted, which corroborates the existing theory of the JD-R model that an increase in job demands relates to an increase in exhaustion (Bakker & de Vries, 2021; Bakker & Demerouti, 2007b; Lesener et al., 2019b).

Table 60: Hypothesis 1 summarised results

Test	Hypothesis	Variable	Mean	Midpoint of scale	Sig.	Standardized Coefficients Beta
Simple regression	H1	Job demands	3.00	3.00	<.001b	.525

*p-value < 0.05

The mean of the total job demands was 3.00, indicating that supply chain leaders were neutral in their perceived level of job demands, indicating they were neither high nor low. This neither confirms nor denies the research problem indicating that supply chain leaders are presently facing intensified job demands because of the current dynamic business environment (Jones, 2022; Sirtori-Cortina, 2022).

The overall independent variable had a main effect on the dependent variable; however, to gain a deeper understanding, it is important to review each of the underlying job demands and their effect on exhaustion relating to supply chain

leaders. In summary, the formulated hypothesis H1 is supported by results and reinforces the existing theory on job demands and how they positively relate to exhaustion. However, it is not known at this time what the result for each of the various job demands on exhaustion is in particular for supply chain leaders. This will be delved into, in the subsequent section, by discussing the various sub-hypotheses H1a, H1b, H1c, H1d, and H1e.

6.3.1.1. Hypothesis 1a: Work pressure and exhaustion discussion

The first sub-hypothesis was formulated to confirm that supply chain leaders are facing job demands relating to work pressure. Work pressure is one of the five job demands that were tested as per the job demands and resource questionnaire (Bakker, 2014b). As observed through the problem formulation, leaders with a focus on supply chains are facing increased work pressure because of the expectation to do more with less and work longer hours (Jones, 2022).

This has been particularly evident for supply chain leaders who have had to contend with complex and volatile supply chains that have been subject to disruptions for the past four years, as well as reduced resources in the form of employees due to events such as the Great resignation, and while simultaneously having to lead a team of people (Rowsell, 2022; Stalk & Mercier, 2022). Therefore, the below hypothesis H_{1a} was formulated around the job demand known as work pressure.

H_{1a}: Work pressures are positively related to exhaustion for supply chain leaders.

The statistical summary seen in Table 61 shows that work pressure is not significant in predicting exhaustion among supply chain leaders. This is further supported by a low beta value of 0.044, signifying a weak positive correlation. Based on the findings, it can be concluded that there is no significant positive relationship between work pressure and exhaustion and as such H_{1a} can be rejected.

Table 61: Hypothesis 1a summarised results

Test	Hypothesis	Variable	Mean	Midpoint of scale	Sig.	Standardized Coefficients Beta
Moderated regression	H1a	Work pressure	3.72	3	.606	.044

*p-value < 0.05

Table 61 shows that the mean score for the 156 responses for work pressure was 3.72 which is the second highest out of the five job demands, which can be seen in

Appendix 8. This indicates that work pressure is trending towards often, which aligns with the information gathered in the research problem. However, what is interesting to note is that even though this is a higher perceived work pressure and job demand for supply chain leaders, it does not predict exhaustion for them as indicated by the results.

This lack of significance and the higher mean statistical results for work pressure seem contradictory to the theory of the JD-R model which says that when there is an increase in job demands there is a related increase in exhaustion (Bakker et al., 2023). However, it relates to the second part of the JD-R model which specifies that if these supply chain leaders are equipped to handle challenging work circumstances in the form of job resources, there will be reduced results of exhaustion as experienced by the supply chain leader (Bakker & de Vries, 2021; Schaufeli, 2017). Therefore, this can create a buffering effect on job demands and it might be that the supply chain leader has developed the resources to be able to negate the higher job demands, thus creating no significant effect on exhaustion. The exact resource that could have created this buffering effect cannot be explained further as it was not part of the data collected.

Furthermore, since this is a cross-sectional study, it only captures a moment in time where presently it has been noted that these supply chain leaders are experiencing higher-than-average work pressure but have unknown resources to deal with the added demands. However, this could change if these individuals were to be constantly exposed to this work pressure over time the relationship between work pressure and exhaustion might change to significant leader exhaustion (Cheng et al., 2023). The reason for this is that as individuals are continually exposed to intensified job demands over time their ability to self-regulate becomes compromised (Bakker et al., 2023; Bakker & Costa, 2014; Bakker & de Vries, 2021). This lack of ability to self-regulate can lead to a state of continual exhaustion leading to burnout and its associated negative outcomes.

In summary, the analysis of H_{1a} which looked at the relationship between work pressure and exhaustion amongst supply chain leaders was not significant and as such the hypothesis was rejected. However, it has been noted that work pressure had the second highest mean across the various job demands and that even though this job demand is presently not a significant predictor of exhaustion it should still be considered relevant. This is because of the effect that was explained where

intensified job demands over time can negate the resources buffering effect in the relationship between job demands and exhaustion. Work pressure could become significant and therefore is important as it can become a precursor to the health implications known as burnout (Bakker et al., 2023).

6.3.1.2. Hypothesis 1b: Cognitive demands and exhaustion discussion

The second sub-hypothesis was formulated to confirm that supply chain leaders are facing job demands relating to cognitive demands. Cognitive demands are the second of the five job demands that were tested as per the job demands and resource questionnaire (Bakker, 2014b). As observed through the problem formulation supply chain leaders are increasingly facing increased cognitive demands because of the additional mental strain they are experiencing.

As seen in Chapter 1 supply chain leaders' jobs have required them to take additional care and attention in their roles. This additional care and mental effort are a result of the current dynamic business environment they face. It has required them to take care in decisions because if done incorrectly could have detrimental effects on the business that they work for. For example, during these times of disruption they need to make decisions on how much and when to buy stock. In previous years this was not as complex as it has been in the last four years where they now need to consider many changing scenarios. This level of care and detailed planning is not only regarding what is happening presently but also how to deal with potential further disruption in the future which is expected for these roles (LaRocco, 2022; Monaghan, 2023).

Therefore, their job comes with a high degree of care because one mistake could be costly such as a landed stock at a much higher price due to fluctuating exchange rates, choosing the wrong shipping line, or not forecasting the correct quantities resulting in either stockouts or over stocks. This degree of precision and care places mental strain on these leaders and is considered a cognitive demand (Bakker, 2014b). Lastly, supply chain leaders are not only required to contend with the mental strain of volatile supply chains but are simultaneously expected to be understanding and empathic to their employees. This misalignment where they are expected to use more cognitive energy in their leadership approach while simultaneously dealing with challenging environments can lead to exhaustion (Caplan & Van Harrison, 1993; Kaluza et al., 2020, p. 38). Therefore, the below hypothesis H_{1b} was formulated around the job demand known as cognitive demands.

H_{1b}: Cognitive demands are positively related to exhaustion for supply chain leaders.

The statistical summary seen in Table 62 shows that cognitive demands are not significant in predicting exhaustion among supply chain leaders. This is further supported by a low beta value of 0.017, signifying a weak positive correlation. Based on the findings, it can be concluded that there is no significant positive relationship between cognitive demands and exhaustion and as such H_{1b} can be rejected.

Table 62: Hypothesis 1b summarised results

Test	Hypothesis	Variable	Mean	Midpoint of scale	Sig.	Standardized Coefficients Beta
Moderated regression	H1b	Cognitive demands	3.94	3	.838	.017

*p-value < 0.05

Table 62 shows that the mean score for the 156 responses for cognitive demands was 3.94 which is the highest out of the five job demands which can be seen in Appendix 8. This indicates that cognitive is trending towards "often" on the scale, which aligns with the information gathered in the research problem. However, something interesting to note is that even though this is a higher perceived cognitive demand for supply chain leaders but does not predict exhaustion for them as indicated by the results.

