HOW THE DISTRESSED PERSONALITY, JOB DEMANDS AND RESOURCES RELATE TO CUSTOMER SERVICE AGENTS' ENGAGEMENT AND BURNOUT

RUSHKA STEMMET

Thesis submitted in partial fulfilment of the requirements for the degree of Master of Commerce (Industrial Psychology) in the Faculty of Economic and Management Sciences at Stellenbosch University

SUPERVISORS: Dr Billy Boonzaier and Dr Yolandi Fontaine

April 2022

DECLARATION

I, the undersigned, hereby declare that the entirety of the work contained herein is my own, original work, that I am the sole author thereof (save to the extent explicitly otherwise stated), that reproduction and publication thereof by Stellenbosch University will not infringe any third-party rights and that I have not previously in its entirety or in part submitted it for obtaining any academic qualification.

Date: April 2022

ABSTRACT

Using the Job-Demands Resources (JD-R) model as a theoretical framework, this study proposes a model that investigates the influence of the distressed personality type (Type D), job overload (i.e. a job demand), and perceived social support (i.e. a job resource) on the work engagement and burnout of customer service agents in the financial services sector. A cross-sectional research design was conducted, using a web-based questionnaire. The researcher collected data from *N* = 442 customer service agents working in the financial service industry in Gauteng, South Africa. An online questionnaire included a compilation of instruments, viz. the Utrecht Work Engagement Scale 9-item version; the Social Support Scale; the Maslach Burnout Inventory; the Type D Scale-14; and the Job Demands and Resources Scale, to assess work overload. The study evaluated the aforementioned relationships using partial least squares (PLS) analysis through structural equation modelling (SEM). The results of the study indicate that burnout has a direct and significant negative impact on work engagement; perceived social support has a direct positive relationship with work engagement; the Type D personality profile has a direct negative relationship with perceived social support; and work overload has a direct positive relationship with burnout. In addition, the results of PLS suggest that, when work overload is low, it functions as a mediator of perceived social support in engagement (but less so when work overload is high). Given the results of the current research, human resource professionals and customer service managers should take decisive steps to establish and maintain a socially supportive work environment and prioritise initiatives that foster job resources, even in an inherently demanding work environment. Furthermore, increasing job resources will enhance the experience of work engagement and buffer against the impact of job demands and burnout. The current study contributes to the existing knowledge base by including the Type D personality in the JD-R model and its effect on the perception of social support, and by testing work overload as a mediator between social support and engagement. This study concludes by providing practical interventions that focus on proactively enhancing work engagement and reducing burnout. Finally, ideas for future researchers to consider are proposed.

OPSOMMING

Deur die gebruik van die *Job-Demands Resources* (JD-R) model as 'n teoretiese raamwerk, stel die huidige studie 'n model voor wat die invloed van die gestremde persoonlikheidstipe (Tipe D), werkoorlading (m.a.w. 'n werkseis) en waargenome sosiale ondersteuning (m.a.w. 'n werkshulpbron) op die werksbetrokkenheid en uitbranding van kliëntediensagente in die finansiëledienstesektor ondersoek. 'n Deursnee-navorsingsontwerp is met behulp van 'n webgebaseerde vraelys uitgevoer. Data is van N = 442 kliëntediensagente ingesamel wat in die finansiëledienstebedryf in Gauteng, Suid-Afrika werk. 'n Aanlyn-vraelys het 'n versameling van vyf instrumente ingesluit om werkoorlading te assesseer: die *Utrecht Work Engagement Scale* nege-item weergawe; die Maatskaplike Ondersteuningskaal; die Maslach-uitbrandingsinventaris; die Tipe D-skaal-14; en die *Job Demands and Resources* skaal. Die studie het die voorgenoemde verwantskappe geëvalueer deur gebruik te maak van gedeeltelike kleinste vierkant (GKV) analise met behulp van strukturele vergelykingsmodellering (SVM). Die resultate van die navorsing dui daarop dat uitbranding 'n direkte en beduidende negatiewe impak het op werksbetrokkenheid; waargenome sosiale ondersteuning het 'n direkte positiewe verband met werksbetrokkenheid; die Tipe D-persoonlikheidsprofiel het 'n direkte negatiewe verwantskap met waargenome sosiale ondersteuning; en werkoorlading het 'n direkte positiewe verband met uitbranding. Daarbenewens dui die resultate van GKV daarop dat, wanneer werkoorlading laag is, dit funksioneer as 'n bemiddelaar van waargenome sosiale ondersteuning in betrokkenheid (maar minder so wanneer werkoorlading hoog is). Gegewe die resultate van die huidige navorsing moet professionele menslike hulpbron-werkers en kliëntediensbestuurders beslissende stappe neem om 'n sosiaal-ondersteunende werkomgewing te vestig en in stand te hou, en inisiatiewe prioritiseer wat werkhulpbronne bevorder, selfs in 'n inherent veeleisende werkomgewing. Verder sal die vermeerdering van werkhulpbronne die ervaring van werksbetrokkenheid verbeter en buffer teen die impak van werkseise en uitbranding. Die huidige studie dra by tot die bestaande kennisbasis deur die Tipe D-persoonlikheid in die JD-R model in te sluit en te kyk na die effek daarvan op die persepsie van sosiale ondersteuning; en deur werkoorlading as 'n bemiddelaar tussen sosiale ondersteuning en betrokkenheid te toets. Hierdie studie sluit af met voorstelle vir praktiese ingrypings wat fokus op die proaktiewe bevordering van werksbetrokkenheid en die vermindering van uitbranding. Laastens word idees voorgestel vir toekomstige navorsers om te oorweeg.

ACKNOWLEDGEMENTS

I would firstly like to thank God for providing me with the strength, perseverance and patience during this challenging process, which allowed me to complete my thesis. This has been a long process, but finally, the process is complete.

Thank you to Professor Callie Theron, my research lecturer, for the guidance and the needed constructive criticism in terms of my overall study.

To Professor Martin Kidd, thank you for all your assistance with my data collection, analysis and interpretation of my thesis.

To my family, especially my husband, thank you for the support, prayer and inspirational talks to get me through days when I doubted my ability.

Finally, I would also like to thank my supervisors, Dr Yolandi Fontaine and Dr Billy Boonzaier for their guidance throughout this process. Dr Yolandi Fontaine I could not have completed this dissertation without your guidance and support. Thank you.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER 1

BACKGROUND AND OBJECTIVES OF THE STUDY

1.1 Introduction

Even though customer service agents work in the same organisation, experience the same organisational demands, and have the same job resources available to them, they may experience different work-related outcomes. Whereas some agents may report symptoms of burnout, others might report a high level of work engagement and commitment (Holman, 2002; Mustosmäki et al., 2013). From a study investigating burnout in a telecommunication company, it was reported that the "lack of job control, role stress, performance monitoring, inadequate coaching and training, emotional labour, and lack of team leader support can lead to experiences of depression, emotional exhaustion, and anxiety" (Bakker et al., 2003, p. 394). Additionally, a study on engagement amongst customer service agents found that if agents are satisfied with their work environment and working conditions, they experience job satisfaction and display organisational commitment and engagement (Boukis et al., 2020). Therefore, ensuring that customer service agents experience high levels of engagement and low levels of burnout is critical to the success of telecommunication companies. Further, the fourth industrial revolution and globalisation introduced technological advancements to improve the efficiency of service delivery. Over the past years, many organisations have transitioned their employment practices from face-to-face to virtual interactions through service automation (i.e. telephones and computer systems). Hence, the uptake of digital advancements has resulted in faster service delivery and subsequently increased workload.

One sector that welcomes globalisation and digitisation is the customer service sector. According to Molino et al. (2016), a customer service centre refers to an environment in which customer service agents interact with customers either face-to-face or telephonically. Traditionally, the customer service environment followed the Taylorism production-line orientation, which is described as a repetitive and structured environment with low autonomy, low control, and limited variety (Rod & Ashill, 2013). Customer service roles were viewed as temporary employment for individuals with limited skills and little to no qualifications. Individuals working in these environments were paid poorly and had limited career prospects (Rod & Ashill, 2013). However, the customer service sector has since recognised the important role that customer service agents play in organisations and has subsequently moved away from the traditional production-line

orientation and has become more employee-focused (Molino et al., 2016; Rod & Ashill, 2013). More recently, the customer service sector has become more focused on aiming to reduce burnout and enhance work engagement (Mustosmäki et al., 2013).

One of the main reasons why customer service centres were introduced was to optimise organisational output with minimal employee input (Mustosmäki et al., 2013). However, in the customer service environment, efficient and effective customer service delivery requires a great deal of energy and input from the customer service agent. Further, customer service is seen as a frontline service, with agents dealing directly with customers and impacting their first impression of the brand or business (Rod & Ashill, 2013). However, the customer service environment is very complex, as an agent's role entails continuously dealing with customers with different personalities that have different queries. Additionally, the customer service agent needs to adapt to these differences without any downtime between calls, regardless of the complexity of a call (Molino et al., 2016). It therefore becomes complex when the agent is required to ensure satisfactory customer service while also protecting the brand and organisation (Rod & Ashill, 2013).

Various models, which focus on occupational health, suggest that occupational stress can contribute to how an employee appraises their work environment. More specifically, the Job Demand Resources (JD-R) model is a contemporary model that suggests that an imbalance between job demands, and resources cause occupational stress and negative work-related outcomes, such as burnout (Demerouti & Bakker, 2011). Research has found that customer service agents with sufficient job/personal resources, who are passionate about their jobs and find a sense of purpose in their role, appear to be more willing to invest energy into their role as agents. These individuals are generally engaged, which allows them to persevere and endure the demands that form part of their role (Hakanen & Schaufeli, 2006). Therefore, for customer service agents to experience work engagement, they should be able to use available job/personal resources to deal effectively with the high level of job demands relating to their work environment, and thus reduce their possibility of experiencing burnout.

1.2 Problem Statement

With globalisation, customer service organisations have implemented call centres to minimise operational costs as agents can reach a larger volume of customers telephonically. Therefore, customer service centres have become a vital part in allowing organisations to provide efficient

customer service, increase business opportunities, and build a quality customer brand (Molino et al., 2016). However, although the organisational benefits of employing a customer service agent are apparent, the personal benefits of being a customer services agent are less obvious (Holman, 2002). A customer service agent often experiences emotional and cognitive dissonance when dealing with different customers as they are required to exercise emotional regulation to ensure good customer service (Molino et al., 2016). Prolonged emotional and cognitive dissonance and regulation primes customer service agents to become susceptible to emotional exhaustion (Boukis et al., 2020). A survey conducted in the United States found that the main cause of burnout is the ill-treatment (i.e. disrespectful customers, a micromanaging leader, or increased work demands from senior agents) experienced whilst at work (Boukis et al., 2020). As the role requires an agent to put their best foot forward to represent the brand, when agents encounter prolonged ill-treatment and dissonance, it is emotionally taxing. This emotional burden can create a challenge for the agent to cope in a fast-paced, deadline-driven work environment, which might lead an agent to experience emotional exhaustion and eventually burnout (Boukis et al., 2020). Moreover, studies conducted on engagement levels in service sectors provide evidence that the working conditions that customer service agents are exposed to can influence whether they experience burnout or work engagement (Bakker et al., 2003; Mustosmäki et al., 2013). Therefore, this study aimed to shed light on the factors within the customer service environment that induce burnout or work engagement amongst customer service agents.

1.3 Research Initiating Question

Throughout the research, there are two opposing views of the customer service environment; either being referred to as a sweatshop or described as a place that promotes critical thinking and problem-solving while “actively attending to customers” (Mustosmäki et al., 2013, pp. 49-50). The different work-related outcomes (i.e. burnout and work engagement) that customer service agents experience could be attributed to job/organisational characteristics or characteristics unique to the individual. Therefore, this research study investigated the factors that influence variance in work engagement and burnout amongst customer service agents. Based on the background information presented, the research initiating question of this study: Why is there variance in work engagement and burnout amongst employees in the customer services sector?

1.4 Rationale for the Study

As occupational stress is associated with various physiological, psychological, and behavioural manifestations, it becomes an important construct to understand employees' behaviour. Various

studies have been conducted on occupational stress and ways to reduce the negative impact that occupational stress has on an individual and their organisation. However, limited research exists on the individual factors that relate to occupational stress and work-related outcomes, such as burnout and work engagement (Park, 2007). Moreover, managers should be able to identify the factors that act as antecedents to work-related outcomes (i.e. work engagement and burnout). Once these factors are identified, management can proactively address these factors that impact employees' experience of burnout or engagement in the workplace. Additionally, failure to effectively address the factors that influence burnout and work engagement could impact the organisation's morale, performance, and bottom-line (Holman, 2002). Therefore, the effect of the individual factors on burnout and work engagement should be explored in greater depth.

1.5 Research Aim and Objectives

To answer the research initiating question, the study aimed to create a structural model which accounted for variance in burnout and work engagement amongst customer service agents, using the JD-R model as the underlying theoretical framework. The hypotheses of the structural model found to be statistically significant contributed to a better understanding of the antecedents of burnout and work engagement within a customer service work environment. Therefore, to answer the research initiating question the research objectives are:

- To identify the most salient variables that explain variance in burnout and work engagement amongst customer service agents;
- To create and test a structural model which explains variance in burnout and work engagement; and
- To identify interventions to be used to decrease burnout and to induce work engagement amongst customer service agents.

1.6 Delimitations

The researcher focused on identifying the most salient antecedents of burnout and work engagement amongst customer service agents. Data were collected from eligible inbound and outbound customer service agents from a financial service organisation in Gauteng, South Africa. The JD-R model was utilised as the theoretical framework to illustrate how job demands and resources (i.e. job and personal) impact the experience of burnout and work engagement (Janse van Rensburg et al., 2013). Hypotheses were created in line with the JD-R framework, which was tested to determine the statistical significance of the predicted relationships. However, the job crafting and self-development constructs which form part of the JD-R model (Bakker & Demerouti,

2018), were excluded from this study. Additionally, the scores of the subscales for the work engagement and burnout constructs were combined to produce a single global score. Hence, both work engagement and burnout were treated as unidimensional constructs (De Bruin et al., 2013). Finally, only the work overload subscale was selected from the Job Demands Resources Scale as this sub-dimension was seen as the most common job demand (Bakker & Demerouti, 2007) that customer service agents experience in their role and consequently affects their work engagement and burnout.

1.7 Outline of the Study

Chapter 1 gave context to the research study by providing background information on customer service agents, the rationale for the study, what the research aimed to achieve, and the research objectives. Chapter 2 focused on the literature review covering the theoretical objective of the study. Each latent variable, relevant to the study, was described and discussed based on existing literature. The interactions between the variables (i.e., work overload, perceived social support, the distressed personality, known as Type D personality, work engagement, and burnout) were also discussed in depth. Chapter 2 concluded with a conceptual model, which depicted the interactions between the variables. Chapter 3 detailed the research methodology and research design, which were used to validate the structural model and substantive hypotheses that were tested. In Chapter 4, the data was analysed using various statistical analyses to test the substantive hypotheses, and the statistical results were reported. Finally, Chapter 5 concluded with an interpretation and discussion of the results, the limitations of the study, and recommendations for future research. Additionally, managerial implications on how to reduce burnout and enhance work engagement amongst customer service agents were presented.

CHAPTER 2
LITERATURE REVIEW

2.1 Introduction

This chapter focuses on existing literature pertaining to this study and begins by gaining an understanding of the factors that might impact work engagement and burnout. The Job Demand Resources (JD-R) model is used as the premise of this study and is applied to understand the relationships and interactions between the latent variables. Further, interaction effects within the JD-R model will also be investigated, leading to the formulation of further hypotheses. These proposed research hypotheses aim to contribute to answering the research initiating question: Why is there variance in work engagement and burnout amongst employees in the customer services sector? Finally, a conceptual model, depicting the relationships between the variables, is presented.

2.2 Theoretical Framework

According to Demerouti and Bakker (2011) the JD-R model is a contemporary model comprising of two traditionally separate research topics namely, stress and motivation. Underpinning the JD-R model is the assumption that every job has unique factors (i.e. job demands and job resources) that impact employees' experience of work (Janse van Rensburg et al., 2013). Based on Figure 2.1, it can be deduced that depending on the interaction between job demands and resources, employees can either experience burnout or work engagement as an organisational outcome (Bakker & Demerouti, 2007, p. 323; Bakker et al., 2014). Whether an employee will experience work engagement or burnout depends on one of three factors available in the workplace:

Firstly, job demands which refer to work-related factors requiring an employee to utilise physical, mental, or emotional energy to complete a task. Examples of job demands include work overload, pressured timelines, irregular working hours, and emotional strain (Upadyaya et al., 2016). According to Bakker et al. (2003), job demands are not detrimental to an employee unless the exposure becomes chronic and an employee exerts high effort to meet the demand (i.e. the demand exceeds the employees' resources) causing the employee to exhaust their limited resources. Once these limited resources are depleted, the demands may cause health impairments (Bakker et al., 2003). Extensive and excessive exposure to job demands has the potential to cause stress, which manifests as work disengagement and may lead to employees feeling burned out (Upadyaya et al., 2016).

Secondly, job resources which refer to factors (i.e. physical, psycho-social, or environmental) that allow employees to complete work tasks; promote personal advancement and act as a buffer against the impact of job demands. Resources play an important role in how employees appraise their job. Typical job resources include a company culture that promotes growth and recognition, positive interpersonal work relationships, work benefits or employee wellness initiatives. All these job resources have the potential to act as a buffer against the adverse impact that job demands have on individuals' mental or emotional capacity (Bakker & Demerouti, 2007).

Thirdly, personal resources which refer to positive individual evaluations relating to one's ability to withstand, deal with, control or effectively respond to environments they function in. These resources operate in a similar way to that of job resources as they buffer against pressured environments and the adverse effects associated with these environments; motivate employees to attain goals, as well as foster both personal and career growth (Bakker et al., 2014).

2.3 Latent Variables

From the perspective of the JD-R model, the organisational outcomes (i.e. work engagement and burnout) as well as the antecedents that impact customer service agents' work engagement and burnout will be explored in detail in the following section.

2.3.1 *Work Engagement*

Work engagement has over the years received a great deal of attention with various definitions by different authors (Bakker & Demerouti, 2007; Kahn, 1990; Maricuțoiu et al., 2017). Nevertheless, there are common characteristics identified in research that are typically used to define work engagement. Work engagement refers to the positive connection that employees have in their working roles, which can be identified by the commitment (mental, emotional, and physical) that employees display when performing their roles (Bakker, et al., 2003; Janse van Rensburg et al., 2013 & Kahn, 1990). Employees with high engagement are characteristically more energetic and are passionate when executing their tasks. Engaged employees view themselves as competent and able to sustain work demands. Maricuțoiu et al. (2017) view work engagement as a positive state of mind made up of three dimensions:

- Vigour, which refers to mental stamina and increased energy invested in a task;
- Dedication, which is characterised by a high degree of commitment when carrying out and completing a task; and

- Absorption, which refers to becoming consumed with work, and difficulty to break away from the task once initiated.

The three work engagement dimensions' correlations are positive and significant, ranging from *r* = .60 to .67 (Maricuțoiu et al., 2017). Thus, for the purpose of this study, the work engagement concept is analysed and interpreted as a unidimensional construct, instead of referring to the individual dimensions that make up the concept (Maricuțoiu et al., 2017).

2.3.2 *Burnout*

Like the work engagement concept, burnout has also received increased attention, especially over the last couple of years. Burnout is regarded as an occupational phenomenon, "a syndrome conceptualised as resulting from chronic workplace stress that has not been successfully managed" (World Health Organization, 2019, para. 4). Bianchi et al. (2015) state that burnout is a result of an individual's inability to cope effectively with an imbalance between the demands required of the job and the resources available to meet the given demands. According to Salvagioni et al. (2017), burnout comprises of three dimensions, namely:

- Emotional exhaustion, which refers to a depletion of emotional energy because of exacerbated emotional demands placed on the individual;
- Depersonalisation, also known as cynicism, which refers to when a person is aloof and disengaged from their job; and
- Low personal accomplishment, which is characterised by feeling inadequate in a personal and, or professional setting, coupled with poor performance and coping abilities. For the purpose of this study, low personal accomplishment will be referred to as personal accomplishment.

According to Maricuțoiu et al. (2017) the third dimension of burnout, personal accomplishment, has a relatively weak correlation with the other two dimensions (personal accomplishment *, p* = .35). Consequently, the two burnout dimensions with strong correlations, exhaustion and depersonalisation, are often looked at as making up a general factor referred to as core burnout. However, for the purpose of this study, the burnout concept is viewed as a unidimensional construct, instead of referring to the individual dimensions that make up the concept.

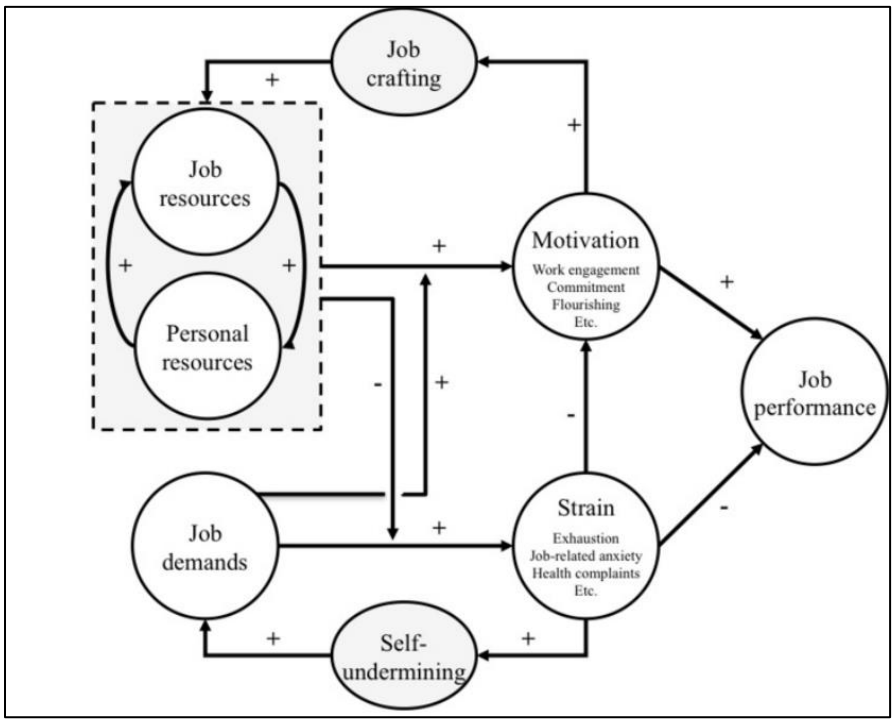
When viewing burnout from the perspective of the JD-R model, Van der Colff and Rothmann (2009) propose that occupational stress is a salient factor involved in the health impairment process which leads to burnout and work disengagement. As the customer service environment is highly stressful, the likelihood of customer service agents experiencing burnout is relatively high. In a study conducted in Sri Lanka, it was found that an individual could experience either healthy or unhealthy stress (Jetha et al., 2017; Rathnayake, et al., 2016). On the one hand, an optimal amount of stress, eustress, was identified as mobilising individuals into action. On the other hand, excessive exposure to stressful situations resulted in distress, which caused mental and emotional exhaustion (Jetha et al., 2017). Therefore, the interaction between personal and environmental factors could induce occupational stress, and if this stress is not properly managed, it can lead to individuals experiencing burnout (Jia et al., 2021).

