



# Exploring the relationship between job demand, resources and psychological well-being: A study in the hospitality and tourism industries.

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## Declaration

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I declare that this research is my own, unaided work. It has not been submitted before for any other degree or examination at this or any other university or published in any form.

Signed: J. B. Marks

Date: 08/03/2024

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## Abstract

Identified as a key factor contributing to elevated levels of individual performance and thus organisational performance, ensuring ideal levels of individual psychological well-being has grown increasingly important within organisations, especially following the onset and recession of the COVID-19 pandemic. Despite the pandemic having receded, its initial impact left lasting effects on various industries, particularly the tourism and hospitality industries as these industries saw a drastic reduction in workforce size and revenue generated. This has prompted the implementation of nationwide recovery efforts; however, these have been found to be primarily aimed at addressing the financial and economic impacts of the pandemic with minimal consideration for addressing the psychological impacts of the pandemic. This study aimed at evaluating the current state of individual psychological well-being of individuals working in the tourism and hospitality industries in South Africa. Given the broad nature of the psychological well-being construct, attempts to evaluate it in the work context have proved difficult. Hence it is for this reason that this study evaluated psychological well-being with reference to the experience of work engagement and burnout, as these constructs have been conceptualised as indicators of psychological well-being. Therefore individual psychological well-being was assessed through the exploration of the potential relationships between various job characteristics and the experience of work engagement and burnout. The sample consisted of 65 participants from organisations within the tourism and hospitality industries in South Africa. Participants were required to complete a questionnaire that comprised of a demographic information section, the Job-Demands Resources Scale (JDRS), the Maslach Burnout Inventory-Health Services Survey (MBI-HSS), and the 9-item Utrecht Work Engagement Scale (UWES-9). The results generated indicated the presence of significant, weak to moderate relationships between the variables of interest, with few exceptions. Furthermore, the significant regression models generated by the analysis provided insight into the relative contributions of the chosen job characteristics to the experience of work engagement and burnout. The results were discussed within the broader literature on the concepts of job demands and job resources, and the experience of work engagement and burnout.

**Key words:** Work engagement, burnout, job demands, job resources, psychological well-being, COVID-19 pandemic.

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## Chapter 1: Introduction

### 1.1. Introduction

Individual psychological well-being has grown significantly in interest in organisational research, largely owing to the fact that the state of an individual's psychological well-being affects their performance and efficiency levels, which in turn affects the organisation's performance and efficiency levels (Grawitch et al., 2006; Lee & Cho, 2019). Central to the achievement and maintenance of an ideal state of individual psychological well-being are the characteristics of the individual's job; establishing an ideal balance between job demands and job resources results in the experience of positive psychological states which further boost individual psychological well-being (Lee & Cho, 2019). Due to the broad nature of the psychological well-being construct, this study will be evaluating the nature of the relationships between job demands and resources and the experience of burnout and work engagement, respectively. With the experience of burnout and work engagement being used as indicators of individual psychological well-being at work (Lee & Cho, 2019).

The potential relationship between job demands and resources and burnout and work engagement becomes more interesting when one considers how the onset of the COVID-19 pandemic may have impacted employee psychological well-being. The onset of the COVID-19 pandemic had a relatively severe impact across industries across the world, resulting in serious downsizing and restructuring of workforces across industries as well as serious financial losses (Kimbu et al., 2023). Of particular interest to this study are the tourism and hospitality industries, as these industries suffered quite serious losses indicated by the number of jobs lost over the first few months of the pandemic and the drastic reduction in revenue from these industries following the onset of the pandemic (Kimbu et al., 2023; StatsSA, 2020).

## 1.2. Rationale

In terms of revenue and financial contributions, prior to the onset of the COVID-19 pandemic the hospitality and tourism industries contributed approximately 3.7% directly and 8.6% indirectly to the South African GDP, and accounted for approximately 8.2% of total investment activity in the country (StatsSA, 2020; Department of Tourism, 2021). In terms of employment statistics, the tourism and hospitality industries accounted for approximately 4.7% of the total workforce, being directly responsible for the creation of 773 533 jobs and indirectly responsible for the creation of 1.49 million jobs (StatsSA, 2020; Department of Tourism, 2021). Based on this it is clear to see the significant role that the tourism and hospitality industries play in driving the South African economy forward, this becomes more evident when the links to the transportation, consumer retail, financial services, and other network industries are considered (Department of Tourism, 2021).

The onset of the COVID-19 pandemic saw a dramatic reduction in the number of people employed within these industries, with approximately 320 000 people losing their jobs due to the subsequent travel bans and heavy lockdown restrictions implemented by the government in response to the rapidly increasing infection rate (StatsSA, 2020). Following the passing of the COVID-19 pandemic and the implementation of the tourism recovery plan these industries have been showing signs of recovery (StatsSA, 2023). Between 2021 and 2022, tourist arrivals increased by 152.6% from 2 255 699 tourists to 5 698 062, demonstrating an improvement since the significant decreases that resulted from the COVID-19 pandemic, however, it still remains 44.3% below pre-pandemic levels (StatsSA, 2023).

Returning to the mass losses sustained as a result of the pandemic, researchers evaluating this phenomenon in the tourism and hospitality industries attributed it to “pandemic induced” redundancy (Kimbu et al., 2023). The cessation of economic activity and the subsequent reduction in revenue forced organisations to undergo large-scale restructuring processes that saw mass terminations across organisations within these industries (Kimbu et al., 2023). The World Health Organisation (WHO) states that the COVID-19 was declared a global pandemic on the 11<sup>th</sup> of March 2020, with the disease being demoted from pandemic status on the 5<sup>th</sup> of May 2023 (WHO, 2023). Between that time, most of the studies conducted evaluating the impact that the pandemic had on individual psychological well-being in these industries have been done using global

samples (Kimbu et al., 2023; Yu et al., 2021). Amongst the negative results popularly cited are a reduced sense of commitment to one's job, reduced job satisfaction, and the experience of adverse psychological states such as depression and anxiety (Kimbu et al., 2023; Yu et al., 2021). Although these studies have evaluated the effects on psychological well-being, they have not specifically evaluated the relationship between job characteristics and burnout and work engagement, using the latter two as indicators of psychological well-being.

In the South African context, between the onset of the pandemic in March of 2020 and its eventual conclusion in July of 2022, most of the studies evaluating psychological well-being at work have done so using a global or more holistic understanding of the construct (Posel et al., 2021). Similarly to the studies conducted in the global context, these studies have not specifically evaluated the relationship between various job characteristics and the experience of burnout and work engagement as indicators of psychological well-being. In addition to this, most of the studies conducted on psychological well-being have been done in the healthcare industries, with the psychological well-being of nurses and other front-line workers as the focus (Posel et al., 2021).