Similar to work pressure, this lack of significance and the higher mean statistical results for cognitive demands seem contradictory to the theory of the JD-R model which says that when there is an increase in job demands there is a related increase in exhaustion (Bakker et al., 2023). However, as previously mentioned it relates to the second part of the JD-R model for which they may be equipped with the right resources allowing them to self-regulate these demands reducing its effect on exhaustion as experienced by the supply chain leader (Bakker & de Vries, 2021; Schaufeli, 2017). Furthermore, there are leadership behaviours which increase resources that buffer the cognitive demands that come in the form of praise from followers (Liao et al., 2021; Sherman & Cohen, 2006). The exact resource that could have created this buffering effect cannot be explained further as it was not part of the data collected.

Again similar to work pressure, cognitive demands that these supply chain leaders experience are only how they feel presently due to the cross-sectional nature of this study. It has been noted that these supply chain leaders are experiencing higher-

than-average cognitive demands but have unknown resources to deal with the added demands. This however could change, because if these individuals are constantly exposed to these cognitive demands over time the relationship between cognitive demands and exhaustion might become significant and lead to exhaustion (Cheng et al., 2023). The reason for this is that as individuals are continually exposed to intensified job demands over time their ability to self-regulate becomes compromised (Bakker et al., 2023; Bakker & Costa, 2014; Bakker & de Vries, 2021). In addition, the request for supportive leadership behaviours that require cognitive demands can be taxing and if no additional support is provided over time could result in exhaustion (Arnold et al., 2015; Kaluza et al., 2020; Zwingmann et al., 2016).

In summary, the analysis of H_{1b} which looked at the relationship between cognitive demands and exhaustion amongst supply chain leaders was not significant and as such the hypothesis was rejected. However, it has been noted that cognitive demands have the highest mean across the various job demands and that even though this job demand is presently not a significant predictor of job demands it should still be considered relevant. This is because of the effect that was explained where intensified job demands over time can negate the resources buffering effect in the relationship between job demands and exhaustion. Cognitive demands could become significant and therefore are important as they can become a precursor to the health implications known as burnout (Bakker et al., 2023).

6.3.1.3. Hypothesis 1c: Emotional demands and exhaustion discussion

The third sub-hypothesis was formulated to confirm that supply chain leaders are facing job demands relating to emotional demands. Emotional demands are the third of the five job demands that were tested as per the job demands and resource questionnaire (Bakker, 2014b). As observed through the problem formulation supply chain leaders are increasingly facing amplified emotional demands because of every heightened demand and requirement for leaders to behave empathetically in their leadership approach.

This request by organisations, society, employees, and scholars for leaders to be more empathetic as part of their leadership style approach is not unique for supply chain leaders but applies more to leaders in general (Eva et al., 2019; A. Lee et al., 2020; Zheng et al., 2023). A situation in which supply chain leaders in addition to general leaders have to deal with the ever-increasing expectation of customer demands regardless of situational circumstances (Yehiav, 2021). For example, the

customer no longer wants to hear that they cannot get their goods because of supply chain disruptions and that they need to address it or they will get it somewhere else. This places a large degree of emotion on these individuals as they are held accountable for challenges that are out of their control. Therefore, the below hypothesis H_{1c} was formulated around the job demand known as emotional demands.

H_{1c}: Emotional demands are positively related to exhaustion for supply chain leaders.

The statistical summary seen in Table 63 shows that emotional demands are significant in predicting exhaustion among supply chain leaders. This is further supported by a beta value of 0.289, signifying a weak positive correlation. Based on the findings, it can be concluded that there is a significant positive relationship between cognitive demands and exhaustion and as such H_{1c} can be accepted.

Table 63: Hypothesis 1c summarised results

Test	Hypothesis	Variable	Mean	Midpoint of scale	Sig.	Standardized Coefficients Beta
Moderated regression	H1c	Emotional demands	2.86	3,00	.001	.289

*p-value < 0.05

Table 63 shows that the mean score for the 156 responses for cognitive demands was 2.86 which is the third highest out of the five job demands which can be seen in Appendix 8. This indicates that emotional demands are trending neutral which was unexpected based on the information gathered in the research problem and literature review. This mean score is relatively close to the mean score of exhaustion at 2.47. Therefore, it can be said that the acceptance of H_{1c} means that emotional demand predicts exhaustion as indicated by the statistical results.

The mean may have been lower than expected, however this corroborates the JD-R model that there is a positive relationship between job demands this being emotional demands and exhaustion (Bakker & de Vries, 2021; Bakker & Demerouti, 2007b; Lesener et al., 2019b). There is a difference between the first two job demands that have been discussed where there was no significance and a very low correlation. Therefore, even though this emotional demand is lower now it is still significant and an increase in this demand will have a significant impact on exhaustion.

In summary, the analysis of H_{1c} which looked at the relationship between emotional demands and exhaustion amongst supply chain leaders was significant and as such the hypothesis was accepted. Emotional demands are significant and therefore are important as it is a precursor to the health implications known as burnout (Bakker et al., 2023). If these job demands increase and it is constant over time it can lead to exhaustion, which will have related negative outcome such as reduced performance, absenteeism, and reduced engagement (Lesener et al., 2019a; Schaufeli, 2017; Schaufeli & Bakker, 2004).

6.3.1.4. Hypothesis 1d: Role conflict and exhaustion discussion

The fourth sub-hypothesis was formulated to confirm that supply chain leaders are facing job demands relating to role conflict. Role conflict is the fourth of the five job demands that were tested as per the job demands and resource questionnaire (Bakker, 2014b). As observed through the problem formulation, supply chain leaders are progressively facing increased role conflict demands because they are expected to manage the supply chain against historical benchmarks that, in the current disrupted environment, are extremely complex.

Supply chain leaders are in a situation where disruptions are the new norm, and it is expected not to improve in the following year (LaRocco, 2022; Monaghan, 2023). This can make this aspect of the job quite demanding where shareholders, directors and executives that are not in the supply chain role place expectations that they require based on previous standards pre-COVID-19. In addition, with extracted demands, they are expected to balance the tightrope of not keeping too much or too little stock. These vast differences in expectations by customers, stakeholders and directors result in conflict for these individuals. The focus on staff well-being and the shift of organisation to be more understanding with their staff makes it difficult for supply chain leaders to manage the expectations of their team in keeping them accountable on complex supply chains while simultaneously ensuring that their approach to leadership is empathic. Therefore, the below hypothesis H_{1c} was formulated around the job demand known as role conflict.

H_{1d}: Role conflicts are positively related to exhaustion for supply chain leaders.

The statistical summary seen in Table 64 shows that role conflict demands are not significant in predicting exhaustion among supply chain leaders. This is further supported by a low beta value of 0.129, signifying a weak positive correlation. Based

on the findings, it can be concluded that there is no significant positive relationship between role conflict and exhaustion and as such H$_{1d}$ can be rejected.

Table 64: Hypothesis 1d summarised results

Test	Hypothesis	Variable	Mean	Midpoint of scale	Sig.	Standardized Coefficients Beta
Moderated regression	H1d	Role conflict	2.19	3,00	.123	.129

*p-value < 0.05

Table 64 shows that the mean score for the 156 responses for cognitive demands was 2.19 which is the lowest out of the five job demands which can be seen in Appendix 8. This indicates that role conflict is trending towards "sometimes" which does not align with the information gathered in the research problem. Role conflict is different to the two previous job demands, work pressure and cognitive demands, which were higher job demands but not significant compared to low job demands and no significance.