2.4 The JD-R Model a Dual-Process

The JD-R model is made up of two inverse processes namely, the health-promoting and health impairment processes. On the one hand, the health-promoting process is motivational in nature whereby job resources promote engagement in a role, resulting in the employee experiencing high work performance and engagement. The health impairment process, on the other hand, relates to stress research, whereby excessive job demands drain employees' cognitive and physical stamina, causing fatigue and eventually health issues such as burnout. Figure 2.1 illustrates how the two inverse processes can be induced by two specific types of working conditions namely job demands and resources (Bakker et al., 2003; Bakker & Demerouti, 2014).

Figure 2.1

The Job-Demand Resources Model



Note. From "Multiple levels in job demands-resources theory Implications for employee well-being and performance" by A. B. Bakker and E. Demerouti, 2018, in E. Diener, S. Oishi, and L. Tay (Eds.), *Handbook of Wellbeing*, 2018, DEF Publishers.

The JD-R model provides a framework for this research study. However, this model was adjusted to meet the requirements of the topic under investigation. This current study explored work overload (i.e. a job demand) and perceived social support (i.e. a job resource) as antecedents to whether customer service agents experienced work engagement and burnout. Additionally, the distressed personality (i.e. Type D personality) was added to the JD-R model as a personal resource, to determine its contribution to the experience of burnout and work engagement.

2.4.1 *Job Demands in the Customer Service Environment*

The following section focuses on work overload, a job demand commonly found in the customer service environment that is positively related to feelings of exhaustion (Bakker & Demerouti, 2018). According to literature, there are various types of job demands that employees experience and the magnitude and prominence of job demands may differ across jobs. For instance, work overload is a job demand experienced by most employees at some point in their careers (Kim &

Wang, 2018). However, for customer service agents, work overload is one of the most common job demands experienced throughout their role (Kim & Wang, 2018).

Work overload refers to the experience of having too many work-related demands, with limited time to complete all the demands (Teng et al., 2020). This work factor is most seen in office work, where tasks are routine and continuous to ensure an efficient workflow (Yilmaz & Keser, 2006). According to Van Bogaert et al. (2012), workload accounts for more than 60% of the variance in job outcomes, such as burnout, which illustrates the significant impact it has on employees' perception of their job. Workload covers many facets including the amount of role requirements, the information load to process, and the emotional load to bear in the role. For instance, in the customer service environment, customer services agents are inundated with incoming calls, dealing with angry customers, follow-up queries, and having to capture each interaction. Additionally, the performance objectives of a customer service agent include working towards achieving "a low response time, while continually improving the quantity and quality of customer service", to reduce business cost (Yilmaz & Keser, 2006, p. 25). These frontline employees experience persistent work overload and prolonged exposure to these conditions may impact agents' recovery efforts are increase their likelihood of feeling stressed. (Kim & Wang, 2018).

2.4.2 *Job Resources Critical in the Customer Services Environment*

The following section focuses on perceived social support, which is a job resource required in the customer service profession to either buffer against job demands, or to act as a motivational catalyst to experience work engagement (Bakker & Demerouti, 2018). Social support refers to interpersonal connections that assist an individual to cope with stressors. For this study, social support was considered from a work context. A big part of a customer service agent's role is interacting and serving people, particularly people with queries (Sertel Berk et al., 2017). Therefore, social support in the workplace entails helpful and positive work interactions, which facilitate a sense of comradery for agents to perform optimally in the stressed environment (Zhu et al., 2016). Interpersonal connections can be measured in service contexts by the magnitude and frequency of supervisory and colleague support experienced by customer service agents. Supervisory support is characterised by concern towards expressed needs, providing feedback, and guiding agents in queries (Molino et al., 2016; Zhu et al., 2016). Based on the JD-R model, the quality of social or interpersonal connections at work can have an impact on work-related factors such as work engagement and burnout.

Additionally, social support plays a buffering role as it reduces the impact of life stressors and the effects that job demands place on an individual (Amarneh & Hunter, 2017; Woodhead et al., 2014). Perceived support positively impacts the agent's performance as it enhances their perception of being psychologically safe (Guchait et al., 2015). Moreover, access to supervisory support is specifically reported as one of the few organisational resources available to customer service agents as they can leverage off this resource of supervisory decision-making power (Zhu et al., 2016). Supervisory support in the face of job demands, such as customer incivility, can also assist in protecting the agent's morale and engagement (Boukis et al., 2020).

2.4.3 *Personality as a Personal Resource*

According to Xanthopoulou et al. (2007), personal resources are factors unique to an individual that strengthen and equip them to handle their environment and differentiate them from others. The more personal resources employees have, the more confident and equipped they feel to tackle tasks and succeed. Using the JD-R model Xanthopoulou et al. (2007) found that the availability and accessibility of job resources increased an individual's personal resources, which in turn created a higher probability of an individual experiencing work engagement. Additionally, based on the assumption that human behaviour is an outcome of the interaction between personal and environmental factors, these factors (i.e. personality and the environment) also influence an individual's level of engagement (Borst et al., 2019). Hence, personality is regarded as a personal resource, which either acts as a buffer against negative experiences or predisposes the individual to be negatively affected by stressors.

From a trait perspective, certain personality traits cause individuals to be more susceptible to experience negative affect (Babazadeh et al., 2019; Koutsimani et al., 2019). From the Big 5 personality perspective, individuals who score high on emotional instability and low on extraversion are more susceptible to the development of depression and anxiety (Koutsimani et al., 2019). Research also supports that there is a positive correlation between emotional instability and two dimensions of burnout, namely emotional exhaustion and depersonalisation (Koutsimani et al., 2019). With the focus on the customer service environment, it is widely known that customer services agents are at high risk of developing burnout due to their demanding work environment, despite their inherent personality susceptibility (Molino et al., 2016).

Burnout may be caused by various job-organisational or individual factors. Despite research identifying common job-organisational factors that act as job stressors (i.e. agent-customer

relationship, level of management and organisational support, and work environment and expectations), there is limited research on the significant role that individual factors play in relation to work-related outcomes, such as work engagement and burnout (Molino et al., 2016). In addition, there is limited research on the relationship between Type D personality and health-related variables (Horwood & Anglim, 2017). This shortcoming is evident in the JD-R model that does not adequately investigate the impact of personality on an individuals' perception of their work environment. Yet, the role of individual factors might be an important contributor to the perception of the work environment, as all customer services agents within the same organisation are exposed to similar job-organisational factors, with some agents developing burnout whilst others experience work engagement (Holman, 2002). As a result of these differing experiences, this research study set out to investigate whether the Type D personality (i.e. a personal resource) plays a role in the development of burnout and work engagement.

2.4.3.1 Type D Personality as a Personal Resource

Type D personality is a behavioural syndrome that is characterised by excessive worrying and tension (Denollet, 2005). Individuals with a Type D personality generally have a pessimistic view of life and are characterised as irritable and slow to warm up. Additionally, individuals with a Type D personality fear rejection and disapproval from others and therefore have fewer friends. These individuals are inclined to develop stress symptoms as they have a negative subjective perception of their work demands, which causes additional strain on their abilities and perceived resources. According to Bakker et al. (2010), individuals with high levels of negative affect and emotional instability are more likely to view stressful events as threatening. Therefore, in the customer service environment, characterised by high work demands and pressure, individuals with the Type D personality may have a negative view of their job, which could negatively impact their attitude towards their work experience (Seo et al., 2013).

2.5 Interaction between Latent Variables

In the following section, the interactions between the latent variables (i.e. work engagement, perceived social support, burnout, the Type D personality, and work overload), which form part of this research study, will be discussed.

2.5.1 *The Relationship between Burnout and Work Engagement*

Employees with high work engagement perform better than those experiencing burnout as these individuals are emotionally attached to their role, whereas employees who experience burnout

are emotionally detached from their roles (Schaufeli et al., 2002). From the JD-R model, antecedents of work engagement are job and personal resources, whereas job demands are antecedents to burnout, more specifically exhaustion (Schaufeli et al., 2002). One school of thought views work engagement and burnout as two opposite ends of a continuum (Cole et al., 2011). Based on this view it is proposed that if an employee experience any of the three dimensions of burnout, it is highly unlikely that the employee will show commitment and engagement in their work. Consequently, the assumption is that employees scoring high on the burnout dimensions (i.e. emotional exhaustion, depersonalisation and personal accomplishment), will score low on the opposing engagement dimensions (i.e. vigour, dedication and absorption) (Cole et al., 2011). This assumption supports the fact that burnout and work engagement are two opposing occupational outputs. However, another school of thought views these two concepts are mutually independent, given that the absence of one construct (i.e. burnout) does not guarantee the presence of the other construct (i.e. work engagement) (Rożnowski, 2020). This theory infers that employee may experience some symptoms of burnout, while still being committed to their job or to the task at hand. Nevertheless, research supports the notion that a negative relationship exists between burnout and work engagement. Therefore, in this study, it is proposed that:

> Hypothesis 1. Burnout ($\eta 2$) has a significant negative relationship with work engagement ($\eta 1$).

2.5.2 *The Relationship between Perceived Social Support and Work Engagement*

The Social Exchange Theory, developed by Homans (1958), suggests that the quality of exchange between supervisors and employees influences how employees respond to supervisors and the broader organisation. On the one hand, when employees perceive that their supervisor is supportive and concerned about their subjective wellbeing, they will be more committed to their role and organisation (Othman & Nasurdin, 2012). On the other hand, a lack of perceived supervisory support results in a limited investment of personal skills, abilities, and knowledge required to complete a task (Othman & Nasurdin, 2012). Additionally, a study that investigated customer service agents' perceptions of their work environment found that whilst majority of the agents felt that the organisation did not put in effort to create a positive work environment, 19% of the agents felt valued and supported by their supervisor despite the tough working conditions (Miller & Hendrickse, 2016). Thus, it can be concluded that the perception of social support impacts an individual's view of their work environment and the amount of

commitment and willingness to invest skills, abilities, and knowledge to effectively render a service (Othman & Nasurdin, 2012). Based on these findings, the following hypothesis is proposed:

> Hypothesis 2. Perceived social support (*η3*) has a significant positive relationship with work engagement (*η1*).

2.5.3 *The Relationship between Type D Personality and Work Engagement*

According to Xanthopoulou et al. (2009), individuals with a Type D personality are viewed as having a negative and hopeless outlook on life as opposed to optimistic individuals who are more likely to experience job satisfaction. Due to their negative affect and social inhibition, these individuals tend to experience higher stress levels and lower job satisfaction. Thus, if an individual with Type D personality is placed in a work environment characterised by high pressure and work overload, psychological strain is likely to occur which could lead to stress (Geuens et al., 2015). Van den Tooren and Rutte (2016) add that individuals who experience enduring distress are less likely to experience work engagement. This distressed experience could be attributed to the negative emotions, characteristic of a Type D personality, that hinders the cognitive processes and actions required as pre-conditions for work engagement. As such, it can be argued that the cognitive processes and actions that are prerequisites for individuals to experience commitment, motivation, and energy to complete a task could be lacking in individuals with a Type D personality (Van den Tooren & Rutte, 2016). Additionally, by definition, the Type D personality contrasts with the JD-R model's description of a personal resource (i.e. a positive inherent quality that equips one to deal with stressors). Hence, although personal resources generally have a positive relationship with work engagement, it is expected that the Type D personality personal resource will have an inverse influence on work engagement. Therefore, it is hypothesised that:

> Hypothesis 3. The Type D personality profile (*ξ1*) has a negative relationship with work engagement *(η1*).

2.5.4 *The Relationship between Perceived Social Support and the Type D Personality*

Social support has a significant impact on how individuals perceive and respond to stress and has a positive impact on individual's psychological health. Social support encompasses both perceived and received social support. Perceived social support refers to the perception of the availability of support when required and is significantly correlated with an individual's personality traits (Sararoudi et al., 2011). For instance, it has been found that extroverted individuals

experience higher perceived social support when compared to introverted individuals as they are more likely to engage and build connections with many people. Similarly, the two dimensions characteristic of an individual with Type D personality (i.e. negative affectivity and social inhibition) tend to be negatively correlated with social support. Individual with Type D personality tend to have negative perception of other people's actions and their social inhibition also hinders them from interacting with others and developing social relations (Denollet, 2005). Therefore, due to their negative perception and social inhibition, when these individuals experience stress, they are less likely to seek help or support from others and are not easily reassured by individuals who offer assistance (Sararoudi et al., 2011). Based on the aforementioned facts, the following hypothesis regarding the effect of the Type D personality profile on perceived social support is proposed:

> Hypothesis 4. The Type D personality profile ($\xi 1$) has a significant negative relationship with perceived social support ($\eta 3$)

2.5.5 *The Relationship between Job Demands and Burnout*

According to Maslach et al. (2001), there are certain job demands (e.g., work and emotional overload) that are particularly associated with role-related stress and the development of burnout, more specifically exhaustion. Moreover, in a customer service environment, an agent's role is characterised by high workload and time pressure, which over time contributes to the experience of stress and burnout. Due to agents' high volumes of work, they often do not take time between calls to process their emotions, especially after dealing with a difficult customer (Rossouw & Rothmann, 2020). The emotional load experienced in the role makes customer services agents vulnerable to experience mental fatigue and exhaustion. If agents do not manage their work and emotional load effectively, it increases their risk of experiencing burnout (Molino et al., 2016). Therefore, it is hypothesised that:

> Hypothesis 5. Work overload ($\xi 2$) have a significant positive relationship with burnout ($\eta 2$).

2.6 Moderating Effects between Latent Variables

The dual-process of the JD-R model is essential to understanding the relationship between job demands and resources and the two work-related outcomes that this study focused on. According to the JD-R model, an imbalance between job demands and resources causes individual strain. An imbalance is experienced when there is a deficit of resources available that individuals require

to meet or to alleviate the stress related to job demands. Prolonged exposure to this imbalance causes heightened psychological strain that is detrimental to an individual and acts as a catalyst for the development of work-related stress (Dewe et al., 2012). Therefore, the two inverse processes (i.e. the health-promoting and health impairment process) will be discussed in relation to job demands and resources acting as moderating variables.

2.6.1 *Work Overload as a Moderating Variable*

The first JD-R interaction involves job demands strengthening the positive relationship between resources (job and personal) and work engagement. According to Bakker et al. (2014), resources have a stronger impact on work engagement when job demands are present, as the demand activates action, and the resources activates the commitment needed to carry the individual through to task completion. Additionally, when work overload is low, there will be a stronger relationship between perceived social support and work engagement, compared to when work overload is high. Conversely, when work overload is high, there is a small probability that individual with a distressed personality will experience work engagement. However, when work overload is low, an individual with a distressed personality might still experience work engagement. Therefore, in the context of this research study, work overload has an impact on the health-promoting process. Consequently, the following hypotheses are proposed:

> Hypothesis 6. Work overload (*ξ2*) moderates the relationship between perceived social support (*η3)* and work engagement (*η1)* among customer service agents.

> Hypothesis 7. Work overload (*ξ2*) moderates the relationship between Type D personality (*ξ1*) and work engagement (η1).

2.6.2 *Perceived Social Support as a Moderating Variable*

The second JD-R interaction involves resources (i.e. job and personal) buffering the impact that job demands have on employees, thus preventing health impairment. According to Xanthopoulou et al. (2007), resources may assist individuals to cope with job demands. Therefore in the case of customer service agents, perceived social support acts as a protective mechanism against emotional exhaustion, even when individuals are dealing with high levels of job demands (Salahian et al., 2012). Therefore, by pre-empting job stressors and cultivating the necessary resources, employees can buffer the effect of the adverse impact imposed by demand.

Furthermore, when viewing burnout from the perspective of the Diathesis-Stress model (Geuens et al., 2015), individuals experience burnout when their stressors outweigh their resilience. This theoretical assumption of burnout is like that of the JD-R model, which states that burnout is a consequence of an imbalance between job demands and resources (Geuens et al., 2015). Therefore, although high demands and low resources predict the onset of burnout, if an employee has sufficient job resources, the impact of high job demands is not as detrimental on an individual's psychological processes. This buffering effect is supported by Bakker et al. (2005), who reported that more than 50% of this buffering effect is significant. Subsequently, in this study, it is hypothesised that perceived social support will buffer the relationship between work overload and burnout. Thus, when work overload is high, the perception of having social support, might have a significant impact on whether employees experience burnout. Consequently, the following hypothesis is formulated:

> Hypothesis 8. Perceived social support ($\eta 3$) moderates the relationship between work overload ($\xi 2$) and burnout ($\eta 2$).

2.6.3 *Type D Personality as a Moderating Variable*

This study focused on why some agents experience burnout, whilst others experience work engagement. Variance in experiencing either burnout or work engagement could potentially be answered by investigating the impact of personality on work-related outcomes. The JD-R model explains that the interaction between an employee and their environment is essential in understanding the reactions of people in a particular work environment. Since behaviour is a reaction of a person's underlying tendencies (traits), personality traits might explain why individuals experience and appraise environments differently (Dewe et al., 2012).

Moreover, according to Xanthopoulou et al. (2007), appraisal and adaption to environmental factors differ from one individual to the next, which could be attributed to the personal resources at their disposal. For instance, on the one hand, employees with a Type D personality have a negative subjective perception of stressors and may therefore perceive work overload as overwhelming and distressing. On the other hand, an employee's distressed nature may hinder the opportunity to build and foster work relationships, which could cause strain on their abilities and resources (McVicar, 2003). Therefore, personal resources act as a moderator between job/environmental factors and work-related outcomes, because personality might influence the way employees perceive the environment that they operate in.

Consequently, when considering the inherently stressful nature of a customer service environment, it can be expected that an agent with a Type D personality will view job demands as distressing and be more socially isolated. Hence, distressed individuals are more likely to experience a higher likelihood of exhaustion (i.e., burnout) and lower levels of work engagement. Subsequently, research suggests that personal resources affect the employees' approach to coping with job demands (Bakker et al., 2005). As a result, the following hypothesis is put forward:

> Hypothesis 9. Type D personality *(ξ1)* moderates the relationship between work overload *(ξ2)* and burnout *(η2).*

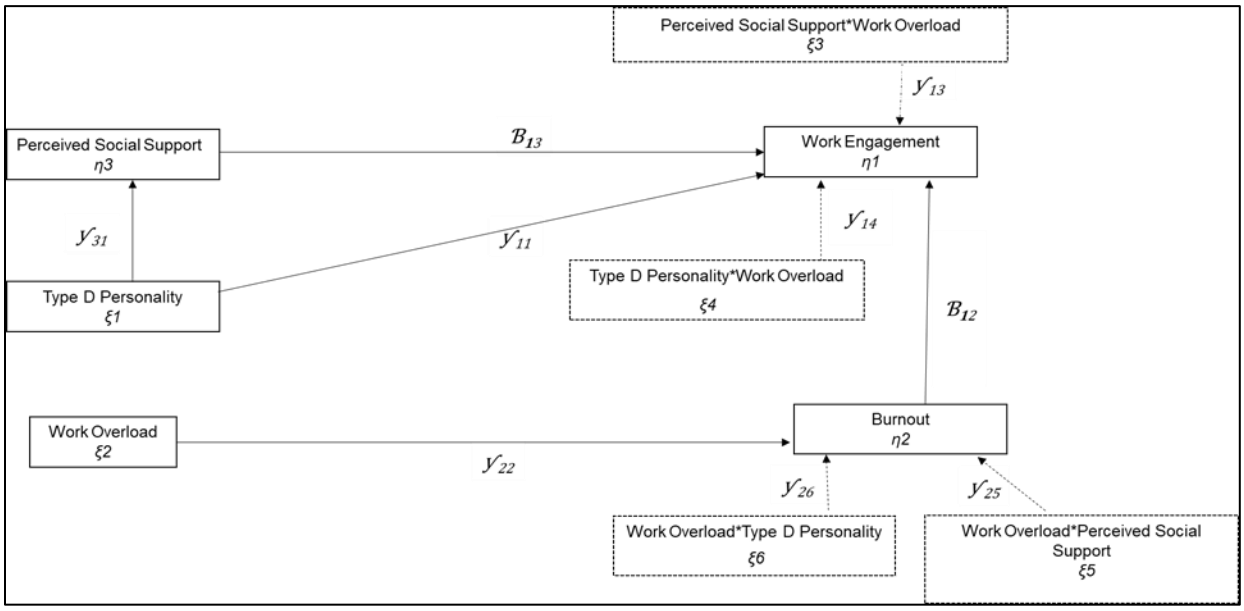
2.7 The Conceptual Model

Individuals operate in an open system which forms part of the greater organisation. Therefore, when investigating employees' wellbeing, it is essential to investigate work outcomes from a holistic perspective (Grobler et al., 2012; Weber & Waeger, 2017). To have a comprehensive understanding of the burnout and engagement phenomena, there is a need to investigate the complex impact of demands and resources. Hence, job characteristics, personal characteristics and the interaction between these variables need to be considered when investigating the occurrence of burnout and work engagement amongst customer service agents (Bakker & Demerouti, 2007).

Figure 2.2 illustrates the conceptual model of the latent variables, the interrelationships between them, as well as the aforementioned hypotheses that were derived from literature.

Figure 2.2

A Conceptual Model of Type D Personality, Job Demands and Resources on Customer Service Agents Burnout and Work Engagement



2.8 Chapter Summary

This chapter focused on the JD-R model, its constructs and the current academic research relating to the interactions between the various constructs, from which the hypotheses were formulated. The literature review and academic theory presented in this chapter focused on finding an answer to the research-initiating question (i.e. determining why there is variance in work engagement and burnout amongst employees in the customer services sector). Next, Chapter 3 focuses on the research methodology utilised to test the structural equation model and the hypotheses posed in this study.

CHAPTER 3
RESEARCH METHODOLOGY

3.1 Introduction

This chapter focuses on the research methodology used in the attempt to answer the research initiating question. A discussion of the research design, the research procedure, the sampling technique, the measuring instruments, the data collection process, the ethical factors considered, and the statistical analyses used for interpreting the data is presented in the upcoming sections of this chapter.

To answer the research initiating question, the researcher applied an explanatory approach to examine this study's predicted causal relationships. Using the JD-R model, this study aimed to evaluate the role that the latent variables (as discussed in Chapter 2) play in causing variance in work engagement and burnout amongst customer service agents in South Africa.

3.2 Substantive Research Hypotheses

Based on the literature review in Chapter 2, it was hypothesised that job demand and resources (i.e. job and personal resources) are the main variables that explain the variance between work engagement and burnout experienced by customer service agents. As described by Prasad et al. (2001), hypotheses are provisional predictions about the nature of the relationship between two or more variables. Hypothesis testing allows the provisional predictions to be empirically tested to determine the accuracy and validity of its predictions. Langenhoven (2015) adds that the substantive research hypotheses allow for other scientific minds to empirically test the researcher's beliefs.