As discussed previously, despite the implementation of recovery efforts both abroad and in South Africa, progress regarding restoring these industries to their pre-pandemic states has been reasonably slow (StatsSA, 2023). Given that these recovery efforts are primarily aimed at the financial and economic recovery of the tourism and hospitality industries, there appears to be relatively little consideration for the psychological well-being of individuals working in these industries (Department of Tourism, 2021). Therefore questions surrounding the current state of the psychological well-being of individuals in the tourism and hospitality industries continue to be raised, with this study attempting to provide some insight that may aid in the restoration of individual psychological well-being.

As mentioned previously, existing literature on psychological well-being, both pre- and post-pandemic, have conceptualised the construct in fairly broad terms with reference to the hedonic and/or eudemonic perspectives (Aiello & Tesi, 2017; Kimbu et al., 2023). To explain briefly, the former is largely concerned with the maximization of positive experiences and suppression of negative ones, while the latter is more concerned with the satisfaction of specific conditions in line with its various dimensions to result in the experience of elevated levels of psychological well-being (Aiello & Tesi, 2017). Its nature as an affect-based and context-free

construct has made its application within the organisational realm relatively difficult (Lee & Cho, 2019). The studies that have been able to measure this construct in the workplace have done so through the evaluation of the nature of the relationship between job demands and resources and the experience of well-being, using burnout and work engagement as indicators of psychological well-being (Lee & Cho, 2019; Bakker & Demerouti, 2007; Schaufeli & Taris, 2014).

Many of these studies have evaluated the nature of the relationship between job demands and resources and the experience of burnout and work engagement within the context of the Job-Demands Resources (JD-R) model, using the motivational and health impairment processes outlined within the model (Bakker & Demerouti, 2007). To elaborate briefly, given their tendency to require sustained effort and energy to be effectively managed, coping with excessive job demands often results in the onset of adverse health outcomes due to the intense exhaustion experienced by individuals (Bakker & Demerouti, 2007). The depletion of the individual's energy subsequently results in the development of a wide variety of adverse health outcomes which may further result in the experience of burnout (Bakker & Demerouti, 2007). Job demands have been typically understood to relate negatively with individual psychological well-being (Lee & Cho, 2019).

On the other hand, given their ability to satisfy the basic psychological needs of the individual as well as their functionality in the achievement of work goals, the presence of sufficient job demands often results in the experience of greater levels of intrinsic and extrinsic motivation and subsequently the experience of work engagement (Bakker & Demerouti, 2007). Their tendency to fulfill these needs and to enable the achievement of work goals functions to elicit the dedication of greater amounts of energy toward the completion of work, as individuals feel obligated to return the favour to their organisations (Bakker & Demerouti, 2007).

This study applied the Job-Demands Resources (JD-R) model to evaluate the current state of the psychological well-being of employees currently working in the hospitality and tourism industries in South Africa, more specifically business located within these industries in Gauteng. This was achieved by evaluating the nature of the relationships between the chosen job demands and job resources and the experience of burnout and work engagement. This study evaluated how the job resources of job autonomy, job control, and perceived supervisory and organisational

support, and the job demands of job insecurity and role stress, which was used to refer collectively to the experience of role conflict, overload, and ambiguity.

### 1.3. Aim

This study was aimed at examining the nature of the relationships between job autonomy, job control, perceived supervisory and organisational support, job insecurity, and role stress and the experience of work engagement and burnout, which have been conceptualised as indicators of individual psychological well-being. In doing so, it also determined the relative contributions of each of the job resources and job demands to the experience of work engagement and burnout, respectively.

### 1.4. Conclusion

This chapter serves as an introductory chapter to the report and outlines the purpose of the study as well as contextualises the study in the broader research and literature on the topic. This chapter also serves to outline the overall aim of the study. Following this a comprehensive review of the current literature on these variables and the potential relationship between them will be presented. The methodological approach of the study will then be discussed in the following chapter, outlining the research design and the processes of data collection and analysis. Following this the results will be presented in order of the analyses conducted, subsequently followed by a discussion of the results.

## Chapter 2: Literature Review

### 2.1. Introduction

This chapter presents a comprehensive overview of the previous literature on the burnout and work engagement constructs as indicators of psychological well-being, as well as the following job resources and demands: job autonomy, job control, perceived supervisory and organisational support, role stress, and job insecurity. In doing so it demonstrates how the job demands and resources of interest in this study could be relate to the experience of burnout and work engagement, using the Job-Demands Resources (JD-R) model as an overarching theoretical framework (Bakker & Demerouti, 2007). More specifically, the motivational and health impairment processes outlined in the JD-R model will be used to demonstrate and explain the relationship between the chosen variables (Bakker & Demerouti, 2005).

### 2.2. Psychological Well-being

Across previous studies on the concept of psychological well-being, the construct has been conceptualised from a hedonic and a eudemonic perspective, with the former positioning the construct as a unidimensional construct and the latter positioning it as a multidimensional construct (Aiello & Tesi, 2017). The hedonic perspective frames psychological well-being as the experience of maximum personal gratification, individuals attempt to maximise their own pleasurable experiences and minimize the experience of any negative or painful experiences (Aiello & Tesi, 2017; Lee & Cho, 2019). This conceptualisation of well-being bears conceptual similarity to the concept of subjective well-being, which has been measured using an individual's overall satisfaction with their life, the presence of positive emotions, and the absence of negative emotions (Lee & Cho, 2019).

From the eudemonic perspective, psychological well-being is distinct from subjective well-being and has been understood as an ideal state of individual psychological functioning which results in an overall greater sense of satisfaction with life and that better enables the achievement of individual goals (Aiello & Tesi, 2017). The eudemonic conceptualisation of psychological well-being comprises of six dimensions which include, autonomy, environmental mastery, personal growth, positive relations with others, purpose in life, and self-acceptance (Lee & Cho, 2019). Previous studies have found that the experience of these dimensions can result in the creation of

the conditions necessary for the experience of greater degrees of positive well-being and the facilitation of individual growth and development (Aiello & Tesi, 2017; Lee & Cho, 2019).

There have been attempts across previous research to evaluate psychological well-being within the context of work, however, given its nature as an affect-based and context-free construct, this has proven reasonably difficult (Wright & Cropanzano, 2000). Studies that have been able to measure the construct within the context of work have done so by evaluating the nature of the relationship between various job demands and resources and psychological well-being, positioning the experience of ideal levels of individual psychological well-being as the experience of fair and challenging job demands in the presence of sufficient job resources (Lee & Cho, 2019). Psychological well-being has been shown to relate positively to job resources and negatively to job demands, implying that psychological well-being may be related to the outcomes of the motivational and health impairment processes in a similar fashion (Lee & Cho, 2019). Hence, within the context of this study, psychological well-being will be understood with reference to the experience of work engagement and burnout which have been conceptualised as the products of the motivational and health impairment processes and will be understood as indicators of individual psychological well-being.