This lack of significance and the low mean for role conflict seem contradictory to the theory of the JD-R model which says that when there is an increase in job demands there is a related increase in exhaustion (Bakker et al., 2023). In addition, since role conflict is the lowest it can be observed according to the theory that resources are buffering the effect of the relationship on exhaustion (Bakker & de Vries, 2021; Schaufeli, 2017).

In summary, the analysis of H$_{1d,}$ which looked at the relationship between role conflict and exhaustion amongst supply chain leaders, was not significant and as such the hypothesis was rejected. In addition, it was the only job demand with the lowest mean and no significance. The exact reasoning cannot be explained as this was not part of this study. However, this job demand is a low predictor for exhaustion and not indicated to become a predictor for burnout compared to the other previously discussed job demands.

6.3.1.5. Hypothesis 1e: Hassles and exhaustion discussion

The fifth sub-hypothesis was formulated to confirm that supply chain leaders are facing job demands relating to hassles. Hassles is the last of the five job demands that were tested as per the job demands and resource questionnaire (Bakker, 2014b). As observed through the problem formulation supply chain leaders are ever

more facing increased hassles because of unexpected challenges that they had to contend with over the last four years and predicted to continue.

Leaders have been faced with an array of surprises during the past four years because of the microeconomic, macroeconomic, and geopolitical conditions they have been experiencing (Marr, 2022). Each of these different challenges has presented a high degree of challenges for supply chain leaders in completing their day-to-day jobs. Whether it be the lockdowns in China caused by COVID-19 or when Russia attacked Ukraine, there have been significant hassles for supply chain leaders. For example, some hassles that these individuals would have to deal with range from changing to an alternative supplier that was cost competitive, continual negotiations, re-procuring of products they cannot get supply from anymore, the list can go on and on. In addition to being a supply chain professional, these individuals are leaders who influence their subordinates' performance and well-being (Inceoglu et al., 2018). All these various aspects of the job can contribute to the hassles of supply chain leaders. Therefore, the below hypothesis H_{1e} was formulated around the job demand known as hassles.

H_{1e}: Hassles are positively related to exhaustion for supply chain leaders.

The statistical summary seen in Table 65 shows that hassles are significant in predicting exhaustion among supply chain leaders. This is further supported by a beta value of 0.309 which was the highest of all job demands, signifying a moderate positive correlation. Based on the findings, it can be concluded that there is a significant positive relationship between hassles and exhaustion and as such H_{1e} can be accepted.

Table 65: Hypothesis 1e summarised results

Test	Hypothesis	Variable	Mean	Midpoint of scale	Sig.	Standardized Coefficients Beta
Moderated regression	H1e	Hassles	2.63	3,00	<,001	.309

*p-value < 0.05

Table 65 shows that the mean score for the 156 responses for cognitive demands was 2.63 which is the fourth highest out of the five job demands which can be seen in Appendix 8. This indicates that hassles are trending regularly which is the neutral point in the scale. This was unexpected based on the information gathered in the research problem and literature review. This mean score is relatively close to the

mean score of exhaustion at 2.47. Therefore, it can be said that the acceptance of H_{1e} means that hassles predict exhaustion as indicated by the statistical results.

The mean may have been lower than expected, however, this corroborates the JD-R model that there is a positive relationship between job demand hassles and exhaustion (Bakker & de Vries, 2021; Bakker & Demerouti, 2007b; Lesener et al., 2019b). There is a difference between all job demands that have been discussed where there were hassles that have the strongest significance and correlation. Therefore, in addition to emotional demands, even though hassles are represented as lower, it is still significant and an increase in this demand will have a significant impact on exhaustion.

In summary, the analysis of H_{1e} which looked at the relationship between hassles and exhaustion amongst supply chain leaders was significant and as such the hypothesis was accepted. Hassles are significant and therefore are important as it is a precursor to the health implications known as burnout (Bakker et al., 2023). If these job demands increase and is constant over time it leads to exhaustion, which will have related negative outcomes such as reduced performance, absenteeism, and reduced engagement, similar to emotional demands which have previously been mentioned (Lesener et al., 2019a; Schaufeli, 2017; Schaufeli & Bakker, 2004).

6.3.1. Hypothesis 2: Moderation between job demands and exhaustion

The second hypothesis was formulated to establish if servant leadership as a leadership style has a positive moderating role in the existing job demands and exhaustion relationship. The theory of the JD-R model still underpins the study while including servant leadership within this model. This conceptual model can be seen in Figure 1 Chapter 3.

At the start of this study, it was hypothesised that the previous, current, and future challenging business environment that supply chain leaders find themselves in has led to an increase in job demands across various types namely: work pressure, cognitive demands, emotional demands, role conflict, and hassles. According to the theory of the JD-R model which underpins this study stating that with an increase in job demands, there would be an increase in exhaustion (Lesener et al., 2019a).

Not only have these leaders been exposed to these challenging business conditions, but organisations have also had a request for leaders to be more empathetic in their approach (Clark et al., 2019; Wolff et al., 2002). The leadership style that is

considered to be the best aligned with empathic leadership is servant leadership because of its approach to serving others (Liao et al., 2021; van Dierendonck, 2011). Organisations want their leaders to adopt this leadership style because of the related benefits of improving employee performance and engagement thereby improving organisational results (A. Lee et al., 2020). However, this may be the straw on the camel's back that strengthens the relationship between an increase in job demands and exhaustion. This implies a moderated relationship between job demands and exhaustion. This is because servant leaders can have a paradoxical effect where the leader has to use additional cognitive and emotional capabilities, thereby exacerbating the current condition that the supply chain leader is experiencing (Kaluza et al., 2020; Zheng et al., 2023).

This paradoxical effect may have the inverse effect where it might buffer the job demands and exhaustion relationship as the leader gains additional resources in the form of content followers and followers that praise the leader uplifting them (Liao et al., 2021; Sherman & Cohen, 2006). However, this effect does not occur in the short term and often takes time. In addition, not all leaders may have the same level of servant leadership capabilities. As mentioned, leaders tend to be consistent in their preferred leadership style (Kaluza et al., 2020; Montano et al., 2017; Van Dierendonck et al., 2004). Trying to adhere to another style might cause strain on individuals who are not skilled in implementing such behaviours. As such it is important to understand this relationship to build on further the existing literature where they have seen this paradoxical behaviour within the context of this study. Therefore, to establish that this was evident within the data collected the below hypothesis was formulated.

H_2: Servant leadership positively moderates the effect of job demands on exhaustion.

Table 66 shows that according to the moderated regression test performed servant leadership did not have any interacting effect on any of the five job demands presented. Based on the findings, it can be concluded that there is no moderating effect on the single construct job demands on exhaustion as such H_2 can be rejected.

Table 66: Job demands servant leadership moderator summarised results

Test	Hypothesis	Description	Sig. sub-hypotheses	Supported
Moderated regression	H2	Mod1 - Servant leadership	None	No

The results in Table 66 were unexpected and deviated from the existing theory that there would be a paradoxical effect. It was expected that there should be a moderating effect either positive or negative and that according to the theory, there should be at least one job demands aspect that should have been significant.

In summary, the analysis of H_2 looked at the moderating role of servant leadership relationship between a leader's job demands and exhaustion amongst supply chain leaders. It was found that none of the interacting effects were significant and as such the hypothesis was rejected. To support this hypothesis each of the various job demands namely: work pressure, cognitive demands, emotional demands, role conflict, and hassles went through the moderated regression. This is further explained in the section below supported by the statistical results.