The literature review in Chapter 2 concluded with a conceptual model which figuratively represents this study's substantive hypotheses. The overarching substantive hypothesis was reduced to the structural model, as illustrated in Figure 3.1, which aims to explain the antecedents that cause variance in work engagement and burnout amongst customer service agents in South Africa. The overarching substantive hypothesis was broken down into nine substantive research hypotheses, formulated as:

Hypothesis 1. Burnout (η2) has a significant negative relationship with work engagement (η1).

Hypothesis 2. Perceived social support (η3) has a significant positive relationship with work engagement (η1).

Hypothesis 3. The Type D personality profile (ξ1) has a negative relationship with work engagement (η1).

Hypothesis 4. The Type D personality profile (ξ1) has a significant negative relationship with perceived social support (η3).

Hypothesis *5.* Work overload (ξ2) have a significant positive relationship with burnout (η2).

Additionally, the structural model, based on the conceptual model (Figure 2.2), also encompasses four interaction effects. The four hypotheses for these interaction effects include:

Hypothesis 6. Work overload (ξ2) moderate the relationship between perceived social support (η3) and work engagement (η1).

Hypothesis 7. Work overload (ξ2) moderate the relationship between the Type D personality (ξ1) and work engagement (η1).

Hypothesis 8. Perceived social support (η3) moderates the relationship between work overload (ξ2) and burnout (η2).

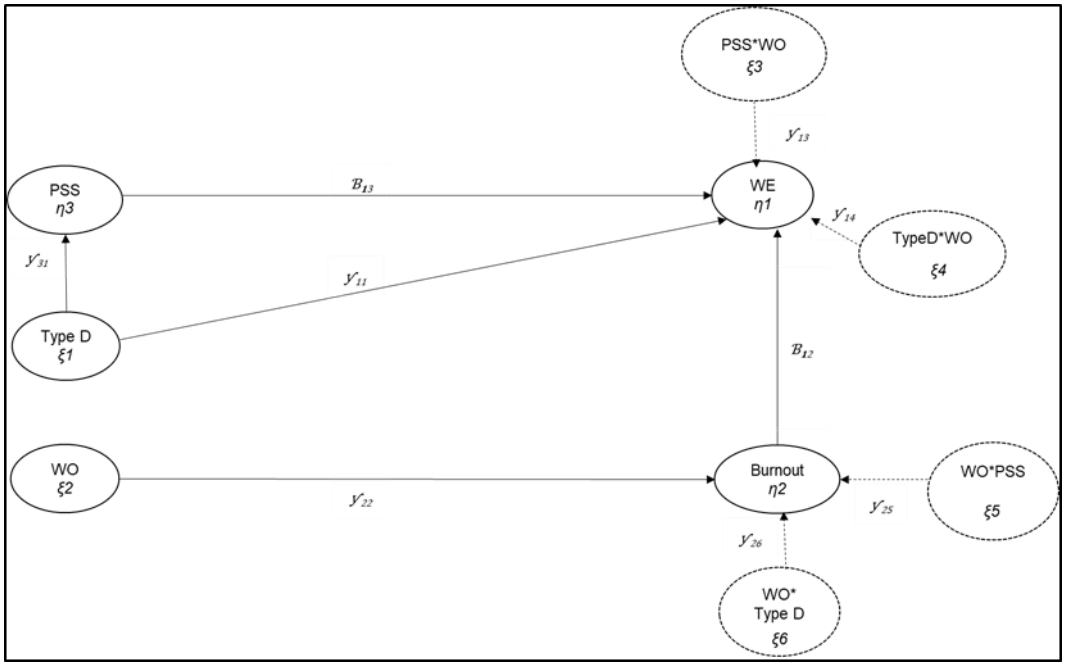
Hypothesis 9. The Type D personality (ξ1) moderates the relationship between work overload (ξ2) and burnout (η2).

3.3 Structural Model

Figure 3.1 represents the structural model, a statistical representation of the substantive research hypotheses for this study. All the latent variables and interaction effects are illustrated in the structural model.

Figure 3.1

Structural Model of Type D Personality, Job Demands and Resources on Customer Service Agents Burnout and Work Engagement



Note. WE: Work Engagement, PSS: Perceived Social Support; WO: Work Overload and Type D: Type D Personality.

Table 3.1 provides a summary representation of all the latent variables and interaction effects that are represented in the structural model in Figure 3.1. The variables (indicated by "*" in Table 3.1) serve as moderating variables that directly affects the endogenous latent variables (Langenhoven, 2015).

Table 3.1

Representation of each Variable in the Structural Model

Statistical Notation	***Symbol***	**Variable**
Eta (η):		
	η1	Work Engagement
	η2	Burnout
	η3	Perceived Social Support
Ksi (ξ)		
	ξ1	Type D Personality
	ξ2	Work Overload
	ξ3	Perceived Social Support*Work Overload influences Work Engagement
	ξ4	Type D Personality*Work Overload influences Work Engagement
	ξ5	Work Overload*Perceived Social Support Influences Burnout
	ξ6	Perceived Social Support*Type D Personality Influences Burnout

3.4 Statistical Hypotheses for the Structural Model

The overarching substantive research hypothesis was broken down into 9 statistical hypotheses, seen below:

Hypothesis 1:

H_{01}: $\acute{B}_{12} = 0$

H_{a1}: $\acute{B}_{12} < 0$

Hypothesis 2:

H_{02}: $\acute{B}_{13} = 0$

H_{a2}: $\acute{B}_{13} < 0$

Hypothesis 3:

H_{03}: $\acute{\gamma}_{11} = 0$

H_{a3}: $\acute{\gamma}_{11} > 0$

Hypothesis 4:

H_{04}: $\gamma_{31} = 0$

H_{a4}: $\gamma_{31} > 0$

Hypothesis 5:

H_{05}: $\gamma_{22} = 0$

H_{a5}: $\gamma_{22} > 0$

Hypothesis 6:

H_{06}: $\gamma_{13} = 0$

H_{a6}: $\gamma_{13} \neq 0$

Hypothesis 7:

H_{07}: $\gamma_{14} = 0$

H_{a7}: $\gamma_{14} \neq 0$

Hypothesis 8:

H_{08}: $\gamma_{25} = 0$

H_{a8}: $\gamma_{25} \neq 0$

Hypothesis 9:

H_{09}: $\gamma_{26} = 0$

H_{a9}: $\gamma_{26} \neq 0$

3.5 Research Design

Research design is the blueprint a researcher follows to guide the data collection and analysis process to gather sufficient information to answer the research initiating question and address the research problem (Reason et al., 2007). According to Babbie and Mouton (2001), research design increases the systematic variance of a structural model, reduces error variance and manages extraneous variance. The current study focused on causal relationships between the perceived intensity of job demands and resources (i.e. job and personal) and its impact on work engagement and burnout. Therefore, a quantitative explanatory research approach was used to fulfil the research objectives (Kabir, 2016).

The researcher focused on a cross-sectional design and used a survey as the data collection tool (Lavrakas, 2008). The cross-sectional research study allowed the researcher to test all the hypotheses and simultaneously gather data from a sample of customer service agents from various demographics, in different divisions within the customer service environment, at a single occurrence (Setia, 2016). Structural Equation Modelling (SEM), specifically the partial least

square structural equation modelling (PLS-SEM), is an approach used within SEM that was used to conduct this cross-sectional research design, due to the flexibility of the statistical analysis method (Kwok et al., 2018).

3.6 Research Procedure and Sample Size

According to Taherdoost (2016), sampling is a process of identifying a group of people who are suitable to answer the research question. Once the specific group of individuals is identified, they are referred to as a population. A population encompasses a group of individuals, which the researcher then reduces into a sample frame (Taherdoost, 2016). The sample frame is a smaller number of selected individuals, a representative of the bigger population, which is used to reduce the time and resources that the researcher would have used to conduct the research study for the entire population. The sample frame selected for this research study was customer service agents from a national financial service organisation in Gauteng, South Africa.

There are two main sampling techniques namely, probability (i.e. randomly selecting individuals from a sampling population) and non-probability (i.e. selecting a sample based on a specific purpose or reason) sampling (Theron, 2016). For this study, a non-probability convenience sampling method was utilised in which a sample of customer service agents, from different divisions within the financial service organisation, was approached based on their accessibility. This sampling method was selected based on the sample availability and the social constraints due to the COVID-19 pandemic, which resulted in all customer service agents often working in isolation and away from a central office location. Additionally, the pandemic may have played a role in the potential bias of over- or under-representation of certain demographics, simply because the pool of agents that were working during the time that data was collected was limited. This was attributed to either employees off ill, attending to a family member who was ill or attending funerals.

Once ethical clearance was obtained, the financial service organisation was approached to participate in the research. Due to the COVID-19 pandemic, the researcher carried out a virtual meeting with the department's Human Resources (HR) representative to discuss the rationale of the study and obtain consent to have the organisation’s customer service agents participate in this study. The HR representative was the contact person for the respective divisions, with whom the researcher liaised, during the data collection. The data collection method used was an internet-based questionnaire, which was deemed sufficient to gather the information required to

answer the research initiating question. This data collection method allowed customer service agents to complete the questionnaire anonymously and at a time most convenient to them, to accommodate their work and home demands (Kabir, 2016). The HR representative was provided with a draft email, which included a link to the survey to share with the customer service agents. When accessing the survey link, the participants were first informed of what the study entailed. The online questionnaire was set up in such a way that only those participants who had given informed consent could gain access to complete the online questionnaire (Appendix A).

As all agents were working remotely, the researcher created awareness of the survey using a launch campaign, which comprised of communication countdown emailers until the launch of the survey, as well as organisational reminder emails sent once a week to the customer service distribution list. These communications encouraged customer service agents to complete the survey that was active for 2 weeks. All emails were distrusted internally by the representatives. The survey link was shared with *N* =1487 customer service agents, of which *n* = 442 agents completed the questionnaire (i.e. 469 agents accessed the survey link, from which 450 agents gave consent and gained access to the questionnaire with 442 completing the questionnaire in full).

3.7 Research Participants

The sample comprised of *N* = 442 customer service agents (of which 24.21% were males, 73.30% were females, with 2.49% not disclosing their gender). The participants' age ranged from 18 to 51 or older (of which 4.07% were between 18-25 years, 25.34% between 26-30, 45.48% between 31-40 years, 17.42% between 41-50 years, 7.01% were 51 years and older, with .68% not disclosing their age). Moreover, 56.79% of the sample were single, 29.86% were married, 6.56% were divorced, 1.13% were widowed and 5.66% preferred not to disclose their marital status. In terms of years in customer service, .9% were in the customer service environment for less than 1 year, 2.5% were in the environment for a year, 31.9% between 2 to 5 years, 26.24% between 6 to 10 years, 35.29% for 11 years or more, while 3.17% did not disclose their number of years in customer service. In terms of highest level of education obtained, 1.37% reported having lower than a Grade 12 certificate, 28.02% had a Grade 12 certificate, 33.71% had a higher certificate, 18.22% had an undergraduate qualification, 14.35% had a postgraduate qualification, while 4.33% did not disclose their highest level of education. Lastly, 59.73% of the sample dealt with external customers as part of their customer service occupation, whilst 33.26% dealt with internal

clients (i.e. colleagues in the organisation), and 7.01% did not disclose the type of customers they served.

3.8 Research Ethics

According to Babbie and Mouton (2001), the researcher must remain cognisant of ethical factors that may pose a risk in the study while interacting with participants. Ethical issues may arise during the data collection stage; this section thus proactively attempts to reduce ethical issues by pre-empting any potential risks. To achieve this, the researcher reflected on the legislation that was considered when engaging in the research process. Factors addressed in the ethical consideration included informed consent, confidentiality, anonymity, and the disclosure of information.

Firstly, the researcher was obliged to apply for ethical clearance from the institution and only proceeded with data collection once ethical clearance was obtained (Appendix B). In line with Annexure 12 of the Ethical Rules of Conduct for Practitioners Registered of the Health Professions Act (Act no. 56 of 1974) (Health Professions Act, 2006, p. 41), a researcher must be granted permission from the given institution from which the research study's sample will be chosen. Therefore, the researcher obtained permission from the HR representative of the customer service environment that participated in the study. Next, the researcher informed the participants that if they wished to receive the results of the study, this would be made available to them.

As this study focused on the customer service agents' level of the identified latent constructs, it was deduced that the study did not pose any threat to the wellbeing of the participants (i.e. customer service agents). Additionally, all the measurement tools utilised in the research study were publicly accessible and did not form part of the Health Professions Council of South Africa (HPCSA) list of psychological tests. Furthermore, although the study was regarded as low risk, in terms of the potential discomfort it could create, the researcher ensured the protection of the participants' identity. The reason for the emphasis on anonymity was to ensure that the participants were not negatively affected, directly or indirectly, from participating in the study (Babbie & Mouton, 2001). In addition, since the web-based questionnaire was used, the researcher did not have access to personal information such as the email addresses of the participants. The researcher also kept all data of the study in a secure storage unit using a password-protected file to further ensure confidentiality (Babbie & Mouton, 2001).

Additionally, the participants received an informed consent form, defining the purpose of the study, their role in the study, the potential benefits, and their rights. The informed consent formed part of the web-based questionnaire, requiring the participants to first agree to participate in the study before accessing the questionnaire. In addition, a draft email was shared with the HR representative which had the link and instructions to access the questionnaire. In conclusion, it is the opinion of the researcher that none of the latent constructs posed ethical risks in the study. In carrying out the study, the researcher ensured that the wellbeing and dignity of the participants were upheld and protected and that compliance with legislation applicable to the research study was met.

The next section focuses on the measuring instruments used to collect the data from the sample of customer service agents.

3.9 Measuring Instruments

To achieve the research objectives, a composite of measurement instruments was combined to create a questionnaire to collect data from the customer service agents (Appendix C). Six sections were included in the online survey, namely biographical information, Utrecht Work Engagement Scale 9-item version (UWES-9), Social Support Scale (SSS), Maslach Burnout Inventory (MBI), Type D Scale-14 (DS14) and the Job Demands and Resources Scale (JDRS). All six sections are discussed in greater detail next.

3.9.1 *Biographical Information*

The biographical information section focused on descriptive factors of the participants, such as age, gender, marital status, years in customer service and the type of customers the agents served.

3.9.2 *Utrecht Work Engagement Scale 9-item Version*

3.9.2.1 Description of the Instrument

As the name suggests, the Utrecht Work Engagement Scale (UWES) was designed to measure an employee's level of work engagement. The original instrument was initially made up of 24 items; however, after undergoing psychometric evaluation, the UWES was shortened by seven items, resulting in the 17 items UWES scale (Schaufeli & Bakker, 2003). Although there are

various versions of the UWES instrument, all the versions cover the three subscales that underlie work engagement, namely dedication, vigour and absorption (Schaufeli & Bakker, 2003).

In this research study, the shortened UWES-9 scale was used to measure the work engagement construct. UWES-9 is like the 17 items UWES scale in that it is a self-report scale, covering the three subscales, but consists of only nine items. The nine items are split to cover dedication (items 3, 4 and 7), vigour (items 1, 2 and 5) and absorption (items 6, 8 and 9). The nine items were all positively scored on a seven-point rating scale, ranging from 0 reflecting *never* to 6 reflecting *always/daily* (Schaufeli et al., 2002). For instance, one of the questions to rate on a seven-point rating scale was: *At my work, I feel bursting with energy.* In this study, the work engagement construct was treated as a unidimensional construct, in that participants' scores were "interpreted in a summative manner, giving a single global score" (De Bruin et al., 2013, abstract section).

3.9.2.2 Previous Findings on the Psychometric Properties

During the psychometric testing of the UWES, factor analysis identified three dominant factors, namely dedication, vigour and absorption. The UWES was tested using confirmatory factor analysis (CFA) which confirmed the superiority of the three-factor structure (Nell, 2015). The psychometric properties for the abbreviated UWES-9 instrument were similar to that of the 17-item UWES scale. A study conducted in the banking sector in India reported that the UWES-9 was also tested using CFA, which indicated a good fit for the three-factor model of UWES-9 (Lathabhavan et al., 2017). Moreover, the three subscales' Cronbach's alphas ranged between .60 and .80 which reflects satisfactory internal consistency and validity (Schaufeli & Bakker, 2003).

3.9.3 *Social Support Scale*

3.9.3.1 Description of the Instrument

The Social Support Scale (SSS) was developed for a 2-year Medical Outcome Study (MOS) to measure patients perceived social support. The instrument also measured the degree to which individuals had access to support during stressful events. The SSS is interchangeably referred to as the MOS-SSS, based on the Medical Outcome Study that it was originally designed for. The SSS is made up of 19 items and covers four domains of social support including emotional-informational support (items 1 to 8), tangible support (items 9 to 12), affectionate support (items 13 to 15), positive social interactions (items 16 to 18) and the final item reflecting the overall functional social support index (item 19) (Zanini & Peixoto, 2016). The 19 items are scored using

a five-point Likert rating scale, ranging from 1 reflecting *none of the time* to 5 reflecting *most of the time* (Zanini & Peixoto, 2016). For instance, one of the questions rated was: *Someone you can count on to listen to you when you need to talk*.

The SSS was used in this study to measure the customer service agents' perceived level of support. The respondents' level of perceived social support was treated as a unidimensional construct and was determined by obtaining an overall support index score by calculating the means of the four subscales and adding it to the score obtained on item 19 (Zanini & Peixoto, 2016). The means of the subscale were calculated, which were then used for the SEM.

3.9.3.2 Previous Findings on the Psychometric Properties

By using the translation and back-translation process, the SSS was linguistically adapted to be used across various regions such as Turkey, Brazil and Malay. To ensure that the adaptions were psychometrically sound, all adaptions were compared to the original four-factor model, which all yielded satisfactory reliability and validity results (Saddki et al., 2017; Yilmaz & Bozo 2019). Moreover, for the original and adapted versions of the SSS, the Cronbach's alpha of all four subscales were above .70, reflecting acceptable internal consistency (Saddki et al., 2017; Yilmaz & Bozo 2019; Zanini & Peixoto, 2016).

3.9.4 *Maslach Burnout Inventory*

3.9.4.1 Description of the Instrument

The Maslach Burnout Inventory (MBI) was designed to measure three components underlying burnout. These three components are emotional exhaustion, depersonalisation and personal accomplishment. The MBI comprises of 22 items split into three sections to measure the three components separately. Items 1, 2, 3, 20, 8, 13, 14, 6, 16 measured the individual's level of emotional exhaustion, items 5, 10, 11,15, 22 measured the individual's level of depersonalisation, and items 4, 7, 9, 12, 17, 18, 19, 21 measured the individual's level of personal accomplishment. For reporting purposes, items related to personal accomplishment were all reversed scored. The 22 items were scored using a seven-point rating scale, ranging from 0 reflecting *never* to 6, reflecting *always*. All the 22 items related to the frequency at which the respondents experienced the feeling related to the item they were rating (Maslach et al., 2001; Maslach et al., 2017). For instance, one of the questions rated using the seven-point scale was: *Working with people directly puts too much stress on me.* For this study, burnout was treated as a unidimensional construct therefore the total burnout score was interpreted per respondent.

3.9.4.2 Previous Findings on the Psychometric Properties

An important selection criterion included in the initial sample used to assess the MBI's psychometric properties required the respondent to have been working in the service sector and directly dealing with individuals. By using factor analysis, the MBI's items were first reduced from 47 to 25 and finally to 22. Three of the four-factor structures showed greater eigenvalues and were selected as the current MBI subscales (Maslach et al., 2001; Maslach et al., 2017). Using the test-retest reliability method of testing the psychometric properties, the findings revealed that the Cronbach's alpha of all three subscales of the MBI were above .70 across various occupational sector groups. This finding reflected acceptable internal consistency.

3.9.5 *Type D Scale-14*

3.9.5.1 Description of the Instrument

The Type D Scale-14 (DS14) was designed to measure the distressed personality, in a manner that does not feel intrusive on the participant completing the questionnaire (Denollet, 2005). The questionnaire includes job-related questions focused on the Type D personality, stress, and burnout. The measure consists of 14 questions that are categorised into two subscales, namely negative affectivity (NA) and social inhibition (SI). The negative affectivity construct is measured by items 2, 4, 5, 7, 9, 12 and 13 and the social inhibition construct is measured by items 1, 3, 6, 8, 10, 11, and 14 (Shao et al., 2017). To determine whether a person can be classified as having a Type D personality or not, a cut-off score of ten was used for both subscales (negative affectivity ≥ 10 and social inhibition ≥ 10) (Denollet, 2005). A score of ten or more on both the negative affectivity and social inhibition subscales indicates that the respondent is likely to have a Type D personality profile (Grande et al., 2010). In addition, the seven items per subscale are rated from 1 to 4, where 1 refers to *false* and 4 refers to *true* (Shoa et al., 2017). For instance, one of the questions to rate using the four-point scale in this questionnaire was: *I often talk to strangers*. For this study, the DS14 was used to assess the degree to which a customer service agents' personality profile is congruent with the Type D personality profile.

3.9.5.2 Previous Findings on the Psychometric Properties

During the psychometric testing of the DS14, factor analysis identified two dominant traits, namely negative affectivity, and social inhibition. The DS14 was tested using CFA which confirmed the superiority of the two-factor structure (Grande et al., 2010). Denollet (2005) and studies whose samples included nursing staff (Geuens et al., 2015), cardiovascular and type-2 diabetes patients

(O'Riordan et al., 2020; Shao et al., 2017; Sararoudi, et al., 2011) made use of the DS14 instrument and all reported that the Cronbach's alpha of the two subscales ranged between .86 and .88 for negative affect and social inhibition, respectively. These coefficients suggest high internal consistency and validity between the subscales (Shao et al., 2017).

3.9.6 *Job Demands and Resources Scale*

3.9.6.1 Description of the Instrument

The work overload construct was measured using the Job Demands-Resources Scale (JDRS) developed by Rothmann et al. (2006). The JDRS measures job demands and job resources. The researcher used the adapted JDRS (Asiwe et al., 2015), which comprises of 40 items, focusing on "pace and amount of work, mental load, emotional load, variety in work, opportunities to learn, independence in work, relationships with colleagues, relationships with immediate supervisors, ambiguities about work, information, communication, participation, contact possibilities, uncertainty about the future, remuneration and career possibilities" (Rothmann et al., 2006, p.79). The approximate completion time for the adapted JDRS version is between seven to ten minutes with participants scoring each item on a seven-point scale where 1 reflects *seldom* and 7 reflects *true* (Asiwe et al., 2015). For instance, one of the questions to rate using the seven-point scale was: *Do you work under time pressure?*

3.9.6.2 Previous Findings on the Psychometric Properties

Rothmann et al. (2006) evaluated the JDRS's construct validity, reliability, and construct equivalence in different South African companies. The results yielded from the South African sample reflected that the JDRS is psychometrically strong. The results showed statistical significance between job demands and job resources across the South African organisations with Cronbach's alphas ranging between .76 and .92.

The 40 items cover the seven JDRS dimensions with varying Cronbach's alpha. These sub dimensions encompass job overload, job insecurity, control, organisational support, relationship with colleagues, rewards, growth opportunities. Although the JDRS comprises of seven dimensions, for this research study, only the work overload subscale was used. The work overload dimension has a Cronbach alpha above .70 suggesting acceptable internal consistency (Nunnally & Bernstein, 1999).