### 2.2.1. Burnout

First discussing the concept of burnout. Conceptualised as the outcome of the health impairment process outline in the Job-Demands Resources (JD-R) model, burnout has been understood as a persistent, negative, work-related state of mind, that is marked by exhaustion, distress, a reduced sense of efficacy, decreased motivation, and the development of cynical attitudes toward work (Rothmann & Joubert, 2007). Burnout is understood to be multidimensional in nature, comprising of the following dimensions: emotional exhaustion, cynicism, and a reduced sense of professional efficacy (Kim & Stoner, 2008). Emotional exhaustion is characterised by the experience of chronic and severe fatigue which results from excessive workload, drained emotional resources, and feelings of tiredness (Maslach et al., 2001). Cynicism refers to the tendency of an individual to distance themselves from their work and is characterised by negative and callous attitudes towards one's work and everything associated with it (Maslach et al., 2001; Rothmann & Joubert, 2007). The final burnout dimension, a reduced sense of professional efficacy, refers to an individual's negative self-evaluation of their competence, achievements, and

productiveness and is characterised by feelings of insufficiency (Rothmann & Joubert, 2007; Schaufeli et al., 2002).

Previous studies evaluating the nature of the burnout construct and its dimensions have revealed that the dimensions are related to each other to a certain extent, with the nature of their relationships being somewhat indicative of the way in which burnout syndrome develops (Maslach et al., 2001). To elaborate, emotional exhaustion has been found to relate directly to the cynicism dimension, hence the experience of intense degrees of emotional exhaustion may prompt the development of a cynical attitude towards work which may further result in the individual distancing themselves from their work (Maslach et al., 2001). This proposition becomes limited when the relationship between these two dimensions and the reduced sense of professional efficacy dimension is considered (Maslach et al., 2001). This relationship is reasonably more complex than the one that exists between emotional exhaustion and cynicism, as a reduced sense of professional efficacy has been shown to both be the result of and to develop in parallel to the other two dimensions (Maslach et al., 2001).

Across previous studies on the burnout construct and its dimensions, the reduced sense of professional efficacy dimension has been shown to be the weakest and least specific of the three dimensions (Rothmann & Joubert, 2007). The experience of burnout has largely been attributed to the presence of high job demands and the absence of job resources and has been shown to result in a variety of negative individual and organisational outcomes (Rothmann & Joubert, 2007). The former refers to the onset of negative psychological and physiological symptoms experienced by the individual and the latter refers to increased levels of staff turnover and decreased performance levels (Rothmann & Joubert, 2007).

Previous research on the concept of burnout revealed that job demands were the most significant predictors of the experience of burnout at work (Bakker et al., 2014). It has been shown that prolonged exposure to excessive job demands can lead to the experience of chronic exhaustion, followed by detachment and disillusionment with one's work (Bakker et al., 2014). Job resources have been found to be reasonably weak predictors of the experience of burnout, however, they have been shown to have a consistent negative relationship with the cynicism dimension of burnout (Bakker et al., 2014). In addition to this, research has demonstrated that job resources qualify the relationship between job demands and burnout, in that, the combination of

high job demands and low job resources significantly added to the prediction of burnout, particularly the emotional exhaustion and cynicism dimensions (Bakker et al., 2014).

### 2.2.2. Work engagement

The concept of individual engagement at work was initially conceptualised by Kahn (1990 as cited in Kanjanakan et al., 2021) as the harnessing of organisation members' selves to their work roles, in that, individuals express themselves physically, cognitively, and emotionally to the fullest extent during role performance. Initial work on employee engagement largely conceptualised the construct as the positive antithesis of burnout syndrome (Kanjanakan et al., 2021). Maslach et al.'s (2001 as cited in Kanjanakan et al., 2021) research proposed that employee engagement is largely characterised by energy, involvement, and efficacy, which have been understood to represent the opposites of the burnout dimensions of emotional exhaustion, cynicism, and a reduced sense of professional efficacy.

More recent studies conducted on the concept of work engagement have conceptualised it as a distinct construct from burnout, defining it as a persistent affective-cognitive state that is not focused on an object, event, individual, and/or behaviour, and is understood as a positive, work-related state of mind that is characterised by vigour, dedication, and absorption (Jose & Mampilly, 2015). Vigour is characterised by high levels of energy and mental resilience while working, greater willingness to invest significant amounts of energy and effort into one's work, as well as persistence when faced with challenges (Bakker & Demerouti, 2008). Dedication is characterised by a sense of significance, enthusiasm, inspiration, pride, challenge, and a deep sense of involvement in one's work (Bakker & Demerouti, 2008). Absorption is characterised by a sense of intense concentration on and feeling fully engrossed in one's work, to the point where time feels as though it passes quickly with one experiencing significant difficulty when trying to detach oneself from work (Bakker & Demerouti, 2008).

Understood as one of the key outcomes of the motivational process outlined in the JD-R model, job resources have been found to be the strongest predictors of the experience of work engagement, the job resources identified to be particularly significant predictors are autonomy, organisational and supervisory support, and role clarity (Bakker et al., 2014). The reason for this being that these job resources have been shown to be highly functional in the achievement of work goals and the completion of work (De Braine & Roodt, 2011; Bakker et al., 2014). Several studies

have also investigated the presence of high job demands and high job resources, and it has been concluded that access to a wider variety of job resources enables the experience of work engagement in the presence of high job demands (Bakker et al., 2014). Many have theorised that this is largely due to the fact that high job resources enable individuals to better cope and thus better perform under difficult working conditions (Bakker et al., 2014).

### 2.3. Work in the Tourism and Hospitality industries

The discussion now turns its focus to the psychological characteristics of work in the tourism and hospitality industries (Pienaar & Willemse, 2008; Chen & Chen, 2012; de Villiers, 2015). Previous literature investigating the most significant job demands and resources in predicting the experience of burnout and work engagement, respectively, revealed that perceived organisational and supervisory support, perceived job autonomy, training and development opportunities, and work overload were the most significant predictors of both burnout and engagement (Pienaar & Willemse, 2008; Chen & Chen, 2012).

In addition to these factors, the emotional labour associated with work in these industries has also been cited as a significant factor in the experience of positive and negative psychological states, such as work engagement and burnout (Pienaar & Willemse, 2008). Emotional labour has been conceptualised as the expression or suppression of certain emotions to display behaviour that would result in the recipient of service feeling safe (Pienaar & Willemse, 2008). Conceptualised this way, there is an inherent implication that the suppression of certain feelings or behaviours may come at a cost for the individual (Pienaar & Willemse, 2008). Emotional labour can be understood with reference to surface and deep acting, with the former referring to “faking” an emotion and the latter referring to the actual experience and display of a particular emotion (Pienaar & Willemse, 2008; de Villiers, 2012). It has been proposed that the fact that most of the work performed within these industries results in direct contact with customers and other key stakeholders. Employees in these industries may be more likely to engage in surface or deep acting thus increasing their likelihood of experiencing negative or positive psychological states (Pienaar & Willemse, 2008; de Villiers, 2012).