6.3.1.1. Hypothesis 2a: Moderation between work pressure and exhaustion

The first sub-hypothesis was formulated to establish if servant leadership at a leadership style has a positive moderating role on the relationship between work pressure and exhaustion relationship.

H_{2a}: Servant leadership significantly positively moderates the effect of work pressure on exhaustion.

The statistical summary seen in Table 67 shows that the moderator effect of servant leadership did have an interacting effect that was significant on the relationship between work pressure and exhaustion. This is further supported by a low beta value of 0.020, signifying a very weak positive correlation. Based on the findings, it can be concluded that servant leadership has no significant positive moderation between work pressure and exhaustion and as such H_{1a} can be rejected.

Table 67: Work pressure servant leadership moderator summarised results

Test	Hypothesis	Description	Sig.	Standardized Coefficients Beta
Moderated regression	H2a	Mod1*Work Pressure	.801	.020

*p-value < 0.05

Table 67 shows an unexpected result based on the information gathered in the research problem and literature review. An interacting effect was expected that would exacerbate the current work pressure demands on exhaustion. This expectation was based on the understanding of the paradoxical effect where servant leadership could be taxing by demanding additional energy in putting others first before oneself (Eva et al., 2019).

6.3.1.2. Hypothesis 2b: Moderation between cognitive demands and exhaustion

The second sub-hypothesis was formulated to establish if servant leadership as a leadership style has a positive moderating role on the relationship between cognitive demands and exhaustion relationship.

H_{2b}: Servant leadership positively moderates the effect of cognitive demands on exhaustion.

The statistical summary seen in Table 68 shows that the moderator effect of servant leadership did have an interacting effect that was significant on the relationship between cognitive demands and exhaustion. This is further supported by a negative beta value of -0.020, signifying no positive correlation. Based on the findings, it can be concluded that servant leadership has no significant positive moderation between work pressure and exhaustion and as such H_{1b} can be rejected.

Table 68: Cognitive demands moderator summarised results

Test	Hypothesis	Description	Sig.	Standardized Coefficients Beta
Moderated regression	H2b	Mod1*Cognitive Demands	.685	-.036

*p-value < 0.05

Table 68 shows an unexpected result based on the information gathered in the research problem and literature review. An interacting effect was expected that would exacerbate the current cognitive demands on exhaustion. This expectation was based on the understanding of the paradoxical effect where servant leadership could be taxing by demanding additional energy in putting others first before oneself (Eva et al., 2019).

6.3.1.3. Hypothesis 2c: Moderation between emotional demands and exhaustion

The third sub-hypothesis was formulated to establish if servant leadership as a leadership style has a positive moderating role on the relationship between emotional demands and exhaustion relationship.

H_{2c}: Servant leadership positively moderates the effect of emotional demands on exhaustion.

The statistical summary seen in Table 69 shows that the moderator effect of servant leadership did have an interacting effect that was significant on the relationship between emotional demands and exhaustion. This is further supported by a low beta value of 0.029, signifying a very weak positive correlation. Based on the findings, it can be concluded that servant leadership has no significant positive moderation between emotional demands and exhaustion and as such H_{1c} can be rejected.

Table 69: Emotional demands moderators summarised results

Test	Hypothesis	Description	Sig.	Standardized Coefficients Beta
Moderated regression	H2c	Mod1*Emotional Demands	.752	.029

*p-value < 0.05

Table 69 shows an unexpected result based on the information gathered in the research problem and literature review. An interacting effect was expected that would exacerbate the current emotional demands of exhaustion. This expectation was based on the understanding of the paradoxical effect where servant leadership could be taxing by demanding additional energy in putting others first before oneself (Eva et al., 2019).

6.3.1.4. Hypothesis 2d: Moderation between role conflict and exhaustion

The fourth sub-hypothesis was formulated to establish if servant leadership in a leadership style has a positive moderating role on the relationship between role conflict and exhaustion relationship.

H_{2d}: Servant leadership positively moderates the effect of role conflict on exhaustion.

The statistical summary seen in Table 70 shows that the moderator effect of servant leadership did have an interacting effect that was significant on the relationship between role conflict and exhaustion. This is further supported by a low beta value of -0.080, signifying no positive correlation. Based on the findings, it can be

concluded that servant leadership has no significant positive moderation between work pressure and exhaustion and as such H_{1d} can be rejected.

Table 70: Role conflict moderator summarised results

Test	Hypothesis	Description	Sig.	Standardized Coefficients Beta
Moderated regression	H2d	Mod1*Role Conflicts	.373	-.080

*p-value < 0.05

Table 70 shows an unexpected result based on the information gathered in the research problem and literature review. An interacting effect was expected that would exacerbate the current role conflict on exhaustion. This expectation was based on the understanding of the paradoxical effect where servant leadership could be taxing by demanding additional energy in putting others first before oneself (Eva et al., 2019).

6.3.1.5.   Hypothesis 2e: Moderation between hassles and exhaustion

The fifth sub-hypothesis was formulated to establish if servant leadership as a leadership style has a positive moderating role on the relationship between hassles and exhaustion relationship.

H_{2e}: Servant leadership positively moderates the effect of hassles on exhaustion.

The statistical summary seen in Table 71 shows that the moderator effect of servant leadership did have an interacting effect that was significant on the relationship between hassles and exhaustion. This is further supported by a low beta value of 0.083, signifying a very weak positive correlation. Based on the findings, it can be concluded that servant leadership has no significant positive moderation between work pressure and exhaustion and as such H_{1e} can be rejected.

Table 71: Hassles moderator summarised results

Test	Hypothesis	Description	Sig.	Standardized Coefficients Beta
Moderated regression	H2e	Mod1*Hassles	.364	.083

*p-value < 0.05

Table 71 shows an unexpected result based on the information gathered in the research problem and literature review. An interacting effect was expected that would exacerbate the current hassles of exhaustion. This expectation was based on the understanding of the paradoxical effect where servant leadership could be taxing by demanding additional energy in putting others first before oneself (Eva et al., 2019).

6.3. Conclusion

This chapter covers each of the two main hypotheses and each of their sub-hypotheses going into detail how the results either corroborate, extend, or deviate from the theories discussed in the literature review and how this linked to the research problem identified. Hypothesis 1 is supported by the fact that supply chain leaders' job demands are positively related to their exhaustion. It was interesting that hassles and emotional demands were the job demands that were significant in predicting exhaustion. In contrast, cognitive demands and work pressure were higher but insignificant. Furthermore, it was unexpected that hypothesis 2 and its sub-hypotheses relating to servant leadership were insignificant for any of the job demands rejected on its interacting effect on the existing relationship between job demands and exhaustion. In the subsequent chapter, the conclusions and recommendations will be discussed in more detail.

7. Chapter 7: Conclusions and recommendation

7.3. Introduction

This chapter provides a summary of the study's conclusions by elaborating the research findings in answering the proposed research questions, implications, academic contribution, business contribution, proposed future research, and limitations.

7.4. Research findings

The identification of the proposed research questions and their subsequent hypotheses were developed around the proposed research gaps. The study was centred on the gaps identified for future research around understanding how complex work environments affect leaders' well-being, in particular relating to the different leadership styles that they apply, such as servant leadership (Kaluza et al., 2020). Therefore, the following research questions were proposed:

RQ1: What is the relationship between job demands and exhaustion among supply chain leaders?

RQ2: To what extent does the use of empathetic leadership by a leader, namely servant leadership, moderate the relationship between a supply chain leader's job demands and exhaustion?