3.10 Data Capturing and Methods Used for Data Analysis

The online questionnaire was developed on SunSurveys, and all data were saved using a Microsoft Excel Spreadsheet. Initially, the researcher used SPSS (Version 27) to conduct exploratory analysis and to determine the Cronbach's alpha (to test for inter-item consistency). However, the statistical packages used to conduct the inferential statistics in this study were (1) Statistica (Version 14), to test the internal reliability and to obtain the psychometric properties of each measure, and (2) partial least squares (PLS), to do SEM to evaluate the outer and inner models, and for path analysis of the proposed structural model.

3.11 Missing Values

In every research study, there is the possibility of missing values in data collected due to attrition, non-response, or withdrawal from the survey. If not addressed before analysing the data collected, missing values can impact the credibility of the results (Nell, 2015; Theron, 2016). To address this, the researcher performed data cleaning before the data analyses process. For this study, the researcher followed a two-step approach to address the problem of missing data. First, *missing data by imputation,* was done for the few participants who left only a few sections incomplete. Imputation refers to a process of substituting real values for missing values. Therefore, "all available data were included in the analysis, while the statistical software program recognised the missing values and took them into account" (Langenhoven, 2015, p. 80). Next, for individuals with too many missing responses, *list-wise deletion* was conducted. List-wise deletion occurs when the entire case was deleted to address too many missing responses (Dixon, 2021).

3.12 Statistical Analysis

The selection of data analysis techniques used for this study was determined by the study's research initiating question. Quantitative techniques were therefore used to analyse the data collected from the survey. The specific quantitative techniques used were item analysis and SEM. As per the research initiating aims, the data analysis was used to evaluate the fit of the structural model. A brief description of the methods and procedures used during the data analysis is described next.

3.12.1 *Item Analysis*

Item analysis was conducted on all the items of the measures included in this study. Item analysis is a process used to measure whether each item that was used to measure a specific latent variable was in line with the constitutive definition of the specific latent variable. A measuring tool

is used to operationalise the latent variables to empirically test hypotheses. Each item that was included in the survey is therefore expected to evoke a behavioural response of the underlying construct being measured (Lee, 2016). This item response reflects observable behaviour which makes the construct measurable (Tabachnick & Fidell, 2013). If an item does not reflect the focal construct, it suggests that the item is insensitive or inconsistent to the given construct being measured or poorly represents the construct (Theron, 2016).

According to Tabachnick and Fidell (2013), if an item receives a reliability coefficient (Cronbach's alpha) that is ≥ .70, the item is deemed to be statistically sufficient. Therefore, if the item analysis identified a poor item (Cronbach's alpha < .70), the researcher had to decide whether removing the poor item from the measuring instrument would significantly improve the measure. If the removal improved the measure, then the item was deleted and removed from any subsequent analyses. For this study, no items were removed as it did not reflect that the removal of any items would significantly improve the measure (Tabachnick & Fidell, 2013).

3.12.2 *Structural Equation Modelling (SEM)*

The researcher used SEM which is a "general statistical technique that uses a combination of factor analysis and path analysis" (Hox & Bechger, 1999, p. 1), to answer the research initiating question. As stated by Diamantopoulos and Siguaw (2013) the researcher used SEM to determine the explanatory structural model's fit through theorising in response to the research initiating question. Using SEM, two focal areas were tested, namely, the outer model (known as the measurement model) and the inner model (i.e. the structural model).

The PLS-SEM, a package called SmartPLS version 3, was used to identify the path coefficients between the variables and to estimate the PLS model (Henseler et al., 2016). PLS is a soft modelling approach used to assess the measurement's reliability and validity based on specific criteria. One criterion included was the assessment of internal consistency reliability with a score above .70 being deemed satisfactory (Henseler et al., 2009). Due to its suitability in prediction-orientated research, PLS path modelling is often used by researchers focussing on the explanation of endogenous constructs (Henseler et al., 2009).

As suggested by Charoensukmongkol (2017), various analyses were conducted before the evaluation of the PLS model estimation. The first analysis focused on the model specifications and involved creating connection paths to create the inner and outer model. When investigating

the outer model, emphasis was placed on a systematic evaluation of the measurement model fit. Only after internal consistency had been achieved in the outer model did the researcher focus on the inner model (Henseler et al., 2009). The fit of the model was evaluated by investigating the reliability of the latent variables, using composite reliabilities and R^2. For the reliability coefficients to be deemed as satisfactory, Charoensukmongkol (2017) suggests that it should exceed .70. Convergent validity using the average variance extracted (AVE) evaluated how close new measures are related to other measures measuring the same construct. According to Charoensukmongkol (2017), the AVE score should at least be .5 to demonstrate convergent validity.

After the analysis on the latent variables reflected sufficient reliability and validity values, the structural model estimates needed to be analysed (Henseler et al., 2009). The structural model compared latent variables to each other to assign relationships between the variables. A technique known as bootstrapping sampling was used to determine the Confidence Intervals (CI) of the path coefficients and statistical inference (Henseler et al., 2009). Once bootstrapping was completed, the accuracy of the structural path estimates to the main effects was assessed.
As this research study explored the moderating effects between variables, the PLS path modelling was used. It is important to note that the researcher first assessed the hypothesised path estimates of direct relationships before continuing with the analysis of the moderating effects.

3.13 Chapter Summary

This chapter presented the research methodology that was utilised in this study. The researcher used a cross-sectional research design with a quantitative approach to answer the research initiating question. The variables were operationalised by introducing the measurement instruments that were used. Data were collected using a web-based questionnaire on a sample of customer service agents from different divisions within the financial service organisation. The measuring tools' psychometric properties were analysed and discussed, and the chapter concluded by presenting the statistical software packages that were used, and the main data analyses conducted. In Chapter 4 the results of analysis will be discussed.

CHAPTER 4
RESEARCH RESULTS

4.1 Introduction

This chapter reports on the statistical findings of the data that were collected and analysed using the statistical methods discussed in Chapter 3. The findings are discussed as they relate to the hypotheses presented in the previous chapters. First descriptive analysis was conducted to describe the sample. Next item analysis was done to determine the quality of the measurements used. Once item analysis was completed, partial least square (PLS) path analysis was used to test the measurement reliability and fit of the structural model by determining the quality of paths between the constructs being investigated.

4.2 Sample Characteristics

The final research sample comprised of customer service agents (n = 442) from a financial service centre in Gauteng, South Africa. Initially, N = 469 customer service agents opened the online survey, but either did not give consent for participation (n = 11) or had too many missing responses and were deleted by using listwise deletion (n = 16). In this study, biographical information was collected on gender, age, marital status, years in customer service, highest level of education obtained and the type of customers those agents served. The biographical information of the research participants is summarised in Table 4.1.

Table 4.1

Combined Sample Characteristics (N = 442)

	Gender	
Category	Frequency	Percentage
Male	107	24.21
Female	324	73.30
Do not want to disclose	11	2.49
Total	442	100

Age		
Category	Frequency	Percentage
18-25	18	4.07
26-30	112	25.34
31-40	201	45.48
41-50	77	17.42
51 +	31	7.01
Did not want to disclose	3	.68
Total	442	100
Marital Status		
Category	Frequency	Percentage
Single	251	56.79
Married	132	29.86
Divorced	29	6.56
Widowed	5	1.13
Did not want to disclose	25	5.66
Total	442	100
Number of years in customer service		
Category	Frequency	Percentage
Less than 1 year	4	.90
1 year	11	2.50
2-5 years	141	31.90
6-10 years	116	26.24
11 years +	156	35.29
Did not want to disclose	14	3.17
Total	442	100

Highest level of education		
Category	Frequency	Percentage
Below Grade 12	6	1.37
Grade 12	123	28.02
Certificate	148	33.71
Undergrad Diploma/Degree	80	18.22
Post-grad Diploma/Degree	63	14.35
Did not want to disclose	19	4.33
Total	439	100
Type of customers		
Category	Frequency	Percentage
Internal colleagues	147	33.26
External customers	264	59.73
Did not want to disclose	31	7.01
Total	442	100

4.2.1 *Inter-correlations Between Variables*

Initial exploratory analysis and descriptive statistics were conducted using SPSS (Version 27). Analyses were conducted to investigate inter-correlations between variables and the internal consistency of items in each measure (Cronbach's alpha). To test the relationship between variables, bivariate correlations were conducted, including all the main/total scales used in this research study (see Table 4.2). The correlation results provide insight regarding the significance, strength, and direction of the relationships between variables. As seen in Table 4.2, all the relationships were in the expected direction. The strengths of the relationships, of the studied variables, ranged from $r = -.27$, $p < .01$, showing a significant, negative relationship between work engagement and Type D Personality, to $r = .52$, $p < .01$, showing a strong relationship between burnout and work overload.

Table 4.2

Means, Standard Deviations, Reliabilities, and Inter-correlations

Variables	M	SD	1	2	3	4	5
1. Work Engagement	4.73	1.38	*α* = .91				
2. Perceived Social Support	7.73	2.09	.28**	*α = .97*			
3. Burnout	3.99	.85	-.25**	-.06	*α = .85*		
4. Type D Personality	7.16	1.76	-.27**	-.24**	.37**	*α = .80*	
5. Work Overload	3.65	.80	-.24**	-.12*	.52**	.35**	*α = .71*

Note. Sample size is *N = 442;* Coefficient alphas are available in parenthesis along the diagonal; the Cronbach's alpha was calculated based on the internal consistency for items in each measure*. *p < .05. ** p <.01 (two-tailed).*

Although the Cronbach's alpha for each of the scales appear to be acceptable, this only showed that items had internal consistency. To further test reliability, it is recommended to use SEM (Yang & Green, 2011); therefore, with the assistance of a statistician, Statistica was used to test the reliability of the items*.*

4.3 Validation of the Measurement Outer Model

The instruments utilised in this study were analysed to determine the level of internal consistency (reliability) and convergent validity that were present per instrument*.*

4.3.1 *Item Analysis*

Item analysis was conducted via SEM on the 13 subscales of the research study. Item analysis was used to examine the inter-correlation between the items used in the separate measures. These correlations are a subtype of internal consistency reliability. Satisfactory average inter-item correlations are values above .40, which suggests that the items are homogenous (M. Kidd, personal communication, June 11, 2021). An overall average inter-item correlation, less than .40, suggests that the items are not well correlated. Further, item analysis is used to provide information on the statistical quality of each measurement item, which represents an underlying construct (Nunnally & Bernstein, 1999).

Chapter 3 indicated the Cronbach's alpha values per instrument. To assess the internal consistency reliability, Cronbach's alpha should be between the value of .60 and .70, to be deemed as an acceptable reliability score (Nunnally & Bernstein, 1994; Yang & Green, 2011).

Item analysis was conducted on each subscale of the composite questionnaire to test internal reliability. Table 4.3 shows that three of the five total constructs' overall average inter-item correlations had satisfactory values. Only the work overload and burnout total scales average inter-item correlation value were lower than the acceptable value (i.e. value ≥ .4). The results of item analysis included the Cronbach's alpha and average inter-item correlation of all the subscales of each measure. The Cronbach's alphas for the 13 subscales indicated good internal consistency. These results, in conjunction with the descriptive statistics for the subscales and total scales, are presented in Table 4.3.

Table 4.3

Descriptive and Reliability Statistics for the Subscales

Sub-scales	Mean	Standard Deviation	Number of items per subscale	Cronbach Alpha	Average inter-item correlation
Work Engagement	14.09	4.14	—	.92	.80
Vigour	13.2	4.52	3	.90	.77
Dedication	14.81	4.60	3	.90	.75
Absorption	14.27	4.24	3	.83	.63
Perceived Social Support	14.84	4.03	—	.91	.73
Emotional Support	27.77	8.63	8	.96	.75
Tangible Support	14.38	4.80	4	.93	.77
Affectionate Support	15.63	4.47	4	.94	.81
Positive Social Interaction	11.60	3.47	3	.96	.89
Burnout	10.22	2.63	—	.55	.30
Emotional Exhaustion	35.48	12.43	9	.92	.56
Personal Accomplishment	37.70	8.12	8	.79	.32
Depersonalisation	14.98	5.95	5	.72	.35
Type D Personality	3.93	1.13	—	.71	.55
Negative Affect	13.50	4.55	7	.80	.38
Social Inhibition	14.00	4.43	7	.77	.33
Work Overload	40.23	8.79	11	.86	.37

Note. $N = 442$.

4.3.1.1 Work Engagement

The UWES-9 results indicated good internal reliability with an overall satisfactory Cronbach's alpha coefficient (α = .92). Based on the Cronbach's alpha coefficient findings in Table 4.3, the UWES-9 showed internal consistency among the subscales with acceptable correlation scores for vigour (α = .90), dedication (α = .90) and absorption (α = .83). The Cronbach's alpha findings indicated a strong internal consistency amongst all the items in the UWES-9 scale (Yang &Green, 2011). From Table 4.3, the average inter-item correlations ranged between .63 and .77 on the individual UWES-9 items, which indicated that the items support the construct it ought to measure. Moreover, the correlation analysis reported a satisfactory total average inter-item correlation value of .80, suggesting strong internal consistency reliability among all the items in the UWES-9 scale. Based on the item analysis performed, the results in Table 4.3 indicate that none of the items that makes up the three subscales of the UWES-9 (i.e. vigour, dedication and absorption) affected the coefficients negatively and therefore all items remained in the measurement and subsequent analyses.

4.3.1.2 Perceived Social Support

Based on the results, the Social Support Survey (SSS) received an overall Cronbach's alpha coefficient of α = .91 and an overall average inter-item correlation of .73. Table 4.3 indicates that the average inter-item correlations between the subscales ranged from .75 to .89 on the individual SSS items. These findings suggested strong internal consistency reliability among all the items in the SSS scale. Based on the performed item analysis, the results in Table 4.3 indicate that none of the items that make up the four subscales of the SSS (i.e. tangible support, emotional-informational support, positive social interactions and affectionate support) affected the coefficients negatively and therefore all items remained in the measurement and subsequent analyses.

4.3.1.3 Burnout

The analysis of the Maslach Burnout Inventory's (MBI) Cronbach's alpha found that the results were satisfactory to a degree as all three subscales of the burnout construct had Cronbach's alpha values above .70; emotional exhaustion (α = .92) depersonalisation (α = .72), and personal accomplishment (α = .79), with satisfactory average inter-item correlations per subscale that ranged between .32 and .56. In terms of the total scale in Table 4.3, the Cronbach's alpha was moderate (α = .55), and the total scale average inter-item correlation score was .30, suggesting moderate correlation between the subscales when measuring the overall burnout construct.

However, the fact that the subscales Cronbach's alpha was all above .70 suggested that the items satisfactorily measured the burnout construct. Nevertheless, the researcher did not remove any items as the removal of any of the items would not have made much of a difference to the results. Consequently, after statistically analysing the psychometric properties of the MBI in the research study, it was considered that the MBI might have not been the best instrument to use to operationally measure burnout. The MBI's total scale's Cronbach's alpha suggested that although there was inter-item consistency between the subscales, the burnout scale did not yield a strong reliability correlation. However, as the participants had completed the MBI section as part of the composite research survey, it was decided that the MBI information would remain in the survey to operationally measure burnout in the research study.

4.3.1.4 Type D Personality

The Type D Scale-14 received an overall Cronbach's alpha coefficient of α = .71, with both subscales Cronbach's alpha values reflecting above .70 (i.e. negative affect with a α = .80 and social inhibition with a α = .77), indicating high internal consistency. Based on Table 4.3, the Type D Scale-14's overall average inter-item correlation was .55, which reflects a good internal consistency reliability finding of the Type D Scale-14. Therefore, the overall total scale psychometric properties were satisfactory. Consequently, all items remained in the measurement and subsequent analyses, as Table 4.3 indicate that none of the measurement items negatively affected the coefficients.

4.3.1.5 Work Overload

The work overload scale's Cronbach alpha was satisfactory (α = .86), with a moderate average inter-item correlation of .37. These findings indicate that the scale successfully measures the construct of work overload. The results further indicated that the overall total scale psychometric properties were satisfactory. Consequently, all items were retained in the subsequent analyses, as Table 4.3 indicates that none of the measurement items negatively affected the coefficients.

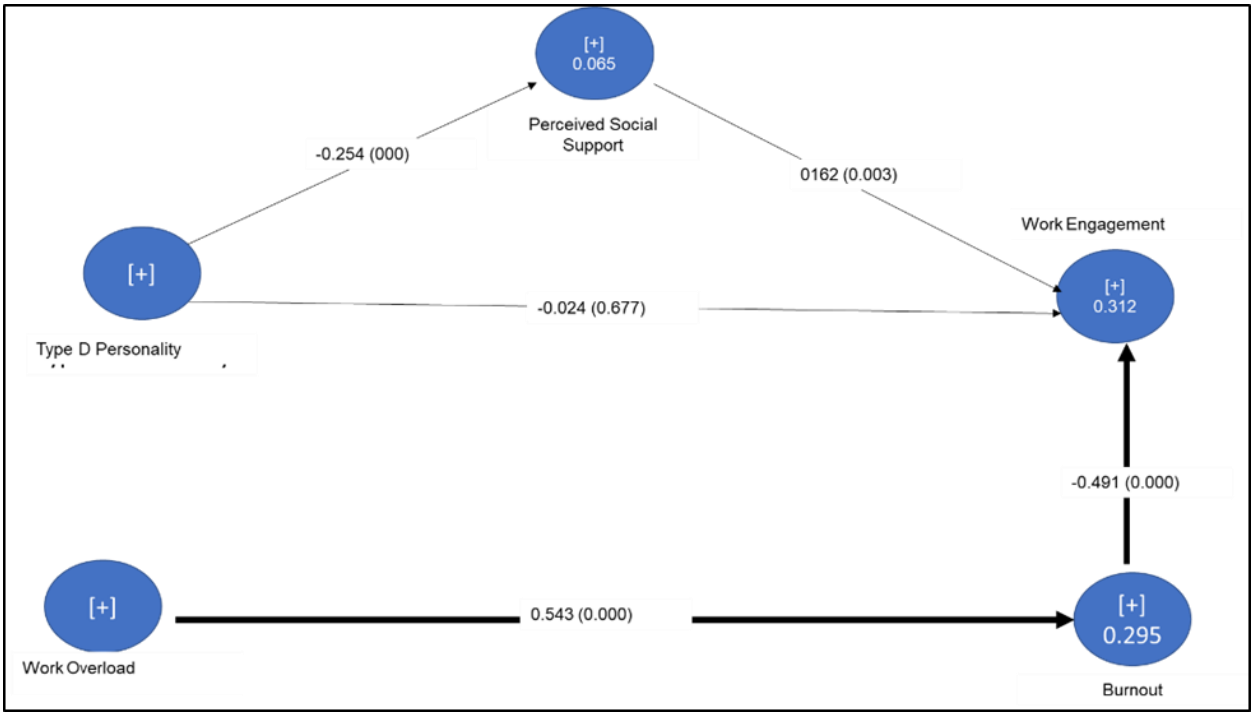
4.3.1.6 Summary of the Reliability of the Latent Variables

The item analysis conducted was utilised to determine the quality and reliability of the instruments used to gather the data that was needed to answer the research initiating question. There was no justification to remove any of the items of the scales. Most of the scales had acceptable Cronbach's alpha ($\alpha \geq .60$), suggesting good internal consistency. Therefore, the researcher was comfortable to move to the second phase of the analysis, namely the PLS path analysis.

The PLS reliability analysis is used to establish the measurement model fit and determine the significance and strength of the constructs. As discussed in Chapter 3, the Smart PLS version 3 statistical package was used to conduct the PLS analysis testing. Only after the outer model showed evidence of sufficient reliability and validity was the inner path model analysed (Henseler et al., 2009). After all the latent variable reliabilities were established (refer to Table 4.3), the significance of the paths was evaluated to test the significance and strength of the hypothesised relationships, and to determine the fit of the structural model. Figure 4.1 represents the SEM model excluding the moderating effects.

Figure 4.1

SEM Model Excluding Moderators



Note. Bold lines indicate larger path coefficients and thin lines indicate smaller path coefficients.

To test the reliability of the outer model, the composite reliability and AVE scores were analysed per construct. At first, the SEM model, without any of the hypothesised moderating effects, was analysed. This was done to analyse the reliability of the outer model and to evaluate the fit of the proposed SEM model (see Figure 4.1).

The composite reliability, like Cronbach's alpha, measured the internal consistency of items that form part of the measuring scales. When the composite reliability (ρ_c) is ≥ .70, it is classified as satisfactory while anything below .60 is regarded as unsatisfactory (Wong, 2013). Table 4.4 presents the composite reliability for the measurement model. All the latent variables' reliability scores for the research study were > .70 and can therefore be reported as successfully representing the variables it set out to measure.

The AVE criterion was also evaluated to determine the convergent validity of the five constructs. The AVE (ρ_v) is used to examine the relatedness between the items and the variables being measured. Scales that obtained a value ≥ .5 indicate satisfactory convergent validity (Hair et al., 2011). Referring to Table 4.4, most of the latent variables assessed reflected good convergent validity (i.e. AVE values > .5), except for work overload. The results indicate that most of the variables explained more than half of the variance in the measuring items. Although the work overload scale reflected a score below .5 (ρ_v = .41) none of the indicators were zero. Therefore, it was deduced that there was a reasonable measurement model fit. Nevertheless**,** the undesirable score of the work overload construct (i.e. ρ_v = .41) raised doubt in terms of the integrity of the structural model and the path correlations related to the work overload variable (Shrestha, 2020).

Table 4.4

Composite Reliability and AVE

Latent Variable	Composite Reliability	AVE (ρ_v)
Work Engagement	*.95*	*.86*
Perceived Social Support	*.93*	*.78*
Burnout	*.76*	*.54*
Type D Personality	*.87*	*.77*
Work Overload	*.88*	*.41*

4.3.2 *Discriminant Validity*

A further analysis was conducted to test construct validity by analysing discriminant validity among the constructs. Discriminant validity was assessed using heterotrait/monotrait ratio and was used to determine whether the constructs were unique, showing theoretical distinction between constructs or whether measurements were assessing the same underlying construct

(Shrestha, 2020). As seen in Table 4.5, all pairings showed discriminant validity, which indicated that all the constructs investigated were unique and different from each other.

Table 4.5

Discriminant Validity

From	To	Discriminate	Ratio	95% CI (lower)	95% CI (upper)
Work Engagement	Type D Personality	Yes	.38	.26	.5
Work Engagement	Work Overload	Yes	.28	.18	.37
Work Engagement	Burnout	Yes	.78	.68	.87
Work Engagement	Perceived Social Support	Yes	.28	.16	.38
Perceived Social Support	Type D Personality	Yes	.31	.19	.42
Perceived Social Support	Work Overload	Yes	.13	.08	.17
Perceived Social Support	Burnout	Yes	.32	.21	.44
Burnout	Type D Personality	Yes	.82	.72	.93
Burnout	Work Overload	Yes	.68	.56	.8
Work Overload	Type D Personality	Yes	.33	.25	.4

Note. 'Yes', indicates discriminant validity between the constructs and CI = Confidence Intervals.