With regard to the experience of adverse health outcome such as burnout, surface acting has been shown to be associated with elevated levels of emotional exhaustion as individuals are forced to expend more emotional resources when attempting to regulate their expressions with

little opportunity to replenish these resources (Pienaar & Willemse, 2008; Karatepe & Olugbade, 2009). Unlike surface acting, deep acting is associated with lower levels of emotional exhaustion as the emotional resource expended during expression are replenished through the meaningful connection established between one's emotions and a greater degree of authenticity (Pienaar & Willemse, 2008). While this study does not investigate the relationship between emotional labour and the experience of burnout and work engagement, it is still worth noting factors outside of those being investigated in this study that could contribute to the experience of either of these states.

#### 2.4. The Job-Demands Resources (JD-R) model

Framed within the context of the broader Job-Demands Resources (JD-R) model, the discussion now turns its focus to the job characteristics from which work engagement and burnout syndrome, as previously discussed, are said to result from (Bakker & Demerouti, 2007). The JD-R model will be used to further explain the development and experience of work engagement and burnout in individuals working in the tourism and hospitality industries. Job demands refer to the physical, psychological, social, and organisational aspects of an individual's job that require sustained physical and/or psychological effort or skills to manage, and so can be associated with a variety of physiological and psychological costs (Bakker & Demerouti, 2007). Job demands can be further divided and classified as quantitative and qualitative demands, with the former referring to demands such as work and time pressure and the latter referring to demands such as role ambiguity and conflict (Schaufeli & Bakker, 2004).

Previous research evaluating the ways in which the presence of various job demands effect individuals has shown that job demands are not inherently negative (Schaufeli & Bakker, 2004). When meeting demands at work requires high degrees of sustained effort on the part of the individual they turn into job stressors, and thus become associated with high energy and effort costs that ultimately result in the experience of various negative outcomes such as depression, anxiety, and burnout (Schaufeli & Bakker, 2004). The terms 'job demands' and 'job stressors' have been used interchangeably across previous literature, however, based on how job demands have been conceptualised within the context of the JD-R model it is necessary to distinguish between the two (Ren & Zhang, 2015). As mentioned above, job demands become job stressors when the individual perceives their job demands to exceed their job resources, and the former become stimuli which induce stress within the individual (Ren & Zhang, 2015). The experience of job

stressors is ultimately what results in the experience of adverse outcomes such as anxiety, exhaustion, and possibly burnout (Ren & Zhang, 2015).

Job resources refer to the physical, psychological, social, and organisational aspects of an individual's job that are functional in the achievement of work goals, function to reduce job demands and their associated physiological and psychological costs, as well as in stimulating the growth, learning, and development of the individual (Bakker & Demerouti, 2007). Job resources can be found at various levels in an organisation, being found at the general organisational level, on an interpersonal level between individuals, in the organisation of work, and at the level of work itself (Schaufeli, 2017). Due to their inherent motivational potential job resources are not only functional in the reduction of the negative costs of job demands but are also functional in the acquisition of new resources and the maintenance of existing ones (Schaufeli & Bakker, 2004).

As alluded to previously, the JD-R model outlines two psychological processes, a health impairment process and a motivational process, that play a role in the development of job strain and motivation respectively (Bakker & Demerouti, 2007). The health impairment process can be understood as the result of poorly designed jobs or chronic job demands that exhaust the mental and physical resources of an individual, which subsequently leads to the depletion of their energy and ultimately the impairment of their health (Schaufeli & Taris, 2014; Schaufeli, 2017). This process is based on the premises of the Compensatory Regulatory-Control (CRC) model proposed by Hockey (as cited in De Braine & Roodt, 2011), which proposes that the sustained expenditure of energy by the individual to cope with excessive job demands results in severe energy depletion which results in the onset of burnout.

Regarding the motivational process outlined by the JD-R model, this process proposes that job resources possess inherently motivational properties that lead to the experience of high work engagement, low cynicism, and elevated levels of job performance (Bakker & Demerouti, 2007). Job resources are said to play both an intrinsic and extrinsic motivational role, the former largely refers to the tendency of job resources to fulfill basic human needs such as the need for autonomy, competence, and relatedness (Schaufeli & Bakker, 2004; Bakker & Demerouti, 2007). This is largely consistent with one of the premises of the self-determination theory; work contexts that are conducive to psychological autonomy, competence, and relatedness enhance one's well-being and elevate one's levels of intrinsic motivation (Schaufeli & Bakker, 2004). With regard to the latter,

the extrinsic motivational potential of job resources is largely consistent with one of the premises of the Effort-Recovery model, which stipulates that work environments that offer sufficient resources foster the willingness to dedicate one's efforts and abilities to the completion of a particular work task (Schaufeli & Bakker, 2004; Bakker & Demerouti, 2007).

Previous research evaluating the relative contributions of various job resources to the experience of work engagement and various job demands to the experience of burnout have revealed that, based on the nature of these job characteristics, the relative strength with which they predict experience of work engagement or burnout varies (Hakanen et al., 2021; Lesener et al., 2019). With regard to job resources it has been found that job resources found at the task level contribute the most to the experience of work engagement in the presence of other job resources, particularly resources such as job autonomy and job control (Hakanen et al., 2021). With regard to job demands, previous studies have found that the impact that a particular job demand has on an individual is largely determined by whether that individual appraises the demand as a challenging or hindering stressor (Crawford et al., 2010). Challenge job demands can be described as demands that promote mastery and personal growth and so are appraised more positively and are not often associated with the experience of adverse health outcomes, while hinderance job demands can be described as demands that thwart personal growth and the attainment of individual goals, often resulting in the experience of adverse health outcomes (Crawford et al., 2010).

## 2.5. Job resources

The discussion now turns its focus to the job resources of interest in this study, namely job autonomy, job control, and perceived supervisory and organisational support. In addition to providing comprehensive insight into these constructs and the nature of their relationships with work engagement and burnout, this section will also provide a discussion regarding the relative contributions of each job resource to the experience of work engagement and burnout (Schaufeli & Bakker, 2004; Hakanen et al., 2021).

### 2.5.1. Work independence

The term work independence will be used to refer collectively to the individual job resources of job autonomy and job control, this has largely been done for the sake of the data analysis and in anticipation of a reasonably small sample size. Across previous literature investigating the degree of control one has over their work as well as the degree of discretion they have in the performance of their work and their impact on individual well-being at work, the terms job autonomy and job control have been used interchangeably to refer to these aspects of work (Baillien et al., 2010; Thompson & Prottas, 2006).