The findings around RQ1 have found that there is a positive relationship between job demands and exhaustion among supply chain leaders. Hassles and emotional demands are presently significant in the relationship between job demands and exhaustion, while cognitive demands and work pressure are the highest of them all. Lastly, role conflict was neither significant nor high relative to the other job demands experienced by supply chain leaders. This showed how the dual process of job demands and job resources work together affects exhaustion, which, if not understood correctly, can lead to burnout (Bakker et al., 2023)

The findings around RQ2 have found that there is not a positive relationship between job demands and exhaustion among supply chain leaders in this study. It was found that none of the five different job demands were significant in moderating the existing relationship between job demands and exhaustion. This is concerning this study regarding supply chain leaders using the research methodologies applied. This was unexpected, as there could have been either positive or negative results, and potentially one that was significant.

7.5. Research Context

The context of the research indicates that leaders are experiencing high levels of burnout. In particular, this has been observed in supply chain leaders who have had to deal with extreme challenges within their roles in contending with events such as COVID-19, the Russo-Ukrainian war, strikes, and rising inflation. In addition, the focus of mental health over the past year has been on employee health, where organisations have placed increasing pressure on leaders to be more understanding, empathic, and flexible with their staff. This increase in demands has caused leaders alike to burn out, stating that they do not have enough to carry on. If the cause of this is not understood, it is not possible to develop solutions that address the underlying issues.

It has been observed and known that the various events that have caused volatile supply chains over the last four years have increased. These increases have resulted in resignations due to exhaustion. What is not known is what the underlying causes of these are and what the implications of the request for leaders to lead in a particular way have on these current job demands as experienced by supply chain leaders.

7.6. Research implications

The implications of this research study are how the past four years of complex and dynamic business conditions are affecting a leader's exhaustion by understanding the different types of job demands that are significant and that they are experiencing. In addition, what different leadership styles require of leaders themselves and how they can have paradoxical effects need to be better understood.

If this is not understood, it could be costly for organisations, as they may not understand the implications of the current stresses that have been placed on them due to the various macroeconomic, microeconomic, and geopolitical conditions.

Furthermore, if the taxing effects of different leadership styles that leaders are expected to use result in exhaustion, the long-term effects of both areas have the potential to have significant negative consequences for organisations because of the key influential role that they have.

7.7. Research limitations

There are a few limitations to the study that may affect results in being biased even though steps were taken to prevent this it is important to acknowledge them. As this is a sample obtained using non-probability techniques the results cannot be used to

generalise for the total sample populations, however, due to the requirements of this project it was deemed acceptable.

The measurement instrument that was used to collect the data was a self-reported questionnaire. Self-reported questions are reliant on honesty in their responses wherein respondents may not provide truthful responses due to fear of being judged, thereby leading to inaccuracies in research results (Saunders & Lewis, 2018). There is a chance that the responses that were explicitly stated as anonymous to encourage honesty may still have responses that are biased where they want to look good or how they think society would expect them to behave; which is known as social desirability bias (Podsakoff et al., 2003; Rosenman et al., 2011). In addition, individuals who are completing the survey may believe that they are better than the average person resulting in a higher score on the scales used (Zell et al., 2019).

It does seem that even though the anonymity was communicated in the study without the recording of respondents' details, certain aspects of the survey, in particular the self-reported servant leadership items, resulted in a mean of 6.13 where the scale's maximum is 7 and a standard deviation of 0.67. This higher mean in conjunction with the low standard deviation indicates that there were little variations and that the sample of 156 respondents on average could be considered servant leaders.

This may indicate bias in responses due to the social desirability bias which may have implications for the interacting effect of servant leadership. In addition, the higher mean may indicate that the original questionnaire, which was designed for followers reporting on their leader's level of servant leadership, may not be effective in being adapted to self-reporting. Furthermore, the use of composite reliability were used for these test which can deemed acceptable and appropriate, however it was noted that this reliability test can be generous in its results which may differ compared to more reserved tests such as the Cronbach alpha test (Hair et al., 2019).

This research was a cross-sectional study which captured a particular moment in time. This has restricted the study as any variation in job demands cannot be determined such as a leader's resource loss and gain over time, as noted by (Kaluza et al., 2020; Zheng et al., 2023). Lastly, this study was limited to one style of leadership which may lead to incorrect assumptions and an overgeneralisation because of the lack of consideration of other similar leadership styles (Kaluza et al., 2020).

7.8.   Theoretical implications

The findings have confirmed past academic research on the existing theory of job demands and resources (Lesener et al., 2019a). In addition, it has helped to understand that there might be differences in how leaders' job demands contribute to exhaustion, more specifically in how different roles affect this relationship and potentially how the context that individuals have been exposed to might be different.

In addition, the study has contributed to determining that the SL-7 questionnaire, which was designed as a shorter version of the 28-question servant leadership (SL-28) survey by Liden et al. (2015), might not be appropriate to be adapted as a self-reported leadership questionnaire. Similar to the SL-7 scale, it was designed to be a shorter, unidimensional questionnaire that could be used globally in conjunction with other scales.

7.9.   Practical implications

The business contribution of this study will enable organisations to be better equipped to implement different human resources programmes that can assist supply chain leaders in dealing with exhaustion. This is because they will be able to customise programmes that equip their leaders with the resources that contribute to exhaustion among supply chain leaders, such as hassles and emotional demands. Knowing exactly which job demands contribute to exhaustion ensures they can quickly address challenges that may contribute to burnout in the short term while simultaneously developing long-term strategies to reduce their strength in determining exhaustion.

In addition, understanding their current demands that are high but predict exhaustion enables organisations to structure their business in such a way that there is an elevation of the demands, such as work pressure and cognitive demands, that they do not become significant. These insights ensure that their leaders can deal with high job demands effectively, which ensures high performance, engagement, and job satisfaction. This increased ability to deal with higher demands ensures that even when leaders face dynamic business conditions, which are expected in the following years, they are equipped to continue their crucial role in ensuring the organisation's success.

7.10. Future research

Based on the insights gathered in the study, several areas are recommended for future studies that will add value to the field of leadership. As mentioned in the limitations section, the results achieved by using the SL-7 short-form leadership scale as a self-reporting scale might contain significant bias as it was not originally designed for this. Due to the nature of servant leadership being one that is to serve others and the effect of social desirability bias, it is suggested that future studies look at developing a short form of self-reported servant leadership scale that makes use of the theory and dimensions used as part of the original SL-28 scale (Liden et al., 2015). This will allow researchers to make use of the shorter form in various studies where they can include other leadership questionnaires such as the FRLT (B. Avolio & Bass, 1995).In addition, similar to the reason why the SL-7 was developed, it will allow a unidimensional scale that can be used globally and, due to its short nature, improve the completion rate of surveys.

The second recommendation is that future research collect data over a period. This would be a longitudinal study that would allow for variations in job demands and job resources for the leaders. The variations over a period ensure that it is not just how a leader is feeling at a given time. The third recommendation is that other studies run similar studies but with different leadership styles, such as transformational, transactional, etc., to see what differences there are in their moderating effects on the relationship between job demands and exhaustion.

7.11. Conclusion

It can be concluded that not only supply chain leaders but leaders, in general, are facing increasing pressure from the various demands that are being placed on them. In addition, to the external dynamic business conditions organisations, scholars, and employees are placing increasing expectations on leaders to be understanding in their approach that considers their team's well-being. This balance of high performance and empathic understanding can be challenging specifically for individuals that are neither skilled nor equipped to handle this new expectation.

This study aimed to understand the dynamic of these new demands placed on leaders. It was able to identify and confirm existing theory, as well as, shed light on what relationships exist between job demand and exhaustion in supply chain leadership roles. Lastly, the study was not able to confirm the interacting effect of servant leadership on the relationship between job demands and exhaustion,

however, it set up the path for future research to design a self-reported short-form scale that could be used to better understand its interacting effects.