4.3.3 *Evaluating the Outer Loadings*

The final reliability evaluation conducted was the PLS bootstrap analysis technique to evaluate the study's outer loadings (Henseler et al., 2009). This technique is used to test the statistical significance of factor loadings per item. Table 4.6 indicates the path coefficients between the variables and the items measuring the specific latent variables in the composite questionnaire.

Table 4.6

PLS-SEM Outer Loadings per Scale

Latent Variable	Manifest Variable	Loadings	95% CI (lower)	95% CI (upper)	Sig.
Work Engagement					
	Dedication	.95	.93	.96	Yes
	Absorption	.91	.88	.93	Yes
	Vigour	.93	.92	.95	Yes
Perceived Social Support					
	Affectionate support	.92	.89	.94	Yes
	Emotional Support	.83	.79	.86	Yes
	Positive Social Interaction	.92	.9	.94	Yes
	Tangible Support	.86	.81	.89	Yes
Burnout					
	Depersonalisation	.81	.75	.86	Yes
	Emotional Exhaustion	.92	.90	.95	Yes
	Personal Accomplishment	.35	.15	.51	Yes
Type D Personality					
	Negative Affect	.92	.88	.95	Yes
	Social Inhibition	.84	.77	.89	Yes
Work Overload					
	Work Overload item 1	.72	.66	.77	Yes
	Work Overload item 2	.64	.55	.71	Yes
	Work Overload item 3	.70	.62	.76	Yes
	Work Overload item 4	.52	.39	.63	Yes
	Work Overload item 5	.8	.76	.83	Yes
	Work Overload item 6	.7	.64	.75	Yes
	Work Overload item 7	.68	.61	.74	Yes
	Work Overload item 8	.48	.37	.58	Yes
	Work Overload item 9	.48	.37	.57	Yes
	Work Overload item 10	.76	.70	.81	Yes
	Work Overload item 11	.49	.37	.59	Yes

Note. CI = Confidence Intervals and *Sig.* indicates whether each path was statistically significant.

The loadings indicate how much the items contributed toward the scoring of the constructs. If a loading is < .4, it indicates that the item does not contribute to the construct (Cabrera-Nguyen, 2010; M. Kidd, personal communication, June 11, 2021). Based on Table 4.6, none of the factors loaded (ranging from .35 to .95) were zero and the p-values per item were $p < .01$. These findings suggest that the paths between the variables (i.e. work engagement, burnout, work overload, perceived social support and Type D personality) all reflected statistically significant correlations. This finding confirmed the reliability of the scales used.

4.4 Validation of the Inner Structural Model

The quality of the relationship between the constructs used in the composite questionnaire was assessed by analysing the structural model. The PLS-SEM analysis was used to determine covariance between a set of variables. Included in testing the structural model was the evaluation of coefficient of determination outputs *(R^2)*, as well as analysing and determining possible main and moderating effects. The proposed paths in the inner model were investigated by assessing R^2 and path coefficients (Urbach & Ahlemann, 2010). The R^2 determines the degree of variance per dependent variable that forms part of the inner model (Urbach & Ahlemann, 2010). The R^2 statistically measures how much of the variance of a specific construct is explained by the model (Chin, 2010). Generally, a R^2 value of .19 is regarded as weak, .33 as moderate, and .67 as a strong value (Chin, 1998). Table 4.7 illustrate the R^2 of the endogenous variables (i.e. work engagement and burnout).

Table 4.7

R-Square Values for the Endogenous Variables

Scale	R^2	R^2 Adjusted
Work Engagement	.31	.31
Burnout	.29	.29

The R^2 values in Table 4.7 illustrate that 31% of the variance of work engagement (work engagement, R^2 = .31) was explained by the full model. Therefore, roughly 69% of other factors, which were not specified in the SEM model, can be used to explain variance in work engagement. Similarly, the results indicated that 29% of the variance in burnout (burnout, R^2 = .29) was explained by the variables presented in the model; thus 71% is explained by other factors not

identified in the current research. Therefore, additional variables, not identified in this research, can be used to explain variance in work engagement and burnout.

Additionally, the PLS path modelling was used to test the cause-and-effect relationship between latent variables (Henseler et al., 2009). Once the reliability measures for each scale were determined, path coefficients were investigated to determine the quality and significance of the paths. The hypothesised paths were investigated by determining whether zero fell within the 95% CI, for each path coefficient. Values close to zero suggest that there was no relationship between the constructs investigated. Table 4.8 indicates which path coefficients were significant (or not). Based on the findings, four path coefficients were found to be significant. The paths are also visually represented in Figure 4.2, which was first introduced as Figure 2.2 in Chapter 2.

Table 4.8

Path Coefficients between Variables

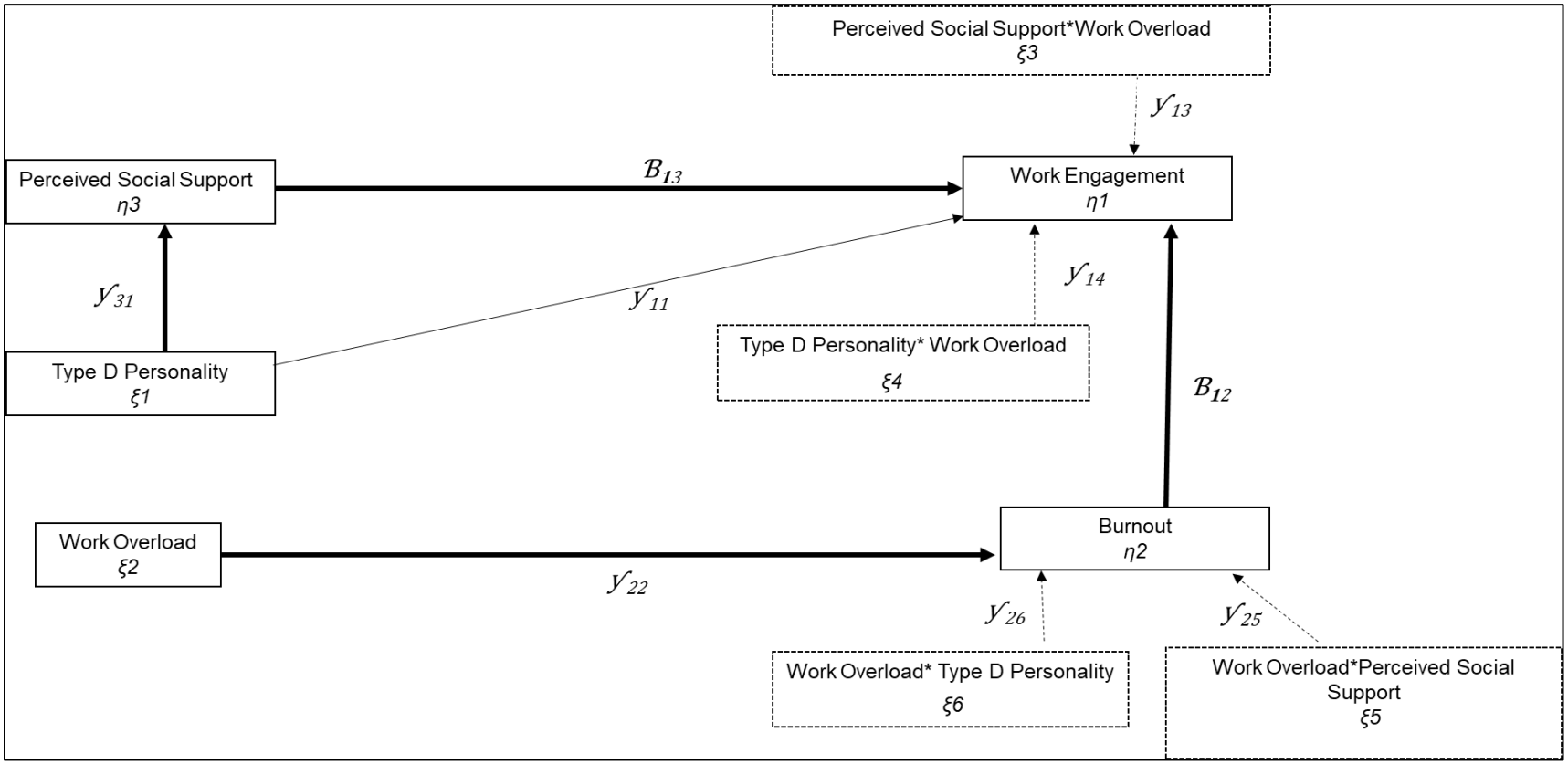
Path	From	To	Path Coefficient	*p*-value	Sig.
H1. Burnout -> Work Engagement	Burnout	Work Engagement	-.49	<.01	Yes
H2. Perceived Social Support -> Work engagement	Perceived Social Support	Work Engagement	.16	<.01	Yes
H3. Type D Personality -> Work Engagement	Type D Personality	Work Engagement	-.02	.68	No
H4. Type D Personality -> Perceived Social Support	Type D Personality	Perceived Social Support	-.25	<.01	Yes
H5. Work Overload -> Burnout	Work Overload	Burnout	.54	<.01	Yes
H6. Perceived Social Support* Work Overload -> Work Engagement	Perceived Social Support*Work Overload	Work Engagement	-.07	.23	No
H7. Type D Personality*Work Overload -> Work Engagement	Type D Personality* Work Overload	Work Engagement	-.01	.93	No

Path	From	To	Path Coefficient	*p*-value	Sig.
H8. Work Overload* Perceived Social Support -> Burnout	Work Overload* Perceived Social Support	Burnout	.02	.62	No
H9. Work Overload* Type D Personality -> Burnout	Work Overload*Type D Personality	Burnout	-.01	.85	No

Note. Sig. indicates whether each path was statistically significant.

Figure 4.2

A Conceptual Model of Type D Personality, Job Demands and Resources on Customer Service Agents Burnout and Work Engagement



Note. The bold arrows indicate significant paths, and the thin arrows indicate non-significant paths.

4.5 Interpretation of the Proposed Hypotheses

In testing each of the proposed hypotheses, the following results were found.

Hypothesis *1.* Burnout (*η2*) has a significant negative relationship with work engagement *(η1*).

The finding corroborates the hypothesised significant negative relationship between burnout and work engagement (i.e. r = -.49, p = <.01). Consequently, the null hypothesis 1 (i.e. H_{a1}: $B_{12} < 0$) was rejected. The hypothesis was tested and proven to show that when employees experience burnout, they are less likely to experience work engagement. This finding is congruent with the findings of current research surrounding the relationship between the two constructs. Based on this finding, there is a strong negative relationship between burnout and work engagement. With respect to the customer service environment, this finding indicates that customer service agents who experience burnout, would be less engaged at work and while doing work activities.

From a meta-analysis conducted by Cole et al. (2011) that included a review of 50 samples from 37 studies, it was deducted that there is no standard acceptable view regarding whether burnout and work engagement are either opposite ends of the occupational health continuum or mutually independent constructs. However, according to Kaski and Kinnunen (2020), when assessing an individual's occupational well-being, burnout is classified as ill-being whereas work engagement is classified as well-being. Nevertheless, the fact that these two variables are not stronger than r = .5, implies that the variables measure different constructs and are not the same.

Hypothesis *2*. Perceived social support (*η3*) has a positive relationship with agents' work engagement *(η1)*.

The findings supported the hypothesised positive relationship between perceived social support and work engagement, as the path for perceived social support and work engagement was found to be significant (i.e. r = .16, p = <.01), with zero not falling within the 95% CI. This research study's finding indicates that employees who feel supported at work tend to be more engaged in their work and work environments. The hypothesis aimed to confirm the findings of a meta-analysis conducted on work engagement, which proposed that work engagement is best predicted by job resources, such as support from an individual's supervisor (Bakker et al., 2018). Studies conducted on service professions such as nursing staff, support these findings which show that social support has a positive correlation with employees work engagement (Orgambídez-Ramos & De Almeida, 2017; Pohl & Galletta, 2017; Polman et al., 2010). Based on

this research it is postulated that collective social support (i.e. support received from supervisors and colleagues) plays a significant role in the experience of work engagement (Vera et al., 2015). Therefore, this finding supports the meta-analysis and builds on the body of knowledge that currently exists regarding antecedents of work engagement within a customer service work environment.

Hypothesis *3*. The Type D personality profile (*ξ1*) has a significant negative relationship with work engagement (*η1*).

In Chapter 2, it was argued that based on the JD-R model, personality is classified as a personal resource that positively impacts work engagement. However, as the Type D personality has negative tendencies, it was postulated that the more Type D tendencies an individual has, the lower their likelihood of experiencing work engagement. Therefore, although the JD-R model indicates that personal resources have a positive relationship with work engagement, for this study, the researcher predicted an inverse relationship between the distressed personality and work engagement. Additionally, in a cross-sectional study conducted on *N* = 334 undergraduate students, Polman et al. (2010) found that individuals with Type D personality are more likely to experience higher levels of work disengagement. Building on this finding, the assumption was that as customer service environments are inherently stressful, it is expected for customer service agents (with a Type D personality) to be more disengaged. Additional individuals with a Type D personality characteristically experience negative affect and therefore tend to experience more negative emotional states, and consequently are less likely to experience engagement (Van Den Tooren & Rutte, 2016; Xanthopoulou et al., 2009). However, in the current research, the hypothesis was not supported by the research findings. The hypothesised negative relationship between the Type D personality profile and work engagement was found to be *non-significant* (i.e. r = -.02, p =.68). Consequently, the null hypothesis (i.e. H_{o3}: γ_{11} = 0) was not rejected. Interestingly, the finding indicated no direct relationship between the Type D personality construct and work engagement. Although the results showed that the relationship between the two constructs was negative, the relationship was non-significant. Therefore, this study's finding implies that if customer service agents have a Type D personality, they are not necessarily less engaged at work.

Hypothesis 4. The Type D personality profile (*ξ1*) has a negative relationship with perceived social support (*η3*).

In this study it was predicted that individuals with a Type D personality are less likely to build social relationships and thus less inclined to perceive having social support. The hypothesised negative relationship between Type D personality profile and perceived social support was found to be statistically significant (i.e. r = -.25, p = < .01). This finding suggests that the higher the individual's scores on the Type D personality, the lower their likelihood to perceive the experience of social support. According to a study conducted on N = 334 undergraduate students, it was confirmed that both sub dimensions of the Type D personality had a negative correlation to social support (Polman et al., 2010). This study's finding therefore confirms previous research on the relationship between the Type D personality and perceived social support. Individuals with a Type D personality tend to have a generalised negative outlook and be socially inhibited, which hinders their development of social relations and subsequent perception of social support (Sararoudi et al., 2011). Moreover, in the customer service environment, agents with a Type D personality might view situations predominantly negatively and be socially inhibited. Consequently, their negative appraisal tendency may increase their experience of stress and their social inhibition tendencies might limit them from seeking help. Therefore, when an agent appraises a situation as stressful, they may not ask for help and subsequently build the perception that support is unavailable, even though their colleagues and supervisors might not even be aware that support is required.

Hypothesis 5. Work overload (*ξ2*) has a significant positive relationship with burnout (*η2*).

Literature related to the impact of work overload on burnout indicates that the frequency and severity of an individual's workload has a significant impact on the experience of burnout (Chirico, 2016; Fernando et al., 2020; Molino et al., 2016). It was therefore hypothesised that a positive relationship exists between job demands and burnout. This hypothesis was found to be statistically significant (i.e. r = .54, p < .01). According to a study conducted on 156 call centre agents in Namibia, there was a significant, positive relationship between job demands and burnout. This study's findings confirmed that the more demanding the f customer service agent's work is, the more likely burnout may occur (Chirico, 2016; Fernando et al., 2020). Therefore, customer service agents with high work overload can become burnt-out when exposed to high job demands over a long period of time. This finding further supports the claim, as specified in the JD-R model, that job demands might negatively impact occupational health, resulting in health impairments, such as burnout (Fernando et al., 2020).

Hypothesis 6. Work overload (*ξ2*) moderates the relationship between perceived social support (*η3*) and work engagement (*η1*).

When analysing the effect of work overload as a moderator of the relationship between perceived social support and work engagement, it was found that this effect was non-significant (i.e. r = -.07, p = .23). This finding suggests that the relationship between perceived social support and work engagement remains the same, regardless of the frequency or severity of workload that an individual experiences. Therefore, the null hypothesis (i.e. H_{o6}: γ_{13} = 0) was not rejected. This finding is supported by research conducted by Kaski and Kinnunen (2020), who postulates that the availability of job resources plays a more significant role in explaining whether an individual experiences burnout or work engagement, irrespective of the individuals' experience of job demands.

Hypothesis 7. Work overload (*ξ2*) moderates the relationship between the Type D personality (*ξ1*) and work engagement (*η1*).

To date, very limited research has been conducted relating to the impact of the Type D personality on work-related outcomes. However, in a study on N = 2273 Dutch individuals working in various sectors, findings indicated that Type D personality and job demands are related to lower levels of work engagement (Bagherian, 2011). Nevertheless, in the current research, the moderating effect of work overload on the relationship between the Type D personality and work engagement was found to be non-significant (i.e. r = -.01, p = .93). Consequently, the null hypothesis (i.e. H_{o7}: γ_{14} = 0) was not rejected. The findings suggest that work overload does not act as a moderator between the Type D personality and work engagement. This study's finding therefore builds on the limited data available related to the impact of work overload on the relationship between Type D personality work engagement.

Hypothesis 8. Perceived social support (η3) moderates the relationship between work overload (ξ2) and burnout (η2).

Based on a study conducted by Bakker et al. (2005) which included a research sample of N = 1021, it was reported that all the job resources that formed part of the study (which included social support), buffered the impact of work overload on burnout. The buffering relationship is also evident in research studies relating to the Demand – Control Model (Karasek, 1979). It was therefore predicted that perceived social support would moderate the relationship between work overload and burnout. The researcher analysed the PLS path coefficient and conducted the

bootstrapping technique to test the hypothesised moderating effect. However, the predicted moderating effect of perceived social support on the relationship between work overload and burnout was found to *be non-significant* (i.e. r = .02, p = .62). Therefore, the null hypothesis (H_{08}: γ_{25} = 0) was not rejected.

Hypothesis 9. The Type D personality ($\xi 1$) moderates the relationship between work overload ($\xi 2$) and burnout ($\eta 2$).

In service professions, such as highly interactive customer service environments, “employees are likely to seek support from each other and the social setting in order to develop a feeling of control over their work” (Mustosmäki et al., 2013, p. 53). Therefore, it is postulated that if individuals with Type D personality are socially inhibited, they may not seek this support and thus are more inclined to appraise increased workload as stressors and hindrances. Thus, although there is currently limited research relating to the Type D personality construct, in line with the research by Mustosmäki et al. (2013), it was assumed that an individual’s tendency to experience negative affect and be socially inhibited impacts the effect of work overload on burnout.

However, hypothesis 9 was not corroborated by the study’s finding. The results, as presented in Table 4.8, showed that the hypothesised moderating effect of the Type D personality on the relationship between work overload and job burnout was found to be non-significant (i.e. r = -.01, p = .85). Thus, the null hypothesis (H_{09}: γ_{26} = 0) was not rejected. Based on this finding, it can be deduced that the Type D personality profile has no impact on the positive significant relationship that exists between work overload and burnout.

4.5.1 *Univariate Moderation*

In univariate moderation, scores are derived for each latent variable and by using regression analysis, separate analyses were conducted for the three variables that were involved in the hypothesised moderating effects (i.e. work overload, perceived social support and the Type D personality). The univariate moderation analysis evaluated and interpreted the independent, moderator and dependent variables to determine whether there was a significant increase in the R^2 when the paths between the independent variables and the moderator variables (i.e. indicated as independent*moderator) were included. Table 4.9 indicates whether a moderating effect exists between the various paths.

Table 4.9

Univariate Moderation Analysis

Independent Variable	Moderator	Dependent Variable	R^2 only	R^2 change	*p*-value
Work Overload	Type D Personality	Burnout	.42	—	.95
Work Overload	Perceived Social Support	Burnout	.31	—	.66
Perceived Social Support	Work Overload	Work Engagement	.15	-.01	.05*
Type D Personality	Work Overload	Work Engagement	.15	—	.71

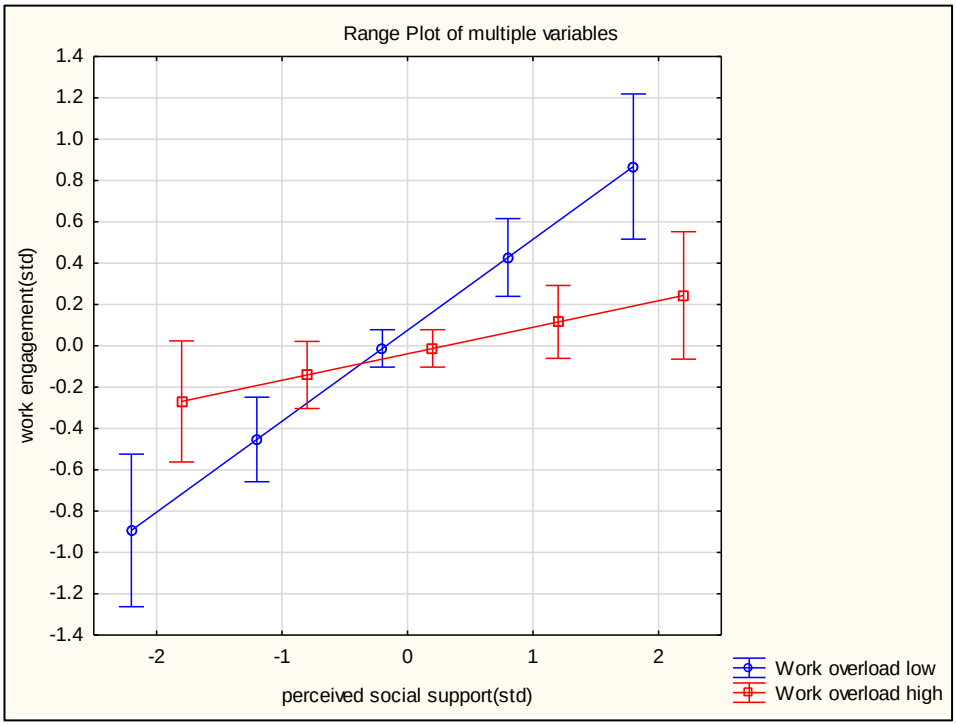
The only significant R^2 change value was found for hypothesis 6, which states:

Hypothesis 6. Work overload (ξ2) moderates the relationship between perceived social support (η3) and work engagement (η1).

It is hypothesised that work overload moderates the relationship between perceived social support and work engagement. The moderating effect of work overload on the relationship between perceived social support and work engagement was found to be significant. More specifically, results of the current research show that when an employee experiences high work overload, it negatively impacts the positive effect that perceived social support has on work engagement. Put differently, the higher workload that people experience, the lesser the positive impact of perceived social support on work engagement. Figure 4.3 illustrates the moderating effect of hypothesis 6. Based on the range plot, a strong positive relationship between perceived social support and work engagement is observed when work overload is low, but the strength between the relationship weakens as the workload increases. This change is reflected by the steeper blue curve versus the flatter red curve.