#### 2.5.1.1. Job autonomy

The first job resource to be discussed is that of job autonomy. The concept of autonomy has been extensively researched in the workplace on account of the significance of the impact it has on individual well-being and performance, as well as organisational performance and effectiveness (Gagne & Bhawe, 2010). Initial conceptualisations of the autonomy construct position it as the extent to which employees possess the freedom and independence in the scheduling and performance of their work (Gagne & Bhawe, 2010). As theory around the construct developed, the autonomy construct has come to be understood in broader terms as the degree of independence and control an individual has with regard to the timing of their work, how their work is carried out, as well as the performance of secondary tasks associated with their work (Gagne & Bhawe, 2010).

More recent conceptualisations of the construct have not completely abandoned these elements of the autonomy construct, defining the concept as being multidimensional in nature, comprising of the following dimensions: work scheduling, work process, locational, and decision-making autonomy (De Spiegelaere et al., 2016). Based on this, autonomy has been defined as the degree to which an individual's job provides them with substantial freedom, independence, and discretion in the scheduling of their work, determining how they perform their work, where the work is carried out, as well as the degree of decision-making authority they have in their job (De Spiegelaere et al., 2016; Gagne & Bhawe, 2010). Despite its multidimensional nature, most studies conducted on autonomy within the context of the JD-R model have adopted a more general understanding of the concept, using it to refer generally to the degree of independence an individual has within their job (De Spiegelaere et al., 2016).

As discussed previously, task level job resources have been shown to be the strongest and most consistent predictors of the experience of work engagement (Hakanen et al., 2021). As a task-level job resource, individual autonomy at work has been cited across various studies as a strong positive predictor of the experience of work engagement and a strong negative predictor of burnout (Kim et al., 2019; Vera et al., 2016; Hakanen et al., 2021). Previous studies have identified an individual's need for autonomy and independence as a basic psychological need, the satisfaction of which results in the achievement of optimal levels of individual functioning and performance (De Spiegelaere et al., 2016). Using the motivational process outline in the JD-R model, through the satisfaction of the need for autonomy, reasonable degrees of independence and autonomy in the performance of work have intrinsic motivational properties that often lead to the experience of work engagement (Bakker & Demerouti, 2007). Individuals are thus more motivated to complete work tasks and are more likely to experience elevated levels of work engagement, which in turn results in greater levels of performance and effectiveness at an organisational level (Bakker & Demerouti, 2007).

#### 2.5.1.2. Job control

The discussion now turns its focus to job control. Job control was initially conceptualised within the context of Karasek's (1979 as cited in De Spiegelaere et al., 2015) Job-Demands Control model and can be defined as the degree to which an individual is able to exercise a degree of control over their job by being able to decide how best to meet the demands of their work. Job control can be divided into two dimensions, decision latitude and skill discretion, with the former referring to the degree of control an individual has over their tasks and their behaviour during the work day and the latter referring to the degree to which an individual's job enables the use of their abilities, a degree of variety in work tasks, and the possibility of advancement (Warr, 1990; Matthews & Rutherford, 2020). Job control does bear some conceptual similarity to job autonomy, as both constructs have been understood with reference to an individual's ability to exercise a degree of agency and independence in the scheduling and performance of work (Parker et al., 2010; Liu et al., 2005).

In more recent studies, the concept of job control has been reformulated to reflect a broader construct termed behavioural control, which encompasses control over one's work tasks, methods, work scheduling, pacing, and physical workspace (Parker et al., 2010). Similar to individual

autonomy, job control has been shown to be a consistent and strong positive predictor of the experience of work engagement and a consistent and strong negative predictor of the experience of burnout (Liu et al., 2005; De Spiegelaere et al., 2015). Similar to job autonomy, as a task-level job resource, the consistency with which job control predicts the experience of work engagement is to be expected, as task-level job resources are suggested to contribute the most to the experience of work engagement (Hakanen et al., 2021; Liu et al., 2005).

Using the motivational process outlined by the JD-R model, possessing a fair degree of control over one's job may have intrinsic motivational properties, in that possessing a degree of control over one's job may satisfy the need for autonomy and thus may result in the individual being more willing to dedicate larger degrees of energy to the completion of their work and subsequently result in the experience of work engagement (Bakker & Demerouti, 2007; Liu et al., 2005). This, in turn, results in greater levels of organisational performance and effectiveness (Schaufeli & Taris, 2004).

#### 2.5.2. Perceived supervisory and organisational support

The final job resources to be discussed are that of perceived supervisory support (PSS) and perceived organisational support (POS), these will be discussed simultaneously as PSS has been shown to consistently predict an individual's experience of POS (Jin & McDonald, 2017; Jose & Mampilly, 2015). This has been attributed to the tendency of individuals to perceive their immediate supervisors as direct links between themselves and their organisations, positioning the supervisor as an organisational agent (Jin & McDonald, 2017). Which would imply that any support offered to the individual by their supervisor serves as an indication of the degree to which their organisation cares about its workforce (Jin & McDonald, 2017). Perceived Supervisor Support (PSS) refers to the degree to which employees perceive their supervisors to genuinely care about their well-being, value their contributions, and are generally supportive (Shi & Gordon, 2020; Jose & Mampilly, 2015). The behaviours, attitudes, and characteristics of supervisors are significant influencers of the behaviours and attitudes of employees, which implies that individuals that perceive their supervisors to be supportive are more likely to reciprocate and actively contribute to the success of the organisation (Jose & Mampilly, 2015).

Perceived Organisational Support (POS) refers to employees' perceptions of the extent to which the organisation possesses a deep concern for the well-being of its staff, and plays a role in

the facilitation of instrumental, social, and emotional support (Rasool et al., 2021; Guo et al., 2017). Individual employees base their perceptions of POS on the nature and quality of their interactions with a wide variety of organisational agents, such as their immediate supervisors (Rasool et al., 2021). Similar to PSS, fair degrees of POS may make individual more inclined to reciprocate the organisation's kindness, being more willing to dedicate greater degrees of energy toward the achievement of the organisation's goals and success (Guo et al., 2017).

Both PSS and POS have been found to be consistent, positive predictors of the experience of work engagement and significant, negative predictors of the experience of burnout (Jose & Mampilly, 2015; Rasool et al., 2021; Guo et al., 2017). Their classification as interpersonal and organisational level job resources respectively positions them as strong predictors of the experience of work engagement, however, they may not predict work engagement as strongly as their task-level counterparts (Hakanen et al., 2021). Drawing from the motivational process outlined in the JD-R model, both PSS and POS may possess extrinsic motivational properties, as both may be considered functional in the achievement of work tasks and individual work goals (Bakker & Demerouti, 2007). This may result in individuals being more willing to dedicate greater degrees of energy toward the achievement of the organisation's objectives (Bakker & Demerouti, 2007).

## 2.6. Job demands

The discussion now turns its focus to the job demands under investigation in this study. Similar to what has been discussed regarding the chosen job resources, this discussion provides an explanation of the concepts and illustrates how these constructs act along the health impairment pathway within the JD-R model to result in the experience of burnout (Bakker & Demerouti, 2007; De Braine & Roodt, 2011; Schaufeli & Taris, 2014). Additionally, insight into the relative contributions of the chosen job demands to the experience of burnout are also discussed (Crawford et al., 2010).