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Appendices

Appendix 1: SAPICS permission letter

SAPICS | PROFESSIONAL BODY FOR
SUPPLY CHAIN MANAGEMENT

1 July 2023

MBA programme

GIBS

Illovo

Johannesburg

To Whom it May Concern,

This serves to confirm that SAPICS, a members' association for those involved in Supply Chain Management in South Africa, will assist Mr Jaycee Kent with his research for his MBA

SAPICS is happy to send out a survey to its members (776) as required, by Mr Kent.

If you have any questions, please contact me.

Yours sincerely

C M Fincham

CLARE FINCHAM

Marketing Manager

Appendix 2: Articles and sample sizes

Article name	Reference	Sample size
How does chronic burnout affect dealing with weekly job demands? A test of central propositions in JD-R and COR-theories	(Bakker et al., 2023)	84
Followers matter: Understanding the emotional exhaustion of servant leadership	(Zheng et al., 2023)	83
Leadership behaviour and leader self-reported well-being: A review, integration and meta-analytic examination	(Kaluza et al., 2020)	133
Servant leadership: A meta-analytic examination of incremental contribution, moderation, and mediation	(A. Lee et al., 2020)	130
Serving You Depletes Me? A Leader-Centric Examination of Servant Leadership Behavior	(Liao et al., 2021)	146

Appendix 3: Survey

Gordon Institute of Business Science
University of Pretoria

MBA Research Survey

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 to understand if a particular leadership style contributes further to burnout in high demanding jobs with a focus on leaders in the supply chain profession. This will further help us understand how certain leadership styles impact a leader's well-being in different circumstances and should take no more than 10 minutes of your time. Your participation is voluntary, and you can withdraw at any time without penalty. Your participation is anonymous and only aggregated data will be reported. By completing the survey, you indicate that you voluntarily participate in this research. If you have any concerns, please contact my supervisor or me. Our details are provided below.

Researcher name: Jaycee Kent
Email: 22957406@mygibs.co.za
Phone: 082 851 0656

Researcher Supervisor: Rhys Johnstone
Email: JohnstoneR@gibs.co.za
Phone: 082 382 2800

Section A
Description (optional)

What is your gender? *

○ Male

○ Female

○ Non-binary

○ Transgender

○ Not listed

○ Prefer not to reply

What is your current age? (Please enter a number) *

Short-answer text

What is the highest level of education you have completed? *

○ Matric

○ Diploma

○ Undergraduate degree

○ Postgraduate degree (up to Master's level)

○ Doctoral degree

Which level in the organisation are you on? *

○ Staff

○ Supervisor

○ Middle manager

○ Senior manager

○ Executive

○ Not listed

In which industry is your organisation? *

○ Agriculture

○ Arts, culture, fashion, entertainment

○ Automotive

○ Construction

○ Education

○ Fast Moving Consumer Goods

○ Financial services

○ Healthcare

○ Hospitality and Tourism

○ Manufacturing

○ Mining

○ Professional Services

○ Retail

○ Security

○ Technology

○ Wholesale

○ Not listed

How many persons do you supervise? *

○ None

○ 1-2 persons

○ 3-5 persons

○ 6-10 persons

○ 11-25 persons

○ more than 25 persons

How many years of experience do you have in a leadership position? (Please enter a number). *

Short-answer text

Section B

In the following set of questions, think of yourself as the supervisor or manager (or team leader). Please select your response from Strongly Disagree = 1 to Strongly Agree = 7 presented below.

I can tell if something work-related is going wrong. *

○ Strongly Disagree (1)

○ Disagree (2)

○ Slightly Disagree (3)

○ Neutral (4)

○ Slightly Agree (5)

○ Agree (6)

○ Strongly Agree (7)

I make my subordinates' career development a priority. *

○ Strongly Disagree (1)

○ Disagree (2)

○ Slightly Disagree (3)

○ Neutral (4)

○ Slightly Agree (5)

○ Agree (6)

○ Strongly Agree (7)

I would offer help to my subordinates if they had a personal problem. *

○ Strongly Disagree (1)

○ Disagree (2)

○ Slightly Disagree (3)

○ Neutral (4)

○ Slightly Agree (5)

○ Agree (6)

○ Strongly Agree (7)

I emphasise the importance of giving back to the community. *

○ Strongly Disagree (1)

○ Disagree (2)

○ Slightly Disagree (3)

○ Neutral (4)

○ Slightly Agree (5)

○ Agree (6)

○ Strongly Agree (7)

I put my subordinates' best interests ahead of my own. *

○ Strongly Disagree (1)

○ Disagree (2)

○ Slightly Disagree (3)

○ Neutral (4)

○ Slightly Agree (5)

○ Agree (6)

○ Strongly Agree (7)

I give my subordinates the freedom to handle difficult situations in the way that they feel is best. *

○ Strongly Disagree (1)

○ Disagree (2)

○ Slightly Disagree (3)

○ Neutral (4)

○ Slightly Agree (5)

○ Agree (6)

○ Strongly Agree (7)

I would not compromise ethical principles in order to achieve success. *

○ Strongly Disagree (1)

○ Disagree (2)

○ Slightly Disagree (3)

○ Neutral (4)

○ Slightly Agree (5)

○ Agree (6)

○ Strongly Agree (7)

Section C

The following questions refer to your personal work situation and your experience of it. For each question, please choose the answer that is most applicable to you. Please select your response from Never = 1 to Very Often = 5 presented below.

Do you have to work at speed? *

○ Never (1)

○ Sometimes (2)

○ Regularly (3)

○ Often (4)

○ Very Often (5)

Do you have too much work to do? *

○ Never (1)

○ Sometimes (2)

○ Regularly (3)

○ Often (4)

○ Very Often (5)

How often do you have to work extra hard in order to reach a deadline? *

○ Never (1)

○ Sometimes (2)

○ Regularly (3)

○ Often (4)

○ Very Often (5)

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Do you work under time pressure? *

○ Never (1)

○ Sometimes (2)

○ Regularly (3)

○ Often (4)

○ Very Often (5)

Does your work require a lot of concentration? *

○ Never (1)

○ Sometimes (2)

○ Regularly (3)

○ Often (4)

○ Very Often (5)

Does your work demand enhanced care or precision? *

○ Never (1)

○ Sometimes (2)

○ Regularly (3)

○ Often (4)

○ Very Often (5)

Do you regard your work as mentally very straining? *

○ Never (1)

○ Sometimes (2)

○ Regularly (3)

○ Often (4)

○ Very Often (5)

Section D

The following questions are about your emotions during your work. The questions that refer to clients can also be read as if they are referring to internal clients (colleagues).

Is your work emotionally demanding? *

○ Never (1)

○ Sometimes (2)

○ Regularly (3)

○ Often (4)

○ Very Often (5)

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In your work, are you confronted with things that personally touch you? *

○ Never (1)

○ Sometimes (2)

○ Regularly (3)

○ Often (4)

○ Very Often (5)

Do you face emotionally charged situations in your work? *

○ Never (1)

○ Sometimes (2)

○ Regularly (3)

○ Often (4)

○ Very Often (5)

In your work, do you deal with clients who incessantly complain? *

○ Never (1)

○ Sometimes (2)

○ Regularly (3)

○ Often (4)

○ Very Often (5)

In your work, do you have to deal with demanding clients? *

○ Never (1)

○ Sometimes (2)

○ Regularly (3)

○ Often (4)

○ Very Often (5)

Do you have to deal with clients who do not treat you with the appropriate respect and politeness? *

○ Never (1)

○ Sometimes (2)

○ Regularly (3)

○ Often (4)

○ Very Often (5)

Section E

The following questions are about conflicting expectations and about hassles at work. Indicate for each statement to what extent you agree.