Figure 4.3

Range Ploy Portraying the Interaction Effect of Work Overload on Perceived Social Support and Work Engagement



4.5.2 *Additional Significant Relationship*

Although not tested as a formal hypothesis, a mediating relationship was discovered during the exploratory data analysis process. The data showed a statistically significant negative relationship between Type D personality and perceived social support (r = -.25, p < .01), and a statistically significant relationship between perceived social support and work engagement (i.e. r = .16, p = <.01). The findings suggest that there was a mediating effect through perceived social support on the path between Type D personality and work engagement. Therefore, the perceived social support acted as a full mediator between Type D personality and work engagement. Put differently, the Type D personality construct did not have an impact on work engagement on its own, but it influenced the perceived social support construct which in turn, influenced work engagement (M. Kidd, personal communication, June 11, 2021).

However, until this point, not much research has been conducted on the Type D personality construct to support the results of this finding. On the one hand, research conducted by Bowling et al. (2004), relating to personality and social indicated that the relationship between personality and social support received was predominately mediated by the amount of social support given. Research on reciprocity suggests that an individual's display of social support (or lack thereof) can induce the same or similar behaviour from others. For example, in an earlier study on Japanese university students, a high correlation ($\alpha = .71$) was found between the amount of social support displayed and received (Bowling et al., 2004). Although there is limited research on this reciprocity relationship in work settings, if one relates it to the current context, it can be assumed that if individuals have a personality tendency to give social support to others, they will also experience having social support. However, for individuals with the Type D personality, who are often socially inhibited, it is expected that they will be less likely to give support and in turn, be less likely to perceive or receive support. Consequently, with a low social support reciprocity relationship for individuals with Type D personality, these individuals will be less likely to experience work engagement. However, on the other hand, research conducted by Polman et al. (2010) which focused on the interaction between Type D personality, perceived stress and social support on work-related factors of burnout and work engagement, reported a non-significant relationship between Type D personality and social support/coping. Consequently, more research needs to be conducted to determine whether a mediating role of perceived social support exists in relation to the relationship between Type D personality and work engagement.

4.6 Chapter Summary

Chapter 4 focused on the statistical analysis of the data collected, the results, and interpretation thereof. By evaluating the inner and outer model, it was evident that all the paths in the outer model were statistically significant. These findings suggest that all the items included in the online survey measured the constructs they were intended to measure.

From the nine research hypotheses that were tested, four main effect hypotheses were significant, which are:

- Hypothesis 1. Burnout (η2) has a significant negative relationship with work engagement (η1).
- Hypothesis 2. Perceived social support (η3) has a significant positive relationship with work engagement (η1).

- Hypothesis 4. The Type D personality profile (ξ1) has a significant negative relationship with perceived social support (η3).
- Hypothesis 5. Work overload (ξ2) have a significant positive relationship with burnout (η2).

The above hypotheses support the JD-R model's premise, which states that the experience of burnout or work engagement depends on the interplay between job demands and resources, where work overload is the main predictor of burnout and perceived social support is the main predictor of work engagement (Demerouti & Bakker, 2011). This finding suggested that in the customer service environment, employees who experience high levels of job resources (i.e. perceived social support) are more likely to feel engaged and energised in their role; whereas employees with a high workload are more likely to experience symptoms of burnout.

The hypotheses that were non-significant included hypothesis 3 (i.e. Type D personality has a significant negative relationship with work engagement), and all the hypotheses testing moderating effects. This finding could be attributed to various reasons. For hypothesis 3, Type D personality might not be the correct classification of a personal resource resulting in no relationship being identified between the personal resource and work engagement as proposed by the JD-R model. For the remaining moderating variables as per Figure 4.2, the reason for a non-significant finding on either of the moderating effects could either be because there is no relationship between the variables under investigation, or the measuring instruments used was not statistically sound. Nevertheless, although in the initial analysis of the moderating effect none of the 4 hypothesised moderating effects were found to be statistically significant, further analysis, using univariate analysis, led to the discovery that the work overload moderator played a statistically significant role between perceived social support and work engagement. This moderating effect was identified even though the PLS-SEM analysis suggested that the moderating effect was non-significant.

Interestingly, although there was no direct relationship between Type D personality and work engagement, there was a mediating relationship was identified between Type D personality, perceived social support, and work engagement, whereby perceived social support acted as a full mediator between Type D and work engagement (M. Kidd, personal communication, June 11, 2021).

Next, Chapter 5 will be used to elaborate on what the research findings mean and the practical implications within an organisational setting. The chapter will also focus on strategies that Industrial Psychologists, Human Resource managers, and customer service supervisors and managers, could consider when addressing issues related to work engagement and burnout. Finally, the chapter will conclude with a discussion on the study's limitations and recommendations, which should be considered in future studies of work engagement and burnout, specifically in the customer service environment.

CHAPTER 5
DISCUSSION

5.1 Introduction

One topical focus area in the Industrial/Organisational Psychology domain is work engagement and burnout, given that these constructs are closely related to the wellbeing of employees (Schreuder & Coetzee, 2021). According to the International Labour Organisation (2016), it is important to equip Human Resource (HR) managers and Industrial/Organisational Psychologists with the knowledge to manage important work-related outcomes, such as decreased burnout and enhanced work engagement. By having such knowledge, allow organisations to put measures in place to equip their staff, and the organisation, to deal with demands in the work environment. Therefore, this study set out to identify the factors that act as antecedents of burnout and work engagement, specifically amongst customer service agents in the financial service industry. In this final chapter, the limitations and shortcomings of the research are reported, and practical implications provided, which could be used to assist HR managers and Industrial/Organisational Psychologists to have a better understanding of the antecedents of work engagement and burnout amongst customer service agents in South Africa. In conclusion, future research ideas are proposed.

According to the Job-Demands Resources (JD-R) model, the interaction between job demands, job resources, and personal resources, influences whether employees experience burnout and engagement in the workplace (Janse van Rensburg et al., 2013). Further, the availability of resources (i.e. job or personal) determines whether the exposure to job demands result in burnout or work engagement (Demerouti & Bakker, 2011). In this study, it was apparent that both burnout and work engagement were products of the interaction of job demands and resources. Additionally, access to job/personal resources acts as a buffer against burnout, resulting in an increase the likelihood of agents experiencing work engagement.

5.2 Discussion of Key Findings

The focus of this study was to determine prevalent factors (i.e. work overload, perceived social support, and Type D personality) which contribute towards the variance in work engagement and burnout as experienced by customer service agents working in the financial services. The research initiating question was: Why is there variance in work engagement and burnout amongst employees in the customer services sector? In line with the research initiating question, the overarching aim of this study was to construct and test a structural model which accounted for

variance in burnout and work engagement of customer service agents within a same work environment, using the JD-R model. The study also aimed to present recommendations to the field of Industrial/Organisational Psychology and wellness in an organisation.

Reflecting on the nine separate hypotheses that were formulated in this study, four main effects were found to be significant. The findings indicated that burnout showed to be significantly negatively related to work engagement (H1); perceived social support was found to be significantly positively related to work engagement (H2); the Type D Personality showed to be significantly negatively related to perceived social support (H4); and work overload showed to be significantly positively related to burnout (H5).

For customer service agents to feel engaged as opposed to experiencing burnout, HR managers and supervisors should first assess customer service agents' perceptions of the job demands and available resources. Based on this assessment, the organisational and individual interventions should place great emphasis on reducing the demands or modifying the perception of the demands so that the agent can view the demand as a motivational challenge as opposed to as a threat. From a support perspective, management and supervisors should implement a participative management style, which buffers against job demands (i.e. work overload) placed on the agents daily. Interventions that build resources (job or personal resources) bolster engagement, therefore assisting customer service agents to manage the demands inherent in the customer service environment (Knight et al., 2017).

Additionally, hypothesis 3 was found to be non-significant. More specifically there was no statistically significant relationship between Type D personality and work engagement (H3). From the JD-R model, there is a relationship between personal resources and work engagement (Bakker et al., 2003). Usually, a personal resource is an antecedent to work engagement; therefore, it was expected that an employee with a low to non-existent distressed personality profile would have a higher probability of experiencing engagement within their job. However, due to the negative tendencies inherent in the Type D personality, this personality type should not be classified as the typical personal resource as described in the JD-R model. For this reason, it could therefore be theoretically justifiable why no relationship exists between the Type D personality and work engagement constructs. There was however a mediating relationship found between Type D personality, perceived social support and work engagement, where it seemed that perceived social support would account for all the observed interaction between Type D

personality and work engagement. This relationship was not explored in this study as it did not form part of the initial research hypotheses that were formulated from the literature. Additionally, although Type D personality predicts burnout, based on this study's finding, the Type D personality does not predict work engagement. This finding therefore supports the view that burnout and work engagement are two independent constructs (Denton et al., 2008; Rożnowski, 2020). Nevertheless, this non-significant finding implies that an employee's distressed disposition has no impact on their likelihood to experience work engagement. However, the distressed personality profile might need to be managed to reduce the likelihood of burnout.

Finally, none of the proposed moderating effects were found to have significant paths. Work overload did not have a significant moderating effect on the relationship between perceived social support and work engagement (H6), nor on the relationship between Type D personality and work engagement (H7). In the moderating hypotheses 6 and 7, the researcher evaluated whether work overload had an impact on the health-promoting process which could lead to work engagement. Research relating to the dual process of the JD-R model, postulates that a high amount of job resources would offset the impact of high job demands, such as work overload. In recent research, work overload was characterised as a challenging job demand. Challenging job demands are demands with "the potential to be seen as rewarding work experiences well worth the discomfort" and is therefore classified as a 'good' stressor (Borst, 2019, p.4). Based on research, the positive impact of resources (i.e. perceived social support or a low Type D personality profile) on work engagement becomes more pronounced when employees experience a challenging demand such as work overload. During this experience, an employees' resources act as a motivational force to see the employee through the discomfort, and achieve their desired goal (Borst, 2019). However, for this study, work overload did not have a moderating effect on the relationship between perceived social support and work engagement or on the relationship between Type D Personality and work engagement. This implies that access to job/personal resources increases the experience of work engagement. Put differently, interventions that focus on increasing accessibility to job resources will enhance work engagement amongst customer service agents, despite the inherent presence of work overload in the role.

In the moderating hypotheses 8 and 9, the researcher aimed to evaluate whether the resource constructs, as per the JD-R model, impact the health impairment process between work overload and burnout. However, there was no significant moderating effect of perceived social support on the relationship between work overload and burnout (H8), nor was there a significant moderating

effect of Type D personality on the relationship between work overload and burnout (H9). When examining the role of resources in the interaction between work overload and burnout, resources should buffer the effects of work overload. According to Kahn and Byosiere (1992), buffering variables reduce the likelihood of an employee appraising the work overload demand, as a stressor, as the resource changes how the employee perceives the demand thereby interfering with the stress-strain sequence and health-impairment process (as cited in Borst, 2019). However, perceived social support and the Type D personality both had non-significant effects on the relationship between work overload and burnout.

The non-significant findings of the moderating effects could be attributed to various reasons. Firstly, as all the p-values for the moderating interactions were ≥ .05, the non-moderating impact could be attributed to a Type II error, where the study is concluding that there is no moderating impact when in fact there is an impact (Carte & Russell, 2003). Secondly, it could be attributed to a measurement issue. The overload and burnout scales reflected average inter-item correlation values that were lower than the acceptable value (i.e. value ≥ .4), suggesting weak internal reliability coefficient values. These values could have impacted the path significance of interactions involving work overload and burnout (Carte & Russell, 2003). Lastly, more research is needed on the specific variables that create moderating effects under the JD-R framework. Nevertheless, non-significant moderating effects are commonly found in research studies (M. Kidd, personal communication, June 11, 2021).

With the overall objective of answering the research initiating question, this study identified factors that need to be targeted, in order to induce work engagement and reduce burnout amongst customer service agents. From the statistical analyses conducted, results indicated that only 31% of the variance in work engagement and 29% of the variance in burnout was attributed to the variables included in the proposed structural model. Although the proposed model only explains a small amount of variance in engagement and burnout, the results can contribute to the existing body of knowledge regarding work engagement and burnout amongst customer service agents in South Africa.

Based on the JD-R adjusted model, work engagement and burnout are individual outcomes resulting from the interaction between job demands and resources (i.e. job and personal) (Bakker et al., 2014). Therefore, preventative interventions should focus on addressing the antecedents (i.e. root causes) versus the organisational outcomes (i.e. symptoms) since the antecedents lead

to the outcomes (Bakker et al., 2014). The discussion of the proposed interventions is aimed at addressing the findings that emerged from the statistical analyses of the investigation of the customer service agents in this study. According to Bakker et al. (2014), the most effective interventions include a combination of specific measures on an individual and organisational level. The following section will therefore cover both organisational and individual-level interventions. To ensure alignment with the JD-R theory, the proposed interventions will focus on reducing work overload and increasing the perception of available resources to reduce burnout and induce work engagement.

5.3 Limitations of the Study

There are several limitations that were identified in this research study. First, operationalising the job demand variable was restricted to only focus on the work overload construct as the main predictor of burnout amongst customer service agents. Therefore, accurate generalisable conclusions about the impact of job demands are limited to the interaction between work overload and the other latent variables present in this research study. Additionally, for this study, the overload subscale was measured on a five-point scale, instead of the seven-point scale. Although the difference in rating scales should have not impacted the correlation of the construct, it could have had an impact on the statistical significance of the work overload measurement. To circumvent this in the future, it is recommended to include more subscales that relate to job demands on the JDRS instrument. Alternatively, as the JDRS instrument measures both job demand and resources, it might be best to utilise an instrument that focuses solely on measuring job demands.

Second, although the study included a large sample size (N = 442), an instrument included in the composite questionnaire contained items that were reverse scored, namely personal accomplishment, which was one of the three burnout dimensions. Having reverse-scored items could influence the reliability of individual measures (Görgens-Ekermans & Herbert, 2013). Consequently, the reverse-scored items, as evidenced by the MBI personal accomplishment subscale, were found to produce low-reliability values. To overcome the effect of reverse scoring in future research, the researcher could rewrite the items to reflect positively and test the reliability of the positively written items. In this case, if reliability is strong, there would be no need to use reverse scoring.

Third, it is not recommended to test two different moderating effects from the same moderating variable (work overload) on an endogenous variable (i.e. work engagement) as the exogenous variables impact one another causing biased estimates, skewness of results, and non-significant findings that cannot be statistically interpreted (Carte & Russell, 2003; M. Kidd, personal communication, June 11, 2021). Hence, to test the conceptual model (Figure 2.2), two separate moderating models were created to separate the two moderating effects to ensure that the results were accurate. Future research should not test more than one moderating effect on a single path. In doing so, this will ensure the quality of the path coefficient being tested between two variables.

Fourth, data were collected from only one financial services organisation; hence the findings are only applicable to this specific population. According to Simons et al. (2017), to strengthen a body of knowledge, researchers require accuracy in the generality of findings. However, the results of this current study cannot be generalised to customer service agents outside of the participating organisation. Therefore, to do a follow-up study on the findings, future researchers would have to use the same participating organisation to test the validity of the research findings (Simons et al., 2017). Future researchers should consider collecting data from numerous institutions and could also consider gathering data from different geographical locations (within one organisation). In doing so, results will show external validity (Simons et al., 2017).

Fifth, the method of data collection chosen also introduced the likelihood of measurement bias. Although a web-based self-report questionnaire was fit for this study, given that the South African government implemented gathering restrictions, the self-report questionnaire could have introduced response bias into the data. Response bias is the probability of the participants responding in a manner that impacts the validity of the response. Common response bias errors include socially desirable responding, acquiescent responding, central tendency responding, and extreme responding. Although the participants were advised that their results were anonymous, individuals generally rate themselves overly positive to make a good impression, which is referred to as social desirability rating. Acquiescent responses occur when individuals agree to a statement in a questionnaire even though their answer is not a true reflection of their current status or experience (Podsakoff et al., 2003). Central tendency is the participants' tendency to choose the middle number of an uneven rating scale; while extreme responding is the tendency to choose the scores furthest from the centre on either end of the rating scale (either 0 or 4) (Paulhus & Vazire, 2007; Podsakoff et al., 2003). All these response biases negatively impact the quality of the data and the accuracy of the inferences drawn from the data.

Sixth, this study followed a cross-sectional research design, which takes a picture of the data in a specific instance. According to Carte & Buckley (1987), a quarter of the variance in statistical analyses performed can be attributed to systematic sources of measurement methods (as cited in Podsakoff et al., 2003). This implies that researchers can contaminate the data collection process purely based on the research design utilised. A cross-sectional research design introduces common measurement variance, which adversely impacts the true interactions between latent variables and its statistical soundness (i.e. significance of the paths, the effect size of relationships, and its direction) due to the way data was collected (Podsakoff et al., 2003). Therefore, future researchers should consider making use of a longitudinal research design.

Seventh, given that data were collected during the COVID-19 pandemic, this could have had an impact on the sample's overall status of well-being (which is directly related to wellbeing and burnout (Schreuder & Coetzee, 2021). Therefore, the generalisability of the results and findings, in a post-pandemic reality, might be questionable. It is recommended that researchers repeat the study to determine if the findings replicate. Replication of studies is important as it keeps researchers honest to provide findings that are true to the data collected and analysed. Replication also allows future researchers to conduct follow-up studies or comparative studies, based on the available findings (Podsakoff et al., 2003).

Finally, although biographical data were collected from each respondent, this information was only used for descriptive statistics, not inferential statistics. More valuable insight could have been drawn by analysing whether biographical factors play a role in determining whether a customer service agent experience burnout or work engagement.

However, despite the noted limitations this research still contributed to the body of knowledge e relating to work engagement and burnout. More specifically, the results show that work overload (i.e. as a job demand), perceived social support, and a distressed personality type (Type D personality) are all factors that may lead to work engagement or burnout amongst customer service agents working in the financial service industry. It should be noted that these limitations did not take away from the study's findings. Instead, the limitations should be a guide for improvements in any future research endeavours.

5.4 Practical Implications

Interventions aimed at an organisation are group or team-focused and include training programmes and job redesign. Consistent with research and underpinned by the JD-R model, proposed interventions which would benefit the study's sample focused on the reduction or buffering of job demands and the increase and promotion of job and personal resources within the customer service environment.

5.4.1 Organisational-level Interventions

For this research study, the organisational interventions to be discussed included job modification and improved social support. The first intervention addressed job demands, while the second intervention focused on a customer service agent's job resources.

5.4.1.1 Job Modification to Reduce Work Overload

For this study, work overload was seen as the main predictor of burnout in service environments. Therefore, it is important to identify and mitigate this demand to reduce its negative impact on customer service agents.

In this study, the hypothesised positive relationship between work overload and burnout was found to be statistically significant, suggesting a strong positive relationship. This emphasises the importance of addressing work overload when implementing interventions that could reduce burnout and increase work engagement. According to Chirico (2016) due to the demanding nature of customer service environments, many agents experience mental fatigue and depletion of resources resulting in burnout. Therefore, customer service agents with a high level of work overload are more likely to experience burnout.

To proactively address the impact of work overload, Surana and Singh (2013) suggest that organisations should implement job modification, which requires a change in a job, task or work environment (Bakker et al., 2014). In the customer service environment, job modification aims to create a balance between an agents' workload and job resources, therefore transforming the agents' perception of their workload from a threat to a motivational element that engages the employees (Knight et al., 2017). One way to practically modify the role is to alter the job elements by introducing modern technologies in the customer service environment. This introduction would lighten the workload of customer service agents and give them systems to be accountable for, which would increase their effectiveness and efficiency, while reducing their task load. Examples

of technologies that can reduce agents' workload include chat-bots, service automation, and self-service operations, which would reduce the influx of calls and alleviate the agents' need to redirect calls as customers are able to answer specific questions that would navigate them to the correct department that can assist in resolving their queries (Martin, 2021). Modern technology and software allow agents to collaborate across departments by integrating and intuitively aligning operations hence empowering them in their roles (Martin, 2021). Additionally, there is a strong correlation between employee experience and customer experience. Empowered employees translate their positive affect and experiences into their interactions with their customers, therefore reducing the prospect of experiencing emotional labour and subsequently burnout (Martin, 2021). Based on these findings, implementing job modifications can lead to employees feeling empowered to effectively manage their workload, allowing agents to see high workload as a motivator as opposed to as a stressor (Surana & Singh, 2013).

5.4.1.2 Increasing Job Resources (I.e. Perceived Social Support) Through Leadership Engagement

Job resources, such as perceived social support, can be optimised by redesigning work practices, to induce work engagement (Bakker et al., 2014). This research study confirmed that social support increases a customer service agent's likelihood of experiencing work engagement. However, this study also reported that the impact of perceived social support on work engagement is dependent on the magnitude of workload an agent experience. These findings highlight that to increase the likelihood of agents experiencing work engagement, their social support needs to outweigh their workload. To optimise the perception of available resources, job resource-building interventions should focus on improving the social and cultural aspects of the job. This can be achieved by having leadership-focused training and increasing leadership engagement (Knight et al., 2017). Leadership entails ensuring regular and consistent agent-supervisor interactions, where the agent receives constructive feedback on their role and how they are performing. As stated by Martin (2021), regular and consistent feedback provides clarity and direction during demanding periods of the day or week, therefore helping stressed employees feel centred. Consequently, to keep customer service agents motivated and engaged in the stressful and demanding environment, managerial support is crucial and requires organisations to promote a workplace culture that encompasses a caring and compassionate leadership style (Knight et al., 2017).

Additionally, the study also found that the Type D personality profile impacts an agent's perception of social support. This suggests that agents' whose profiles are similar to the Type D personality profile are more likely to have a low perception of social support. This study's finding is in line with O'Riordan et al. (2020) who state that individuals with the Type D personality generally perceive social interactions as negative, intrusive, and threatening. Additionally, due to their fear of rejection, when these individuals experience a negative social interaction, it triggers negative affect which hinders the individuals from experiencing the support available to them (Kelly et al., 2017). Consequently, organisations should implement non-intrusive social-emotional support to customer service agents to reduce their negative perceptions related to social interactions and increase their perception of available social support. An Employee Assistance Programme (EAP) is a social-emotional intervention that can combat employees' perception of a lack of support as it provides workplace opportunities for employees to share issues in a confidential setting. Part of the EAP could be at least three free counselling sessions, which agents are able to make use of should they encounter a difficult customer or feel overwhelmed by their role or environment. Wellness initiatives such as an EAP may increase individuals' perceptions of feeling supported, promote a sense of belonging, and subsequently increase their work engagement. Another way of increasing social relationships within a work setting is by incorporating team-building activities or team interventions, which allow customer service agents to get to know one another outside of their work demands and build social networks. Engagement in these social activities provides employees with access to positive and non-intrusive social support, despite their differing personalities. These interventions aim to increase the employees' perception of social support, which is positively associated with work engagement.

5.4.2 *Individual-level Interventions*

According to Bakker et al. (2014), individual-level interventions focus on person-specific areas. Employees in the same or similar type of work environments can experience the environment differently due to individual differences. To evaluate how employees perceive the availability of resources versus their job demands, the organisation should request that each employee complete an online JD-R survey (Bakker & Demerouti, 2018). Based on the information gathered, supervisors should connect with their employees to co-craft ways of balancing their job demands and resources. Two individual-level interventions that organisations should consider, to reduce burnout and induce work engagement, are job crafting and emotional regulation. Job crafting allows employees to readjust their work environment based on their demands and resources

available to make it more pleasant for them, while emotional regulation assists employees to objectively appraise and address stress and demands (Borkoles et al., 2018; Verlinden, 2021).