### 2.6.1. Job insecurity

The first job demand to be discussed is job insecurity, it could be proposed that this job demand may be especially significant within this study given its focus on the effects of the COVID-19 pandemic on the psychological well-being of individuals working in the tourism and hospitality industries. Job insecurity has been understood as both a global and multidimensional construct

(Stander & Rothmann, 2010; Tilakdharee et al., 2010). Understood as a global construct, job insecurity refers to the perceived threat of job loss by an individual or the experience of elevated degrees of job uncertainty (Stander & Rothmann, 2010). Understood as a multidimensional construct, job insecurity comprises of a cognitive and affective dimension, with the former referring to the individual's perception of potential job loss and the latter referring to fear experienced by an individual when they perceive their job to be under threat (Stander & Rothmann, 2010; Tilakdharee et al., 2010).

Distinguishing between cognitive and affective job insecurity as the perception of a threat to the security of one's job and the emotional response to said threat respectively, allows for the potential relationship between the dimensions to be clearly seen (Huang et al., 2012). Understood this way the causal nature of the relationship between these dimensions is illustrated, with the cognitive appraisal of a perceived threat to the security of one's job preceding the emotional response to the perceived threat (Huang et al., 2012).

Previous studies evaluating the nature of the relationship between job insecurity and the experience of burnout and work engagement found that job insecurity was a consistent, positive predictor of the former and a consistent, negative predictor of the latter (Stander & Rothmann, 2010; Blom et al., 2015). This may be the result of job insecurity being classified as a hindrance job demand, meaning this particular demand prevents the achievement of work-related goals and hinders the process of individual learning and development (Crawford et al., 2010). With reference to the health impairment process outlined in the JD-R model, higher degrees of job insecurity may result in greater susceptibility to the experience of burnout due to the excessive degrees of energy and effort expended on the part of the individual in an attempt to cope with the fear of potentially losing one's job (Huang et al., 2012; Schaufeli & Taris, 2014). Individual energy levels may become depleted which may subsequently result in the experience of emotional exhaustion and the development of a cynical attitude towards their work (Huang et al., 2012).

### 2.6.2. Role stress

The last job demands to be considered are role ambiguity, role conflict, and role overload, which for the purposes of this study will be evaluated and discussed collectively as role stress (Kim & Stoner, 2008). First, role overload has been defined as a role stressor that results from an individual's perception that their work demands greatly exceed the resources they have at their

disposal, and thus hinders their ability to successfully complete their work tasks (Andrew & Kacmar, 2014). Role overload can be understood in terms of qualitative and quantitative overload, with the former referring to overload as a result of an individual's perception that they do not possess the necessary skills to complete certain tasks and with the latter referring to overload as a result of the individual's perception that their work cannot be completed in the allotted time (Yip et al., 2008).

Second, role conflict refers to an individual's experience of seemingly incongruent expectations with regard to work tasks and responsibilities and can occur both between and within roles (Dasgupta, 2012). Role conflicts may also arise when work tasks clash with the value and belief systems of the individual (Papastyliaou et al., 2009). Third, role ambiguity, which refers to a lack of clarity regarding performance consequences and a lack of information regarding the type of behaviours that are expected of one within a particular role (Dasgupta, 2012). Role ambiguity has been understood as a multidimensional construct across previous studies on the relationship between role ambiguity and the experience of adverse work and health outcomes (Papastyliaou et al., 2009).

Each of the above role stress factors above have been shown to be significant and consistent positive predictors of the experience of burnout, largely due to the fact that each of these factors can be classified as hindrance job demands (Peiro et al., 2001; Crawford et al., 2010). As mentioned above, hindrance demands often result in the experience of adverse health outcomes such as burnout due to their tendency to obstruct the achievement of work goals and the associated energy and effort costs that result from attempts to manage these demands (Crawford et al., 2010). Role stress has been shown to significantly predict the experience of emotional exhaustion and the development of a cynical attitude at work, this would suggest that as individuals attempt to cope with the negative effects that result from role stress their energy is depleted to the point of exhaustion (Peiro et al., 2001).

## 2.7. Research questions

To reiterate, the aim of this study is to determine the current levels of individual psychological well-being of individuals working in the tourism and hospitality industries. It has attempted to do so by evaluating the nature of the relationship between the job demands and resources discussed above and the experience of work engagement and burnout, which have been conceptualised as indicators of psychological well-being in this study. Additionally, this study will provide further insight into the relative contributions of the chosen job demands and resources to the experience of burnout and work engagement. Job demands and job resources have been shown to act along the health impairment and motivational processes, respectively, to create the conditions necessary for the experience of burnout and work engagement, respectively (Bakker & Demerouti, 2008). In the case of job demands and the experience of burnout, previous research found that excessive job demands result in the depletion of individual energy which subsequently results in the onset of adverse health outcomes and ultimately burnout (Bakker & Demerouti, 2007; Maslach et al., 2001). In the case of job resources and work engagement, researchers have found that their intrinsic and extrinsic motivational properties enable the satisfaction of psychological needs as well as the achievement of work tasks, which results in greater motivation to perform (Bakker & Demerouti, 2007).

As has been illustrated above, while all the job demands and resources discussed are expected to significantly predict the experience of burnout and work engagement respectively, differences with regard to the relative strength with which they each predict the experience of either of these states are expected (Hakanen et al., 2021; Crawford et al., 2010). With regard to the job resources, job autonomy/job control are expected to contribute more to the experience of work engagement than perceived supervisor support (PSS) and perceived organisational support (POS) due to the former being classified as task-level job resources (Hakanen et al., 2021). With regard to job demands, while both role stress and job insecurity are classified as hindrance job demands, given the way in which the onset of the COVID-19 pandemic affected the tourism and hospitality industries, job insecurity may be expected to contribute more to the experience of burnout in comparison to role stress (Crawford et al., 2010).

*RQ1: What are the relative contributions of work independence, perceived supervisor support (PSS), and perceived organisational support (POS) to the experience of work engagement in a sample of employees working in the tourism and hospitality industries?*

*RQ2: What are the relative contributions of work independence, perceived supervisor support (PSS), and perceived organisational support (POS) to the experience of burnout in a sample of employees working in the tourism and hospitality industries?*

*RQ3: What are the relative contributions of job insecurity and role stress to the experience of burnout in a sample of employees working in the tourism and hospitality industries?*

*RQ4: What are the relative contributions of job insecurity and role stress to the experience of work engagement in a sample of employees working in the tourism and hospitality industries?*

## 2.8. Conclusion

To conclude this chapter, the unique interplay between the abovementioned job demands and resources and the experience of burnout and work engagement respectively, may provide vital insight into the state of the psychological well-being of employees currently working in the tourism and hospitality industries in Gauteng. To reiterate what has been discussed above, job demands and resources are said to act along the health impairment and motivational pathways to result in the experience burnout and work engagement respectively (Bakker & Demerouti, 2008). In the case of job demands and the experience of burnout, previous literature found that excessive job demands in the absence of vital job resources results in the depletion of the individual's energy which may subsequently result in the experience of burnout (Bakker & Demerouti, 2007; Maslach et al., 2001). In the case of job resources and work engagement, the intrinsic and extrinsic motivational properties of job resources enable the satisfaction of psychological needs as well as facilitate the completion of work tasks (Schaufeli & Taris, 2014; Schaufeli, 2017).