I receive conflicting requests from two or more people. *

○ Never (1)

○ Sometimes (2)

○ Regularly (3)

○ Often (4)

○ Very Often (5)

I am unable to fulfill the conflicting expectations of my coworkers. *

○ Never (1)

○ Sometimes (2)

○ Regularly (3)

○ Often (4)

○ Very Often (5)

The expectations of my colleagues are in conflict. *

○ Never (1)

○ Sometimes (2)

○ Regularly (3)

○ Often (4)

○ Very Often (5)

At my work, different groups of people expect opposite things from me. *

○ Never (1)

○ Sometimes (2)

○ Regularly (3)

○ Often (4)

○ Very Often (5)

I have to deal with administrative hassles. *

○ Never (1)

○ Sometimes (2)

○ Regularly (3)

○ Often (4)

○ Very Often (5)

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I have many hassles to go through to get projects/assignments done. *

○ Never (1)

○ Sometimes (2)

○ Regularly (3)

○ Often (4)

○ Very Often (5)

I have to go through a lot of red tape to get my job done. *

○ Never (1)

○ Sometimes (2)

○ Regularly (3)

○ Often (4)

○ Very Often (5)

I am confronted with unexpected hassles at work. *

○ Never (1)

○ Sometimes (2)

○ Regularly (3)

○ Often (4)

○ Very Often (5)

I have many hassles to go through to get my work done. *

○ Never (1)

○ Sometimes (2)

○ Regularly (3)

○ Often (4)

○ Very Often (5)

Section G

The following statements concern the way you experience your work and how you feel about it. For each statement please choose the answer that is most representative for you.

There are days when I feel tired before I arrive at work. *

○ Never (1)

○ Sometimes (2)

○ Regularly (3)

○ Often (4)

○ Very Often (5)

After work, I tend to need more time than in the past in order to relax and feel better. *

○ Never (1)

○ Sometimes (2)

○ Regularly (3)

○ Often (4)

○ Very Often (5)

During my work, I often feel emotionally drained. *

○ Never (1)

○ Sometimes (2)

○ Regularly (3)

○ Often (4)

○ Very Often (5)

After my work, I usually feel worn out and weary. *

○ Never (1)

○ Sometimes (2)

○ Regularly (3)

○ Often (4)

○ Very Often (5)

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Appendix 4: Initial validity testing of servant leadership

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0,625
Bartlett's Test of Sphericity	Approx. Chi-Square	57,731
	df	21
	Sig.	0,000

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	1,761	25,159	25,159	1,761	25,159	25,159	1,476	21,084	21,084
2	1,176	16,802	41,961	1,176	16,802	41,961	1,453	20,758	41,842
3	1,021	14,585	56,546	1,021	14,585	56,546	1,029	14,704	56,546
4	0,893	12,758	69,304						
5	0,805	11,494	80,798						
6	0,726	10,366	91,164						
7	0,619	8,836	100,000						

Extraction Method: Principal Component Analysis.

Component Matrix[a]

	Component		
	1	2	3
I can tell if something work-related is going wrong.	-0,074	-0,165	0,916
I make my subordinates' career development a priority.	0,630	0,134	-0,094
I would offer help to my subordinates if they had a personal problem.	0,420	0,372	0,277
I emphasise the importance of giving back to the community.	0,701	-0,310	-0,052
I put my subordinates' best interests ahead of my own.	0,584	0,037	0,253
I give my subordinates the freedom to handle difficult situations in the way that they feel is best.	0,393	0,639	-0,098
I would not compromise ethical principles in order to achieve success.	0,442	-0,698	-0,141

Appendix 5: Initial Servant Leadership Box and Whisker plot outliers
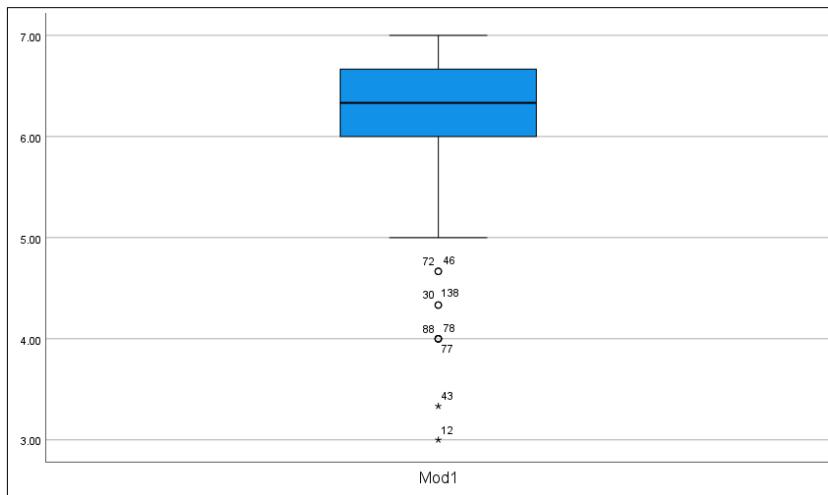
Appendix 6: Correlation coefficient table

Correlations

		Mod1	Work Pressure	Cognitive Demand	Emotional Demands	Emotional Client Demands	Role Conflicts	Hassles	Exhaustion
Mod1	Pearson Correlation	1	.160[*]	.057	.036	.168[*]	.161[*]	.052	-.040
	Sig. (2-tailed)		.046	.482	.654	.036	.045	.520	.616
	N	156	156	156	156	156	156	156	156
Work Pressure	Pearson Correlation	.160[*]	1	.541[**]	.413[**]	.296[**]	.341[**]	.430[**]	.317[**]
	Sig. (2-tailed)	.046		<,001	<,001	<,001	<,001	<,001	<,001
	N	156	156	156	156	156	156	156	156
Cognitive Demand	Pearson Correlation	.057	.541[**]	1	.403[**]	.254[**]	.226[**]	.312[**]	.255[**]
	Sig. (2-tailed)	.482	<,001		<,001	.001	.005	<,001	.001
	N	156	156	156	156	156	156	156	156
Emotional Demands	Pearson Correlation	.036	.413[**]	.403[**]	1	.462[**]	.427[**]	.526[**]	.482[**]
	Sig. (2-tailed)	.654	<,001	<,001		<,001	<,001	<,001	<,001
	N	156	156	156	156	156	156	156	156
Emotional Client Demands	Pearson Correlation	.168[*]	.296[**]	.254[**]	.462[**]	1	.420[**]	.440[**]	.233[**]
	Sig. (2-tailed)	.036	<,001	.001	<,001		<,001	<,001	.003
	N	156	156	156	156	156	156	156	156
Role Conflicts	Pearson Correlation	.161[*]	.341[**]	.226[**]	.427[**]	.420[**]	1	.552[**]	.396[**]
	Sig. (2-tailed)	.045	<,001	.005	<,001	<,001		<,001	<,001
	N	156	156	156	156	156	156	156	156
Hassles	Pearson Correlation	.052	.430[**]	.312[**]	.526[**]	.440[**]	.552[**]	1	.509[**]
	Sig. (2-tailed)	.520	<,001	<,001	<,001	<,001	<,001		<,001
	N	156	156	156	156	156	156	156	156
Exhaustion	Pearson Correlation	-.040	.317[**]	.255[**]	.482[**]	.233[**]	.396[**]	.509[**]	1
	Sig. (2-tailed)	.616	<,001	.001	<,001	.003	<,001	<,001	
	N	156	156	156	156	156	156	156	156