5.4.2.1 Fostering Job Resources (I.e. Perceived Social Support) Through Job Crafting

Job crafting is an individual-driven approach where agents focus on customising their role to feel more supported in order to increase work engagement and reduce burnout. In job crafting, agents consider their job demands, job resources and work environment and modify these aspects to become more energised and motivated (Bakker et al., 2014; Verlinden, 2021). The Job crafting can be done in numerous ways and should be done in conjunction with an agent's supervisor. First, employees should focus on the task characteristics and amend the type of work, scope of work, or sequence in which work generally unfolds. Second, employees should focus on the relational aspect of the role. This step is key to increase the perception of social support and involves amending who and how often the agent interacts with different individuals at work. In this step, the agent and supervisor can decide on the support required to do the job effectively. Third, the job crafting process also includes a cognitive element. Like cognitive restructuring and reappraisal, cognitive crafting involves amending how agents appraise a task that is inherent in their role (Dutton & Wrzesniewski, 2020). The focus of job crafting is for agents to own the process of co-crafting their job with their supervisor as a point of connection, and to find new meaning in their roles and execution thereof (Dutton & Wrzesniewski, 2020).

In addition to owning the process (i.e. be accountable for its implementation and success), the goal of job crafting is to create meaningfulness to the processes. This meaningfulness aims to combat the repetition in the agents' day-to-day activities. Therefore, as Martin (2021) states, the job crafting process will increase job resources and modify job demands thereby making the role seem challenging as opposed to overwhelming. The crafting intervention allows customer service agents to reorganise their work environment and work relationships in a way that motivates and encourages them to be more engaged in their roles.

5.4.2.2 Emotional Regulation Training to Manage Personal Resources I.e. Type D Personality)

The Type D personality has an influence on an individuals' stress-coping process. Individuals with the Type D personality have a higher propensity to perceive stressful events as a threat and respond to these perceived threats in maladaptive ways, such as avoiding the stimuli. These maladaptive approaches to dealing with stressors increase the individual's likelihood of becoming distressed and eventually experiencing burnout (Borkoles et al., 2018). Moreover, as individuals

with a Type D personality tend to be emotionally strung, their negative affect causes them to experience emotions more intensely when under stress. Based on research, it is better to implement individualised interventions as opposed to organisational interventions when dealing with individuals with a Type D personality (Borkoles et al., 2018). To reduce the emotional and social adversity commonly experienced by individuals with Type D personality, interventions should focus on building their emotional regulation and improving their interpersonal functioning. Emotional regulation strategies will assist individuals to experience more appropriate emotional responses to emotionally charged situation or stimuli (Borkoles et al., 2018). For example, agents with Type D personality could receive training on how to improve coping skills, how to reduce negative emotions and how to appraise a situation more objectively, rather than emotionally, hence reducing the severity of perceived external stressors.

Furthermore, as individuals with a Type D personality tend to be hypersensitive to negative stimuli, they become easily distressed. Research has shown that stress reduction training is very useful to combat feelings of distress and anxiety. Borkoles et al. (2018) suggest mindfulness-based training as one of the most effective forms of stress reduction training. Agents should consider practicing mindfulness-based coping strategies within their daily routine, which will assist them to reappraise a stressful stimulus (i.e. a difficult customer) to be viewed as less threatening. In fact, the stressful stimuli will be reappraised as a motivational challenge to overcome. The key to mindfulness training is its focus on changing the neural pathways in the brain to reappraise situations. Common relaxation techniques include mindfulness meditation or engaging in breathing exercises when individuals start to feel emotionally charged or begin to feel distressed (Borkoles et al., 2018). Moreover, by teaching agents to become more aware of their emotions and to learn mechanisms on how to manage or rephrase negative emotions or thoughts, allows agents to have a more objective appraisal of available resources. As such, emotional regulation training is recommended to assist in managing distressed tendencies and its potential impact on work engagement.

5.5 Recommendations to Future Researchers

Based on the limitations encountered in this research study, this section will detail a few recommendations to future researchers who are interested in gaining more insight on the impact of job demands and resources on work-related outcomes such as work engagement and burnout. First, job demands encompass various elements, which include work overload, but not limited to it (i.e. role ambiguity, role clarity, autonomy, lack of job control, emotional labour, lack of decision

making) (Bakker et al., 2003, p. 394). However, this study focused on work overload as the only job demand in the JD-R model. Future researchers should broaden their scope of operationalising job demands by evaluating, either various types of job demands or by viewing job demands holistically. In doing so, the findings can lead to deeper insight as to understanding why customer service agents might experience work engagement and burnout.

Second, there is a shortage of literature on longitudinal studies relating to the impact of the Type D personality on work-related outcomes (i.e. work engagement and burnout). Therefore, future researchers can continue investigating the relationship between Type D personality and work engagement and burnout, to determine whether the findings of the current study can be replicated.

Third, previous researchers, such as Maricuțoiu et al. (2017), have found that the third dimension of burnout, namely personal accomplishment, has a relatively weak correlation with the other two dimensions (p = .35). This study's findings supported this weaker correlation. Therefore, future research should investigate the Maslach Burnout Inventory scale and the internal correlation between the three dimensions. Future research should check that all dimensions in a measuring instrument have a strong correlation of at least p = .4 to ensure that they all are measuring the totality of the construct under investigation.

Fourth, as the current research only focused on one organisation, the generalisability of the findings is limited to this participating organisation. Thus, future researchers should consider expanding the research sample to include more organisations within the financial services industry, to increase external validity and generalisability. Additionally, researchers should explicitly state who or what their target populations is, which will assist future researchers to accurately conduct replication studies (Simons et al., 2017).

Fifth, based on the JD-R model, personal resources refer to positive individual evaluations relating to one's ability to withstand, deal with, control, or effectively respond to environments they function in (Bakker et al., 2014). These personal resources act as a buffer against job demands, thus the higher the personal resources, the lower the impact of job demands (Bakker & Demerouti, 2007). However, as previously mentioned, although Type D personality is a personality construct, it does not conform to the JD-R framework's definition of personal resources, as the individual is expected to have little to no Type D tendencies for them to withstand, deal with, control, or

effectively respond to environments they function in. Therefore, while most personal resources act as a buffer against burnout, the distressed personality increases the likelihood of experiencing burnout. Future research should investigate which individual or personal traits (e.g., self-efficacy, psychological capital, resilience) might best act as a personal resource to enhance engagement and reduce burnout amongst customer service agents in South Africa.

5.6 Summary and Conclusion

In summary, Chapter 1 provided background and context into the rationale for initiating this research study. In Chapter 2, the focus was on gathering information about the study's variables from existing sources and the theoretical framework underpinning the interactions between these variables. Chapter 3 focused on the research methodology implemented to gather the data, based on the hypothesised interactions. Chapter 4 provided an evaluation and interpretation, of the collected data, to test the hypotheses that was put forward.

As a final thought, using the JD-R model and theory as the premise of this study, allowed the researcher to explore the JD-R path correlations as well as test additional paths of constructs that are relevant in the workplace. The additional paths allowed the researcher to add to the existing body of knowledge regarding job demands, job resources, personal resources, and to gain a better understanding of work engagement and burnout amongst service centre agents. More specifically, the study investigated the impact that job demands (i.e. work overload), job resources (i.e. perceived social support) and personal resources (i.e. Type D personality) have on work engagement and burnout within a financial service institution situated in Gauteng, South Africa. From the findings of this study, practical interventions were proposed to assist customer service agents, both at the individual and at the organisational level.

REFERENCE

Amarneh, B. H., & Hunter, S. J. (2017). Social support behaviors and work stressors among nurses a comparative study between teaching and non-teaching hospitals. *Behavioral Sciences, 7(*5), 1-11. https//doi.org/10.3390/bs7010005

Asiwe, D. N., Hill, C., & Jorgensen, L. I. (2015). Job demands and resources of workers in a South African agricultural organisation. *South African Journal of Human Resource Management*, *13*(1), 1-16. https://doi.org/10.4102/sajhrm.v13i1.634

Babazadeh, M., Molavynejad, S., Bereihi, F., & Cheraghian, B. (2019). Relationship between personality traits and burnout in oncology nurses. *Journal of Family Medicine and Primary Care*, 8(9), 2898-2902. https//doi.org/10.4103/jfmpc.jfmpc_423_19

Babbie, E., & Mouton, J. (2001). *The practice of social research*. Oxford University Press.

Bagherian, R. (2011). 103 Relationship between Type D Personality and Perceived Social Support in Myocardial Infarction Patients. *Asian Journal of Psychiatry*, *4*, S73. https://doi.org/10.1016/s1876-2018(11)60281-5

Bakker, A. B., Demerouti, E., & Euwema, M. C. (2005). Job Resources Buffer the Impact of Job Demands on Burnout. *Journal of Occupational Health Psychology*, *10*(2), 170–180. https://doi.org/10.1037/1076-8998.10.2.170

Bakker, A. B., & Demerouti, E. (2007). The Job Demands-Resources model state of the art. *Journal of Managerial Psychology,* 22(3), 309–328. https//doi.org/10.1108/02683940710733115.

Bakker, A. B., & Demerouti, E. (2014). Job Demands-Resources Theory. *Wellbeing*, 3, 1–28. https//doi.org/10.1002/9781118539415.wbwell019

Bakker, A. B. & Demerouti, E. (2018). Multiple levels in job demands-resources theory Implications for employee well-being and performance" by A. B. Bakker and E. Demerouti, 2018, in E. Diener, S. Oishi, and L. Tay (Eds.), *Handbook of Wellbeing*, 2018, DEF Publishers. DOI: nobascholar.com

Bakker, A. B., Boyd, C. M., Dollard, M., Gillespie, N., Winefield, A. H., & Stough, C. (2010). The role of personality in the job demands-resources model. *Career Development International*, *15*(7), 622–636. https//doi.org/10.1108/13620431011094050

Bakker, A. B., Demerouti, E., & Sanz-Vergel, A. I. (2014). Burnout and work engagement: The JD–R approach. *Annual Review of Organizational Psychology and Organizational Behavior*, *1*(1), 389–411. https//doi.org/10.1146/annurev-orgpsych-031413-091235

Bakker, A., Demerouti, E., & Schaufeli, W. (2003). Dual processes at work in a call centre: An application of the job demands – resources model. *European Journal of Work and Organizational Psychology*, *12*(4), 393–417. https//doi.org/10.1080/13594320344000165

Bianchi, R., Schonfeld, I. S., & Laurent, E. (2015). Burnout–depression overlap: A review. *Clinical Psychology Review*, *36*, 28–41. https//doi.org/10.1016/j.cpr.2015.01.004

Borkoles, E., Kaiseler, M., Evans, A., Ski, C. F., Thompson, D. R., & Polman, R. C. J. (2018). Type D personality, stress, coping and performance on a novel sport task. *PLOS ONE*, *13*(4), e0196692. https//doi.org/10.1371/journal.pone.0196692

Borst, R. T., Kruyen, P. M., & Lako, C. J. (2019). Exploring the Job Demands–Resources Model of Work Engagement in Government Bringing in a Psychological Perspective. *Review of Public Personnel Administration*, *39*(3), 372–397. https//doi.org/10.1177/0734371x17729870

Boukis, A., Koritos, C., Daunt, K. L., & Papastathopoulos, A. (2020). Effects of customer incivility on frontline employees and the moderating role of supervisor leadership style. *Tourism Management*, *77*, 103997. https//doi.org/10.1016/j.tourman.2019.103997

Carte, T. A., & Russell, C. J. (2003). In Pursuit of moderation: Nine common errors and their solutions. *MIS Quarterly*, 27(3), 479–501. https://doi.org/10.2307/30036541

Cabrera-Nguyen, P. (2010). Author Guidelines for Reporting Scale Development and Validation Results in the Journal of the Society for Social Work and Research. *Journal of the Society for Social Work and Research*, *1*(2), 99–103. https://doi.org/10.5243/jsswr.2010.8

Charoensukmongkol, P. (2017). Contributions of mindfulness during post-merger integration. *Journal of Managerial Psychology*, *32*(1), 104–118. https://doi.org/10.1108/jmp-02-2016-0039

Chin, W. (2010). How to write up and report pls analysis. In V. Esposito Vinzi, W. Chin, J. Henseler, & H. Wang (Eds.), *Handbook of partial least squares: Concepts, methods and applications* (pp. 655-690).

Chin, W. W. (1998). The partial least squares approach to structural equation modeling. *Modern methods for business research*, *295*(2), 295-336.

Chirico, F. (2016). Job stress models for predicting burnout syndrome a review. *Annali dell'Istituto Superiore Di Sanità*, *52*(3), 443-456. https//doi.org/10.4415/ANN_16_03_17

Cole, M. S., Walter, F., Bedeian, A. G., & O'Boyle, E. H. (2011). Job Burnout and Employee Engagement. *Journal of Management*, *38*(5), 1550–1581. https://doi.org/10.1177/0149206311415252

De Bruin, G. P., Hill, C., Henn, C. M., & Muller, K. P. (2013). Dimensionality of the UWES17: An item response modelling analysis. *South African Journal of Industrial Psychology, 39(*2), 1-8

Demerouti, E., & Bakker, A. B. (2011). The Job Demands–Resources model: Challenges for future research. *South African Journal of Industrial Psychology*, *37*(2), 1-9. https//doi.org/10.4102/sajip.v37i2.974

Denollet, J. (2005). DS14 Standard Assessment of Negative Affectivity, Social Inhibition, and Type D Personality. *Psychosomatic Medicine*, *67*(1), 89–97. https//doi.org/10.1097/01.psy.0000149256.81953.49

Denton, D. A., Newton, J. T., & Bower, E. J. (2008). Occupational burnout and work engagement: A national survey of dentists in the United Kingdom. *British Dental Journal*, 205, 1–8.

Dewe, P. J., O'Driscoll, M. P., & Cooper C. L. (2012) Theories of psychological stress at work. In R. J. Gatchel, & I. Z. Schultz (Eds.), *Handbook of occupational health and wellness* (pp. 23-38). Springer. https://doi.org/10.1007/978-1-4614-4839-6_2

Diamantopoulos, A., & Siguaw, J. A. (2013). *Introducing LISREL*. SAGE Publications.

Dixon, M. (2021, September 27). *The best way to handle missing data*. Selerity. https//seleritysas.com/blog/2020/03/03/the-best-way-to-handle-missing-data/

Dutton, J. E., & Wrzesniewski, A. (2020, March 12). *What job crafting looks like*. Harvard Business Review. https//hbr.org/2020/03/what-job-crafting-looks-like

Fernando, R., Amukwaya, E., Hlatywayo, C. K., & Pieters, W. (2020). Job Demands and Burnout – The Moderating Effect of Psychological Capital amongst Call Centre Employees in Windhoek, Namibia. *African Journal of Inter/Multidisciplinary Studies*, *2*(1), 74–87. https://doi.org/10.51415/ajims.v2i1.836

Geuens, N., Braspenning, M., van Bogaert, P., & Franck, E. (2015). Individual vulnerability to burnout in nurses: The role of Type D personality within different nursing speciality areas. *Burnout Research*, *2*(2–3), 80–86. https//doi.org/10.1016/j.burn.2015.05.003

Görgens-Ekermans, G., & Herbert, M. (2013). Psychological capital: Internal and external validity of the Psychological Capital Questionnaire (PCQ-24) on a South African sample. *South African Journal of Industrial Psychology*, 39(2), 1- 12.

Grande, G., Romppel, M., Glaesmer, H., Petrowski, K., & Herrmann-Lingen, C. (2010). The type-D scale (DS14) – Norms and prevalence of type-D personality in a population-based representative sample in Germany. *Personality and Individual Differences*, *48*(8), 935–939. https//doi.org/10.1016/j.paid.2010.02.026

Grobler, P., Bothma. R., Brewster. C., Carey. L., Holland. P., & Warnich. P. (2012). *Contemporary Issues in Human Resource Management* (4th ed.). Oxford University Press.

Guchait, P., Cho, S., & Meurs, J. A. (2015). Psychological contracts perceived organizational and supervisor support: Investigating the impact on intent to leave among hospitality employees in India. *Journal of Human Resources in Hospitality & Tourism*, 14, 290-315. https//doi.org/10.1080/15332845.2015.1002070

Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a Silver Bullet. *Journal of Marketing Theory and Practice*, *19*(2), 139–152. https://doi.org/10.2753/mtp1069-6679190202

Hakanen, J., & Schaufeli, W. (2006). Burnout and work engagement among teachers. *Journal of School Psychology, 43*, 495-513. https//doi.org/10.1016/j.jsp.2005.11.001.

Health Professions Act. (2006). Ethical rules of conduct for practitioners registered under The Health Professions Act, 1974. https//www.psyssa.com/wp-content/uploads/2015/12/ethical_rules_annexure_12.pdf

Henseler, J., Hubona, G., & Ray, P. A. (2016). Using PLS path modeling in new technology research: Updated guidelines. *Industrial Management & Data Systems*, *116*(1), 2–20. https://doi.org/10.1108/imds-09-2015-0382

Henseler, J., Ringle. C. M., & Sinkovics, R. R. (2009). The use of Partial Least Squares Path Modeling in international marketing. *Advances in International Marketing, 20*, 277–319.

Holman, D., & Chissick, C., & Totterdell, P., (2002). The effects of performance monitoring on emotional labor and well-being in call centers. *Motivation and Emotion, 26*. 57-81. https://doi.org/10.1023/A1015194108376.

Homans, G. C. (1958). Social behavior as exchange. *American Journal of Sociology*, *63*(6), 597–606. https://doi.org/10.1086/222355

Horwood, S., & Anglim, J. (2017). A critical analysis of the assumptions of Type D personality: Comparing prediction of health-related variables with the Five Factor Model. *Personality and Individual Differences*, *117*, 172–176. https//doi.org/10.1016/j.paid.2017.06.001

Hox, J. J., & Bechger, T. M. (1999). An introduction to Structural Equation Modeling. *Family Science Review. 11*, 354-373

International Labour Organisation. (2016). *Workplace stress a collective challenge world day for safety and health at work*. International Labour Organisation. https//www.ilo.org/wcmsp5/groups/public/---ed_protect/---protrav/---safework/documents/publication/wcms_466547.pdf

Janse Van Rensburg, Y., Boonzaier, B., & Boonzaier, M. (2013). The job demands-resources model of work engagement in South African call centres. *South African Journal of Human Resource Management*, *11*(1), 1-13. https//doi.org/10.4102/sajhrm.v11i1.484

Jetha, A., Kernan, L., & Kurowski, A. (2017). Conceptualizing the dynamics of workplace stress a systems-based study of nursing aides. *BMC Health Services Research*, *17*(1), 1 - 11. https//doi.org/10.1186/s12913-016-1955-8

Jia, Z., Wen, X., Lin, X., Lin, Y., Li, X., Li, G., & Yuan, Z. (2021). Working hours, job burnout, and subjective well-being of hospital administrators: An empirical study based on China's tertiary public hospitals. *International Journal of Environmental Research and Public Health, 18(*9), 1-13. https://doi.org/10.3390/ijerph18094539

Kabir, S. M. (2016). Methods of Data Collection. In S. M. Kabir (Ed.), Basic Guidelines for Research: An Introductory Approach for All Disciplines (1st ed., pp. 201-275). Book Zone Publication.

Kahn, W. A. (1990). Psychological conditions of personal engagement and disengagement at work. *Academy of Management Journal*, *33*(4), 692–724. https//doi.org/10.5465/256287

Kahn, R. L., & Byosiere, P. (1992). Stress in organizations. In M. D. Dunnette & L. M. Hough (Eds.), Handbook of industrial and organizational psychology (2nd ed., pp. 571– 650). Consulting Psychologists Press

Karasek, R. A. (1979). Job Demands, Job Decision Latitude, and Mental Strain: Implications for Job Redesign. *Administrative Science Quarterly*, *24*(2), 285–308. https://doi.org/10.2307/2392498

Kaski, S. S., & Kinnunen, U. (2020). Work-related ill- and well-being among Finnish sport coaches: Exploring the relationships between job demands, job resources, burnout and work engagement. *International Journal of Sports Science & Coaching*, *16*(2), 262–271. https://doi.org/10.1177/1747954120967794

Kelly, M. E., Duff, H., Kelly, S., McHugh Power, J. E., Brennan, S., Lawlor, B. A., & Loughrey, D. G. (2017). The impact of social activities, social networks, social support and social relationships on the cognitive functioning of healthy older adults: A systematic review. *Systematic Reviews*, *6*(1). https//doi.org/10.1186/s13643-017-0632-2

Kim, S., & Wang, J. (2018). The role of Job Demands–Resources (JDR) between service workers' emotional labor and burnout: new directions for labor policy at local government. *International Journal of Environmental Research and Public Health*, *15*(12), 2894. https://doi.org/10.3390/ijerph15122894

Knight, C., Patterson, M., Dawson, J., & Brown, J. (2017). Building and sustaining work engagement – A participatory action intervention to increase work engagement in nursing staff. *European Journal of Work and Organizational Psychology*, *26*(5), 634–649. https//doi.org/10.1080/1359432x.2017.1336999

Koutsimani, P., Montgomery, A., & Georganta, K. (2019). The Relationship between burnout, depression, and anxiety: A systematic review and meta-analysis. *Frontiers in Psychology*, *10*. https//doi.org/10.3389/fpsyg.2019.00284

Kwok, O. M., Cheung, M. W. L., Jak, S., Ryu, E., & Wu, J. Y. (2018). Editorial Recent Advancements in Structural Equation Modeling (SEM) from both methodological and application perspectives. *Frontiers in Psychology*, *9*. https//doi.org/10.3389/fpsyg.2018.01936

Langenhoven, A. (2015). *How job demands and resources predict burnout, engagement and intention to quit in call centres* [Unpublished Master's dissertation, Stellenbosch University].

Lathabhavan, R., Balasubramanian, S. A., & Natarajan, T. (2017). A psychometric analysis of the Utrecht Work Engagement Scale in Indian banking sector. *Industrial and Commercial Training*, *49*(6), 296–302. https//doi.org/10.1108/ict-04-2017-0031

Lavrakas, P. J. (2008). *Encyclopedia of survey research methods (Vols. 1-0).* Sage Publications, Inc. https//doi.org/10.4135/9781412963947

Lee, A. (2016). *Development and empirical evaluation of an explanatory psychological ownership structural model* [Unpublished Master's dissertation, Stellenbosch University].

Maricuțoiu, L. P., Sulea, C., & Iancu, A. (2017). Work engagement or burnout: Which comes first? A meta-analysis of longitudinal evidence. *Burnout Research*, *5*, 35–43. https//doi.org/10.1016/j.burn.2017.05.001

Martin, J. (2021, September 16). *Call center burnout what it is and how to overcome it* [Blog]. Zendesk. https//www.zendesk.com/blog/call-center-burnout/

Maslach, C., Jackson, S. E., & Leiter, M. P. (2017). *Maslach Burnout Inventory manual*, (4th ed.). Mind Garden.