Given the unique impact that the onset of the COVID-19 pandemic had on the tourism and hospitality industries, inquiry into the state of the psychological well-being of employees working in these industries is warranted. Each of the job demands and resources discussed above are expected to relate significantly to the experience of burnout and work engagement, with potential variations with regard to the relative strength of the proposed relationships (Crawford et al., 2010; Hakanen et al., 2021).

## Chapter 3: Methods

### 3.1. Introduction

This chapter outlines the methodological framing of this study by providing an overview of the general research design employed, the characteristics of the sample and the sampling technique, the instruments used for data collection, the research procedure followed, the ethical considerations of the study, and the data analytic techniques used for analysis. This section also provides a brief overview of the anticipated limitations that may result from certain design features of the study.

### 3.2. Research design

To reiterate, the aim of this study is to determine the nature of the relationships that exist between the chosen job demands and resources and the experience of burnout and work engagement respectively in a sample of employees working in the tourism and hospitality industries in South Africa. Therefore it would be appropriate to situate this study within a broader post-positivist paradigmatic framework, as the underlying epistemological principles of this framework align quite strongly with the primary aim of this study (Ryan, 2006). Primarily focusing on the exploration of the relationship between the chosen predictor and criterion variables, aligns strongly with the tendency of post-positivist research to opt for the establishment of a broader view of a particular phenomenon as opposed to drawing definitive conclusions (Ryan, 2006). This approach to research requires a significant degree of researcher reflexivity to better enable the comprehensive exploration of the phenomenon of interest, allowing all potentially influential factors to be found and investigated (Ryan, 2006).

The choice of paradigm has informed the design features of this study; this study has employed a quantitative, cross-sectional, correlational, and non-experimental research design (Swart et al., 2019; Belli, 2009). The choice of design does significantly hinder the ability to draw causal conclusions from the results yielded in the study, as none of the criteria for causality have been sufficiently met, however, given the exploratory nature of the study this will not be a great concern (Belli, 2009). This does, however, introduce some limitations regarding the internal validity of the study which have been accounted for through the use of a non-experimental, correlational design to increase the generalisability of the results and thus increase the external validity of the results (Swart et al., 2019). The design of the study aligns strongly with the

ontological assumptions of the chosen paradigm, focusing more on the exploration of the relationship between the chosen variables instead of the generation of a definitive conclusion regarding the nature of the relationships that may exist between these variables (Ryan, 2006).

### 3.3. Sample and Sampling technique

The study aimed to make use of a sample that consisted of approximately 150 participants currently working in the tourism and hospitality industries in Gauteng. However, only 77 questionnaires were returned, of which only 65 were eligible for inclusion in the data analysis. The only inclusion criteria for the study was that participants would need to have begun working within these industries prior to the onset of the COVID-19 pandemic in the year 2020, this was implemented through the inclusion of an item in the questionnaire that asks participants whether they had begun working in their current industry prior to the pandemic. This was done to better evaluate the way in which the onset of the COVID-19 pandemic and the subsequent changes to the nature of work and the way it is done within these industries has impacted the psychological well-being of individuals within these industries. In line with the stipulated inclusion criteria, 12 participants were removed from the sample, apart from these individuals no other participants were removed from the sample.

The sample was collected using a non-probability, purposive sampling technique using volunteers, as this technique helped to ensure that only individuals with the appropriate characteristics were included in the sample, meaning only individuals working in the tourism and hospitality industries in Gauteng, South Africa (Laher & Botha, 2011). The use of this technique coupled with the relatively small size of the sample may have introduced some limitations with regard to the generalisability of the results and the representativeness of the sample (Belli, 2009). The adoption of a non-experimental, correlational research design was done largely in an attempt to somewhat mitigate these limitations (Belli, 2009).

The demographics statistics of this sample are presented in Table 1 below. The sample consisted of individuals aged 18 to 65 years, with a large portion of the sample falling in the between 35 to 44 age group (35.40%) and 45 to 54 age group (35.40%). The sample consisted of individuals that worked in a wide variety of organisations within the tourism and hospitality industries, with most of the sample working in casinos (43.10%) or hotels and other types of accommodation (46.20%). Additionally, information regarding the various occupational roles

within organisations was also obtained, with most of the sample being comprised of employees (43.10%) or managers (47.10%). Information regarding the racial identities of participants was also obtained, the sample was found to consist predominantly of Black South Africans (46.20%). Based on the results provided below, the sample appears to have been mostly comprised of employees working in organisations based in the hospitality industry. It has been acknowledged that this may introduce limitations with regards to the generalisability of the results.

**Table 1 Frequencies of organisation type, role, gender, age, tenure, and racial group for a sample of hospitality and tourism employees.**

| Variable          |                              | Frequency | Percentage (%) |
|-------------------|------------------------------|-----------|----------------|
| Organisation type | Casino                       | 28        | 43.10          |
|                   | Events management            | 5         | 7.70           |
|                   | Hotel or other accommodation | 30        | 46.20          |
|                   | Restaurant                   | 2         | 3.10           |
| Role              | Business owner/Self-employed | 4         | 6.20           |
|                   | Employee                     | 28        | 43.10          |
|                   | Manager                      | 31        | 47.70          |
|                   | Other                        | 2         | 3.10           |
| Gender            | Do not wish to disclose      | 1         | 1.50           |
|                   | Female                       | 33        | 50.80          |
|                   | Male                         | 31        | 47.70          |
| Age               | 18-24                        | 2         | 3.10           |
|                   | 25-34                        | 11        | 16.90          |
|                   | 35-44                        | 23        | 35.40          |
|                   | 45-54                        | 23        | 35.40          |
|                   | 55-65                        | 5         | 7.70           |
|                   | 65+                          | 1         | 1.50           |
| Tenure            | Less than 1 year             | 6         | 9.20           |
|                   | 1 to 5 years                 | 16        | 24.60          |
|                   | 6-10 years                   | 19        | 29.20          |
|                   | 11-20 years                  | 16        | 24.60          |
|                   | 21 years +                   | 8         | 12.30          |
| Racial group      | Asian                        | 4         | 6.20           |
|                   | Black                        | 30        | 46.20          |
|                   | Coloured                     | 11        | 16.90          |
|                   | White                        | 17        | 26.20          |
|                   | Other                        | 3         | 4.60           |

Contact with the sample occurred in two phases: the management staff of various organisations in these industries were contacted and issued a formal access request letter (see Appendix D) and an advertisement for participation in this study was distributed across various social media platforms. Management staff that agreed to distribute the questionnaire within their organisations were followed up with every two weeks following their agreement to participate in the study, communication with the management staff ceased once it was determined that no more responses would come from their organisations. With regard to social media posting, advertisements to participate in the study were posted every two weeks on the following platforms, Instagram, WhatsApp, LinkedIn, and Facebook. It has been acknowledged by the researcher that directly approaching the management staff of organisations may have been construed as intrusive and thus may have been met with resistance, however, the researcher and their supervisor ensured that the necessary steps were taken to ensure no encroachment took place.