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

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

Appendix 7: Moderation full coefficient table

Coefficients[a]

Model		Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.	Collinearity Statistics Tolerance	VIF
1	(Constant)	-2.599E-16	.063		.000	1.000		
	MC_Work_Pressure	.050	.097	.044	.517	.606	.615	1.625
	MC_Cognitive_Demands	.021	.104	.017	.205	.838	.667	1.499
	MC_Emotionally_Demanding	.312	.093	.289	3.351	.001	.595	1.681
	MC_Client_Demands	-.107	.079	-.108	-1.356	.177	.704	1.421
	MC_Role_Conflicts	.178	.115	.129	1.549	.123	.639	1.564
	MC_Hassles	.357	.104	.309	3.452	<,001	.552	1.810
2	(Constant)	-6.136E-16	.063		.000	1.000		
	MC_Work_Pressure	.066	.098	.058	.678	.499	.604	1.655
	MC_Cognitive_Demands	.018	.104	.014	.169	.866	.666	1.501
	MC_Emotionally_Demanding	.303	.093	.281	3.251	.001	.591	1.691
	MC_Client_Demands	-.094	.080	-.094	-1.181	.240	.690	1.448
	MC_Role_Conflicts	.195	.116	.141	1.686	.094	.630	1.587
	MC_Hassles	.347	.104	.300	3.343	.001	.549	1.823
	MC_Mod1	-.117	.097	-.083	-1.208	.229	.934	1.071
3	(Constant)	.010	.066		.157	.876		
	MC_Work_Pressure	.054	.101	.047	.532	.595	.585	1.709
	MC_Cognitive_Demands	.030	.107	.024	.284	.777	.649	1.540
	MC_Emotionally_Demanding	.314	.098	.291	3.216	.002	.557	1.795
	MC_Client_Demands	-.099	.082	-.099	-1.199	.232	.670	1.493
	MC_Role_Conflicts	.214	.122	.155	1.760	.081	.587	1.704
	MC_Hassles	.330	.108	.285	3.069	.003	.527	1.897
	MC_Mod1	-.132	.106	-.093	-1.246	.215	.814	1.229
	Mod1_MC_Work_Pressure	.033	.132	.020	.252	.801	.723	1.383
	Mod1_MC_Cognitive_Demands	-.066	.162	-.036	-.407	.685	.591	1.692
	Mod1_MC_Emotionally_Demanding	.049	.154	.029	.316	.752	.535	1.870
	Mod1_MC_Client_Demands	-.040	.119	-.028	-.335	.738	.673	1.485
	Mod1_MC_Role_Conflicts	-.171	.191	-.080	-.894	.373	.568	1.759
	Mod1_MC_Hassles	.156	.171	.083	.911	.364	.548	1.824

a. Dependent Variable: MC_Exhaustion

Appendix 8: Fully descriptive statistics

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Servant leadership	156	4,00	7,00	6,13	0,67
Job demands	156	1,91	4,91	3,00	0,58
Work pressure	156	1,75	5,00	3,72	0,83
Cognitive demand	156	2,00	5,00	3,94	0,74
Emotional demands	156	1,00	5,00	2,86	0,88
Emotional client demands	156	1,00	5,00	2,94	0,95
Role conflicts	156	1,00	4,50	2,19	0,69
Hassles	156	1,00	5,00	2,63	0,82
Exhaustion	156	1,00	5,00	2,47	0,95
Valid N (listwise)	156				

Appendix 5: Servant leadership SL-7 scale permission

Access and permission to use SL-7 Scale - Servant leadership: Validation of a short form of the SL-28   External   Inbox ×

Kent Jaycee <22957406@mygibs.co.za>
to bobliden, Rhys ▾

Good day Mr Liden

I hope you are well.

Please may I request access and permission to your SL-7 questionnaire.
https://doi.org/10.1016/j.leaqua.2014.12.002

I am currently an MBA student at the Gordon Institute of Business Science and require this questionnaire as part of my research. I would really appreciate your help, and if you have any questions, please let me know.

Kind regards
Jaycee Kent

Robert Liden <bobliden@uic.edu>
to me, Rhys ▾

Dear Jaycee,
You may use our scale and it is attached.
Best of luck with your research,
Bob Liden

···

--

Robert C. Liden, Ph.D.
Professor and OB-HR doctoral program coordinator
University Scholar - University of Illinois System

Email: bobliden@uic.edu
https://business.uic.edu/profiles/robert-c-liden/

Appendix 7: Job demands and resource questionnaire scale permission

Permission to use adapted questionnaire - The Job Demands-Resources Model of Burnout External Inbox ×

K Kent Jaycee <22957406@mygibs.co.za>
to e.demerouti ▾

Good day Evangelia,

I hope you are well.

Please may I request access to your adapted questionnaire that was used in the Job Demands-Resources Model of Burnout journal article.
https://doi.org/10.1037/0021-9010.86.3.499

I am currently an MBA student at the Gordon Institute of Business Science and require this questionnaire as part of my research. I would really appreciate your help, and if you have any questions, please let me know.

Kind regards
Jaycee Kent
MBA Student
LinkedIn profile: https://www.linkedin.com/in/jayceekent/

D Demerouti, Evangelia <E.Demerouti@tue.nl>
to me, Rhys, Secretariaat ▾

Dear Kent, here is an option but in principle all scales should work. Gool luck with your study.
Best regards,
Evagnelia

•••

One attachment · Scanned by Gmail ⓘ

PDF JD-R questionnai...

Appendix 8: Summary of questions that showed no reliability

Scale	Item	Question
Servant leadership (SL-7)	1	I can tell if something work-related is going wrong.
	3	I would offer help to my subordinates if they had a personal problem.
	5	I put my subordinates' best interests ahead of my own.
	6	I give my subordinates the freedom to handle difficult situations in the way that they feel is best.

Appendix 9: Summary of questions that showed no reliability

Component Matrix[a]

	Component	
	1	2
Is your work emotionally demanding?	0,739	0,436
In your work, are you confronted with things that personally touch you?	0,611	0,597
Do you face emotionally charged situations in your work?	0,674	0,301
In your work, do you deal with clients who incessantly complain?	0,774	-0,445
In your work, do you have to deal with demanding clients?	0,680	-0,527
Do you have to deal with clients who do not treat you with the appropriate respect and politeness?	0,726	-0,258

Extraction Method: Principal Component Analysis.

a. 2 components extracted.

Appendix 10: Ethical clearance approval

Masters Research ☑ <MastersResearch@gibs.co.za>
to me, Masters ▾

Gordon Institute
of Business Science
University of Pretoria

Ethical Clearance
Approved

Dear Jaycee Kent,

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 11: Email body sent to SAPICS database

Good day

We have been approached by a SAPICS student member, currently studying his MBA at the Gordon Institute of Business Science. He needs your assistance with a survey to understand if a particular leadership style contributes further to burnout in high demanding jobs with a focus on leaders in the supply chain profession.

This will further help us understand how certain leadership styles impact a leader's well-being in different circumstances and should take no more than 10 minutes of your time. Your participation is voluntary, and you can withdraw at any time without penalty. Your participation is anonymous and only aggregated data will be reported.

Appendix 14: Histogram and normal P-P Plot from linear regression test

Histogram
Dependent Variable: Exhaustion

Mean = 7.16E-16
Std. Dev. = 0.997
N = 156

Normal P-P Plot of Regression Standardized Residual
Dependent Variable: Exhaustion