Maslach, C., Schaufeli, W. B., & Leiter, M. P. (2001). Job burnout. *Annual Review of Psychology*, *52*(1), 397–422. https//doi.org/10.1146/annurev.psych.52.1.397

McVicar, A. (2003). Workplace stress in nursing a literature review. *Journal of Advanced Nursing*, *44*(6), 633–642. https//doi.org/10.1046/j.0309-2402.2003.02853.x

Miller, N., & Hendrickse, R. (2016). Differences in call centre agents' perception of their job characteristics, physical work environment and wellbeing. *Problems and Perspectives in Management*, *14*(1), 51–63. https://doi.org/10.21511/ppm.14(1).2016.06

Molino, M., Emanuel, F., Zito, M., Ghislieri, C., Colombo, L., & Cortese, C. G. (2016). Inbound call centers and emotional dissonance in the Job Demands – Resources model. *Frontiers in Psychology*, *07*. https//doi.org/10.3389/fpsyg.2016.01133

Mustosmäki, A., Anttila, T., & Oinas, T. (2013). Engaged or not? A comparative study on factors inducing work engagement in call center and service sector work. *Nordic Journal of Working Life Studies*, *3*(1), 49-68. https://doi.org/10.19154/njwls.v3i1.2520

Nell, E. (2015). *Testing the Job Demands-Resources model on nurses* [Unpublished Master's dissertation, Stellenbosch University].

Nunnally, J. & Bernstein, I. (1999). Psychometric theory. *Journal of Psychoeducational Assessment, 226,* 257-280.

Orgambídez-Ramos, A., & de Almeida, H. (2017). Work engagement, social support, and job satisfaction in Portuguese nursing staff: A winning combination. *Applied Nursing Research*, *36*, 37–41. https://doi.org/10.1016/j.apnr.2017.05.012

O'Riordan, A., Howard, S., Brown, E., & Gallagher, S. (2020). Type D personality and cardiovascular reactivity to acute stress: The mediating effects of social support and negative social relationships. *Psychophysiology*, *57*(11). https//doi.org/10.1111/psyp.13660

Othman, N., & Nasurdin, A. M. (2012). Social support and work engagement a study of Malaysian nurses. *Journal of Nursing Management*, *21*(8), 1083–1090. https//doi.org/10.1111/j.1365-2834.2012.01448.x

Park, J. (2007, December 1). *Work stress and job performance - Semantic Scholar. Slidelegend.com*. https//slidelegend.com/work-stress-and-job-performance-semantic-scholar_5a1426541723dd854db3e576.html

Paulhus, D. L., & Vazire, S. (2007). *The self-report method. Handbook of research methods in personality psychology*. The Guilford Press.

Pohl, S., & Galletta, M. (2017). The role of supervisor emotional support on individual job satisfaction: A multilevel analysis. *Applied Nursing Research*, *33*, 61–66. https://doi.org/10.1016/j.apnr.2016.10.004

Polman, R., Borkoles, E., & Nicholls, A. R. (2010). Type D personality, stress, and symptoms of burnout: The influence of avoidance coping and social support. *British Journal of Health Psychology*, *15*(3), 681–696. https://doi.org/10.1348/135910709x479069

Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology, 88*(5), 879–903. https://doi.org/10.1037/0021-9010.88.5.879

Prasad, S., Rao, A., & Rehani, E. (2001, September 18). *Developing hypothesis and research questions.* http//www.public.asu.edu/~kroel/www500/hypothesis.pdf

Rathnayake, S., Athukorala, Y., & Siop, S. (2016). Attitudes toward and willingness to work with older people among undergraduate nursing students in a public university in Sri Lanka: A cross sectional study. *Nurse Education Today*, *36*, 439–444. https://doi.org/10.1016/j.nedt.2015.10.007

Reason, P. W., Bradbury-Huan, H., Reason, P., & Bradbury-Huang, H. (2007). *The SAGE Handbook of Action Research* (2nd ed.). SAGE Publications Ltd.

Rod, M., & Ashill, N. J. (2013). The impact of call centre stressors on inbound and outbound call-centre agent burnout. *Managing Service Quality: An International Journal*, *23*(3), 245–264. https//doi.org/10.1108/09604521311312255

Rossouw, E., & Rothmann, S. (2020). Well-being of judges: A review of quantitative and qualitative studies. South African Journal of Industrial Psychology, 46. https://doi.org/10.4102/sajip.v46i0.1759

Rothmann, S., Mostert, K., & Strydom, M. (2006). A psychometric evaluation of the job demands resources scale in South Africa. *South African Journal of Industrial Psychology*, *32*(4), 1-12. https//doi.org/10.4102/sajip.v32i4.239

Rożnowski, B. (2020). Are professional burnout and work engagement opposing or independent constructs? *Annals of Psychology, 23(*3), 291-307. https//doi.org /10.18290/rpsych20233-6.

Saddki, N., Sulaiman, Z., Abdullah, S., Zakaria, N., Mohamad, N., Ab Razak, A., & Zainan Abidin, Z. (2016). Psychometric properties of the Malay version of the Medical Outcomes Study Social Support Survey (MOS-SSS) in a sample of patients with HIV. *Journal of HIV/AIDS & Social Services, 16(*1), 1–15. https//doi.org/10.1080/15381501.2015.1107801

Salahian, A., Oreizi, H. R., Abedi, M. R. & Soltani, I. (2012). Burnout and relevant factors in organization. *Interdisciplinary Journal of Contemporary Research Business, 3 (*12), 551-558.

Sararoudi, R. B., Sanei, H., & Baghbanian, A. (2011). The relationship between type D personality and perceived social support in myocardial infarction patients. *Journal of Research in Medical Sciences. 16*(5), 627–633.

Salvagioni, D. A. J., Melanda, F. N., Mesas, A. E., González, A. D., Gabani, F. L., & Andrade, S. M. D. (2017). Physical, psychological and occupational consequences of job burnout: A systematic review of prospective studies. *PLOS ONE*, *12*(10), e0185781. https://doi.org/10.1371/journal.pone.0185781

Schaufeli, W. B., Salanova, M., González-romá, V., & Bakker, A. B. (2002). The measurement of engagement and burnout: A two sample confirmatory factor analytic approach. *Journal of Happiness Studies*, *3*(1), 71–92. https//doi.org/10.1023/a1015630930326

Schaufeli, W & Bakker. A (2003). *Utrecht Work Engagement Scale: Preliminary manual*. Occupational Health Psychology Unit: Utrecht University

Seo, H. S., Lee, S., & Cho, S. (2013). Relationships between personality traits and attitudes toward the sense of smell. *Frontiers in Psychology*, *4*. https//doi.org/10.3389/fpsyg.2013.00901

Sertel Berk, Z., Özalp Türetgen, L., & Yetişen Sun, E. (2017). The buffering role of social support on the relationship between job stress and intention to leave. *Journal of Business Research - Turk*, *3*(9), 213–230. https://doi.org/10.20491/isarder.2017.296

Setia, M. S. (2016). Methodology series module 3 Cross-sectional studies. *Indian Journal of Dermatology*, *61*(3), 261. https//doi.org/10.4103/0019-5154.182410

Shao, Y., Yin, H., & Wan, C. (2017). Type D personality as a predictor of self-efficacy and social support in patients with type 2 diabetes mellitus. *Neuropsychiatric Disease and Treatment*, *13*, 855–861. https//doi.org/10.2147/ndt.s128432

Shrestha, N. (2020). Detecting multicollinearity in regression analysis. *American Journal of Applied Mathematics and Statistics*, *8*(2), 39-42.

Simons, D. J., Shoda, Y., & Lindsay, D. S. (2017). Constraints on generality (COG): A proposed addition to all empirical papers. *Perspectives on Psychological Science*, *12*(6), 1123 - 1128.

STATISTICA. (2021, October 1). *Get the software safely and easily.* Software Informer. https//statistica.software.informer.co

Surana, S. J., & Singh, A. K. (2013). The impact of role stressors and work overload on job burnout. *International Journal of Intelligent Enterprise*, *2*(1), 64 - 83. https//doi.org/10.1504/ijie.2013.057339

Tabachnick, B. G., & Fidell, L. S. (2013). *Using multivariate statistics* (7th ed.). Pearson.

Taherdoost, H. (2016). Sampling methods in research methodology; How to choose a sampling technique for research. *International Journal of Academic Research in Management, 5(*2), 18-27.

Teng, M., Hassan, Z., Kasa, M., Nor, N. N. M., Bandar, N. F. A., & Ahmad, R. (2020). Mediating Role of Boredom in the Workplace on Turnover Intention A Proposed Framework. *International Journal of Academic Research in Business and Social Sciences*, *10*(12). https//doi.org/10.6007/ijarbss/v10-i12/8385

Theron, C. (2016, June 30). *Research Methodology Explanatory research* [Lecture recording]. Stellenbosch University.

Upadyaya, K., Vartiainen, M., & Salmela-Aro, K. (2016). From job demands and resources to work engagement, burnout, life satisfaction, depressive symptoms, and occupational health. *Burnout Research*, *3*(4), 101–108. https//doi.org/10.1016/j.burn.2016.10.001

Urbach, N., & Ahlemann, F. (2010). Structural equation modeling in information systems research using partial least squares. *Journal of Information technology theory and application*, *11*(2), 5-40.

Van Bogaert, P., Clarke, S., Willems, R., & Mondelaers, M. (2012). Nurse practice environment, workload, burnout, job outcomes, and quality of care in psychiatric hospitals: A structural equation model approach. *Journal of Advanced Nursing*, *69*(7), 1515–1524. https://doi.org/10.1111/jan.12010

Van den Tooren, M., & Rutte, C. (2016). Explaining emotional exhaustion and work engagement: The role of job demands-resources and Type D personality. *International Journal of Stress Management*, *23*(2), 147–166. https//doi.org/10.1037/a0039754

Van der Colff, J. J., & Rothmann, S. (2009). Occupational stress, sense of coherence, coping, burnout and work engagement of registered nurses in South Africa. *South African Journal of Industrial Psychology*, *35*(1) 1 - 10. https//doi.org/10.4102/sajip.v35i1.423

Vera, M., Martínez, I. M., Lorente, L., & Chambel, M. J. (2015). The Role of Co-worker and Supervisor Support in the Relationship Between Job Autonomy and Work Engagement Among Portuguese Nurses: A Multilevel Study. *Social Indicators Research*, *126*(3), 1143–1156. https://doi.org/10.1007/s11205-015-0931-8

Verlinden, N. (2021, August 20). *Job Crafting What HR Professionals Need to Know*. AIHR. https//www.aihr.com/blog/job-crafting/

Weber, K., & Waeger, D. (2017). Organizations as polities: An open systems perspective. *Academy of Management Annals*, *11*(2), 886–918. https//doi.org/10.5465/annals.2015.0152

Wong, K. (2013). Partial Least Square Structural Equation Modeling (PLS-SEM) techniques using SmartPLS. *Marketing Bulletin,* 24(1), 1-32.

Woodhead, E. L., Northrop, L., & Edelstein, B. (2014). Stress, social support, and burnout among long-term care nursing staff. *Journal of Applied Gerontology*, *35*(1), 84–105. https//doi.org/10.1177/0733464814542465

World Health Organization. (2019, May 28). *Burn-out an "occupational phenomenon": International Classification of Diseases*. https://www.who.int/news/item/28-05-2019-burn-out-an-occupational-phenomenon-international-classification-of-diseases

Xanthopoulou, D., Bakker, A. B., Demerouti, E., & Schaufeli, W. B. (2009). Reciprocal relationships between job resources, personal resources, and work engagement. *Journal of Vocational Behavior*, *74*(3), 235–244. https//doi.org/10.1016/j.jvb.2008.11.003

Xanthopoulou, D., Bakker, A. B., Dollard, M. F., Demerouti, E., Schaufeli, W. B., Taris, T. W., & Schreurs, P. J. (2007). When do job demands particularly predict burnout? *Journal of Managerial Psychology*, *22*(8), 766–786. https//doi.org/10.1108/02683940710837714

Yang, Y., & Green, S. B. (2011). Coefficient Alpha: A reliability coefficient for the 21st century? *Journal of Psychoeducational Assessment, 29*(4), 377–392. https://doi.org/10.1177/0734282911406668

Yilmaz, G., & Keser, A. (2006). Call center work from employer and employee perspective: Two field studies from Turkish banking sector. *ISGUC The Journal of Industrial Relations and Human Resources*, *8*(2), 22–35. https//doi.org/10.4026/1303-2860.2006.0024.x

Yilmaz, T., & Bozo, O. (2019). Psychometric qualities of Medical Outcomes Study Social Support Survey (MOS-SSS). *International Journal of Eurasia Social Sciences*, *10*(37), 899–915. https//doi.org/10.35826/ijoess.2516

Zanini, D. S., & Peixoto, E. M. (2016). Social Support Scale (MOS-SSS): Analysis of the psychometric properties via item response theory. *Paidéia*, *26*(65), 359–368. https//doi.org/10.1590/1982-43272665201612

Zhu, D., Sun, H & Chang, Y. (2016). Effect of social support on customer satisfaction and citizenship behavior in online brand communities: The moderating role of support source. *Journal of Retailing and Consumer Services*, 31. 287-293. https//doi.org/10.1016/j.jretconser.2016.04.013.

APPENDIX A: INFORMED CONSENT FORM

Informed consent

Topic: How the Distressed Personality, Job Demands and Resources Relate To Customer Service Agents' Engagement and Burnout

My name is Rushka Stemmet, I am currently studying towards my master's degree in Industrial-Organisational Psychology at the University of Stellenbosch. As part of the requirements to complete my master's qualification, I have to conduct a research study. You were selected as a potential participant in this research study because you are working in a customer services role and can provide insight as part of the data gathering process of this study.

1. Procedure

Participation in this study is completely voluntary. We are interested in your experience in the customer service environment and as such, there are no right or wrong answers. The questionnaire will take approximately 20 minutes to complete. As this is an electronic survey, you may complete it at a time most convenient to you.

The criteria to take part in this study are that you must be 18 years or older and work in a customer services environment, either dealing with internal colleagues or external customers.

2. Potential risks and discomforts

The researcher is aware that the topics of Personality, Burnout and engagement that the topics has the potential to cause discomfort to the participant. Measuring burnout creates awareness of a possible risk of burnout. This awareness could cause possible discomfort. On the other hand, awareness of possible risk of burnout is also a positive state to enable a bringing about of change to buffer the risk. Therefore, if you experience discomfort at any point, please feel free to contact

the Independent Counselling and Advisory Services (ICAS) on 0800 000 592. The calls and services offered are free of charge.

3. Confidentiality

The researcher will use SunSurveys, a password protected cloud storage facility. Utilising this cloud storage facility ensures that the data is securely stored and backed up in the cloud.

Responses of all completed surveys are anonymous and as the survey does not ask for any identifiable information, it cannot be traced back to the participants.

These responses will be stored in a password-protected file, on a password-protected computer for a period of 5 years, as a means of maintaining confidentiality. Any future use of data collected is strictly for academic research.

Any information gathered as part of this study will remain confidential and will only be disclosed with your permission or as a requirement of law.

4. Potential benefits to subjects and/or to society

Participation in this research study will potentially provide valuable insight on how a variety of job demands, resources and personality impact engagement and burnout for employees working in the customer service environment. The results obtained could assist organisations in gaining insight into the impact that job demands, resources and personality has on the individual and their organisation, to promote occupational wellbeing and performance of customer service staff/.

5. Participation and skipping question/s

Participants may skip a question and remain in the survey. In this case, the researcher will statistically address missing data during the data cleaning process.

6. Participation and withdrawal

Participants may also withdraw at any point during the research process, simply by closing their internet browser. The participant will not be penalized for withdrawing nor questioned about the reasons for withdrawing. If you choose to withdraw from the study, your responses will be permanently deleted from the system and not taken into consideration when reporting on the data collected.

7. Compensation

Participants will not receive any form of compensation for taking part in this research study.

8. Contact information

For any research related queries, email the researcher, Ms Rushka Stemmet on rstemmet149@gmail.com and, or her supervisor Dr Billy Boonzaier on bb@sun.ac.za.

9. Rights of participant

You have the right to decline answering any questions and you can exit the survey at any time without giving a reason. You are not waiving any legal claims, rights or remedies because of your participation in this research study. If you have questions regarding your rights as a research participant, contact Mrs Maléne Fouché [mfouche@sun.ac.za; 021 808 4622] at the Division for Research Development.

***I consent to be in this study and that my de-identified data collected may be used for future research**

☐ **Yes**

☐ **No**

APPENDIX B: ETHICAL CLEARANCE APPROVAL LETTER

UNIVERSITEIT STELLENBOSCH UNIVERSITY

NOTICE OF APPROVAL

REC: Social, Behavioural and Education Research (SBER) - Initial Application Form

9 September 2021

Project number: 19245

Project Title: TYPE D PERSONALITY AND CUSTOMER SERVICE AGENTS ENGAGEMENT AND BURNOUT

Dear Miss R Stemmet

Co-investigators:

Your response to stipulations submitted on 08/09/2021 12:37 was reviewed and approved by the REC: Social, Behavioural and Education Research (REC: SBE).

Please note below expiration date of this approved submission:

Ethics approval period:

Protocol approval date (Humanities)	Protocol expiration date (Humanities)
26 March 2021	25 March 2022

GENERAL REC COMMENTS PERTAINING TO THIS PROJECT:

INVESTIGATOR RESPONSIBILITIES

Please take note of the General Investigator Responsibilities attached to this letter. You may commence with your research after complying fully with these guidelines.

If the researcher deviates in any way from the proposal approved by the REC: SBE, the researcher must notify the REC of these changes.

Please use your SU project number (19245) on any documents or correspondence with the REC concerning your project.

Please note that the REC has the prerogative and authority to ask further questions, seek additional information, require further modifications, or monitor the conduct of your research and the consent process.

CONTINUATION OF PROJECTS AFTER REC APPROVAL PERIOD

You are required to submit a progress report to the REC: SBE before the approval period has expired if a continuation of ethics approval is required. The Committee will then consider the continuation of the project for a further year (if necessary).

Once you have completed your research, you are required to submit a final report to the REC: SBE for review.

Included Documents:

Document Type	File Name	Date	Version
Default	Section 9.2	19/11/2020	1
Data collection tool	Customer_service_staff_engagement_and_burnout (highlighted amendments)	19/11/2020	2
Data collection tool	List of measures	15/01/2021	1
Data collection tool	Revised Customer_service_staff_engagement_and_burnout survey (02 02 21)	02/02/2021	3
Informed Consent Form	Revised Informed Consent (02 02 21)	02/02/2021	2
Request for permission	Revised Letter to Gatekeeper - Approval (02 02 21)	02/02/2021	2
Research	Revised Rushka Stemmet Thesis Proposal (02 02 21)	02/02/2021	3

Protocol/Proposal			
Default	Revised DESC Report R Stemmet (02 02 21)	02/02/2021	2
Default	Similatity report	02/02/2021	1
Letter of support_counselling	ICAS thesis	02/02/2021	1
Informed Consent Form	Revised Informed Consent (15 02 21)	15/02/2021	3
Default	Revised DESC Report R Stemmet (16 02 21)	16/02/2021	3
Default	Revised DESC Report R Stemmet (19245) (05 04 21)	05/04/2021	4
Data collection tool	Revised Customer-service-staff-engagement-and-burnout (19245) (05 04 21)	05/04/2021	4
Informed Consent Form	Revised DESC Report R Stemmet (19245) (05 04 21)	05/04/2021	4

If you have any questions or need further help, please contact the REC office at cgraham@sun.ac.za.

Sincerely,

Clarissa Graham

REC Coordinator: Research Ethics Committee: Social, Behavioral and Education Research

National Health Research Ethics Committee (NHREC) registration number: REC-050411-032.
The Research Ethics Committee: Social, Behavioural and Education Research complies with the SA National Health Act No.61 2003 as it pertains to health research. In addition, this committee abides by the ethical norms and principles for research established by the Declaration of Helsinki (2013) and the Department of Health Guidelines for Ethical Research: Principles Structures and Processes (2nd Ed.) 2015. Annually a number of projects may be selected randomly for an external audit.

Principal Investigator Responsibilities

Protection of Human Research Participants

As soon as Research Ethics Committee approval is confirmed by the REC, the principal investigator (PI) is responsible for the following:

Conducting the Research: The PI is responsible for making sure that the research is conducted according to the REC-approved research protocol. The PI is jointly responsible for the conduct of co-investigators and any research staff involved with this research. The PI must ensure that the research is conducted according to the recognised standards of their research field/discipline and according to the principles and standards of ethical research and responsible research conduct.

Participant Enrolment: The PI may not recruit or enrol participants unless the protocol for recruitment is approved by the REC. Recruitment and data collection activities must cease after the expiration date of REC approval. All recruitment materials must be approved by the REC prior to their use.

Informed Consent: The PI is responsible for obtaining and documenting affirmative informed consent using **only** the REC-approved consent documents/process, and for ensuring that no participants are involved in research prior to obtaining their affirmative informed consent. The PI must give all participants copies of the signed informed consent documents, where required. The PI must keep the originals in a secured, REC-approved location for at least five (5) years after the research is complete.

Continuing Review: The REC must review and approve all REC-approved research proposals at intervals appropriate to the degree of risk but not less than once per year. There is **no grace period.** Prior to the date on which the REC approval of the research expires, **it is the PI's responsibility to submit the progress report in a timely fashion to ensure a lapse in REC approval does not occur.** Once REC approval of your research lapses, all research activities must cease, and contact must be made with the REC immediately.

Amendments and Changes: Any planned changes to any aspect of the research (such as research design, procedures, participant population, informed consent document, instruments, surveys or recruiting material, etc.), must be submitted to the REC for review and approval before implementation. Amendments may not be initiated without first obtaining written REC approval. The **only exception** is when it is necessary to eliminate apparent immediate hazards to participants and the REC should be immediately informed of this necessity.

Adverse or Unanticipated Events: Any serious adverse events, participant complaints, and all unanticipated problems that involve risks to participants or others, as well as any research-related injuries, occurring at this institution or at other performance sites must be reported to the REC within **five (5) days** of discovery of the incident. The PI must also report any instances of serious or continuing problems, or non-compliance with the RECs requirements for protecting human research participants.

Research Record Keeping: The PI must keep the following research-related records, at a minimum, in a secure location for a minimum of five years: the REC approved research proposal and all amendments; all informed consent documents; recruiting materials; continuing review reports; adverse or unanticipated events; and all correspondence and approvals from the REC.

Provision of Counselling or emergency support: When a dedicated counsellor or a psychologist provides support to a participant without prior REC review and approval, to the extent permitted by law, such activities will not be recognised as research nor the data used in support of research. Such cases should be indicated in the progress report or final report.

Final reports: When the research is completed (no further participant enrolment, interactions or interventions), the PI must submit a Final Report to the REC to close the study.

On-Site Evaluations, Inspections, or Audits: If the researcher is notified that the research will be reviewed or audited by the sponsor or any other external agency or any internal group, the PI must inform the REC immediately of the impending audit/evaluation.