The management staff were contacted via email, this email largely served to provide them with an overview of the study and its purpose, and to provide reassurance to the management staff that no harm would befall them, their business, or their staff if they decided to grant permission to access them. The formal access request letter (see Appendix D) attached to the email served to supplement the information provided in the email. The contact details of the researcher and their supervisor were made readily available to management staff, in the event they had any concerns or questions regarding an aspect of the study. In addition to this, the contact details of the University Ethics committee were also made available to management staff in the event they had any concerns regarding the ethical framing of the study.

### 3.4. Instruments

The instrument used for data collection was a questionnaire that consisted of a biographical information section, the Job-Demands Resources Scale (JD-RS), a shortened 9-item version of the Utrecht Work Engagement Scale (UWES-9), and the Maslach Burnout Inventory Health Services Survey (MBI-HSS) (Garcia et al., 2019; Schaufeli et al., 2006; Martin, 2017; Rothmann et al., 2006). With regard to the biographical information section, this section will serve to provide information regarding whether participants began working in these industries prior to the onset of the COVID-19 pandemic, the type of organisation they work in, the position they occupy, their gender, their age, their tenure within their organisation, and their racial group. The information

collected via the biographical information section will only be used to describe the sample, the evaluation of the cross effects of demographic variables on the relationship between job characteristics and the experience of work engagement and burnout is beyond the scope of this study.

It has been acknowledged by the researcher that the instrument used was quite long and so may have introduced some limitations with regard to the reliability of the results, due to increased susceptibility to forms of response bias due to participants becoming bored or fatigued (Yuksel, 2017). Further bias was expected on account of the nature of the concepts being evaluated, it was expected that individuals may provide responses that they believed others, possibly managers or colleagues, would deem socially desirable (Kreitchmann et al., 2019). The inclusion of items that require reverse-scoring may have helped to mitigate the occurrence of these forms of bias (Yuksel, 2017; Kreitchmann et al., 2019).

#### 3.4.1. Maslach Burnout Inventory (MBI)

The Maslach Burnout Inventory (MBI) is the most popular burnout measure as it has been used in a variety of studies investigating the burnout construct, within the context of this study it was used to assess participant's experience of burnout which may have resulted from excessive job demands and insufficient job resources (Rothmann & Joubert, 2007; Maslach et al., 2001). Given that burnout has been conceptualised as a multidimensional construct, consisting of 3 dimensions including emotional exhaustion, cynicism, and a reduced sense of professional efficacy (Maslach et al., 2001). The use of this measure is justified as it is able to account for the multidimensional nature of the construct, with an appropriate subscale being used for the measurement of each dimension as well as having been proved valid and reliable in several studies across industries within the South African context (Maslach et al., 2001; Storm & Rothmann, 2003). This aided in ensuring consistency between the conceptualisation and operationalisation of the burnout construct, increasing the internal validity of the study.

This study made use of the Maslach Burnout Inventory-Human Services Survey (MBI-HSS); this scale was adapted slightly to better suit the sample for this study. The MBI-HSS is a closed-ended, self-report scale that consists of 22 items and 3 subscales, each of the subscales represents one of the dimensions of burnout discussed in the literature review (Maslach et al., 2001; Garcia et al., 2019). The emotional exhaustion and cynicism subscales both consist of 7

items, and the reduced sense of professional efficacy subscale consists of 8 items (Garcia et al., 2019). The items were measured on a 7-point Likert-type scale that ranged from 0 (Never experienced such a feeling) to 6 (Experience such feelings every day) (Garcia et al., 2019).

With regard to the psychometric properties of the MBI-HSS, an exploratory factor analysis conducted by Garcia et al. (2019) yielded results that confirmed the existence of a 3-factor structure for this particular scale. The analysis revealed that all of the items loaded significantly onto the factors they were proposed to represent (Garcia et al., 2019). The reliability analysis for the scale produced a Cronbach's Alpha coefficient of 0.704 indicating moderately high internal consistency reliability for the whole scale, the Cronbach's Alpha coefficients for the emotional exhaustion, depersonalisation, and cynicism subscales were 0.895, 0.751, and 0.762 respectively, also indicating moderately high internal consistency reliability (Garcia et al., 2019). Based on these results, the use of this scale for this study was justified as it had been proven valid and reliable.

#### 3.4.2. Utrecht Work Engagement Scale (UWES-9)

The shortened 9-item version of the Utrecht Work Engagement Scale was used to assess participants' experience of work engagement, explained to be the result of the experience of high and reasonable job demands in the presence of sufficient job resources (Bakker & Demerouti, 2007; Martin, 2017). This scale assessed an individual's experience of work engagement based on their experience of the 3 dimensions of work engagement: vigour, dedication, and absorption (Martin, 2017). The UWES-9 is a closed-ended, self-report measure that consists of 9 items measured on a Likert-type scale, ranging from 0 (Never) to 6 (Always) and consists of 3 subscales with each subscale measuring one of the aforementioned dimensions (Martin, 2017).

To provide insight into the process of reducing the overall number of items used in the scale, Schaufeli et al. (2006) describe the process they utilised to adapt the 9-item version of the scale from the 17-item version of the scale. The process was as follows, the most prominent item of each subscale was selected based on the perceived face validity of the item, after which the item was regressed on the remaining items on the subscale (Schaufeli et al., 2006). Following this the item with the highest  $\beta$  value was added to the initial item and their sum was regressed on the items of the scale, with the item with the highest  $\beta$  value again being added to both items that were previously selected (Schaufeli et al., 2006).

With regard to the psychometric properties of this scale, using a foreign sample Martin (2017) conducted an exploratory factor analysis (EFA), the results of which demonstrated the existence of a 3-factor structure for the UWES-9, which coincided with the results of factor analyses conducted for the 17-item version of the UWES across several contexts. The results revealed that at least 3 items loaded significantly onto each factor, with no significant cross-loadings (Martin, 2017). The reliability analysis demonstrated that the UWES-9 yielded a Cronbach's Alpha coefficient of 0.9, indicating very high internal consistency reliability, and the reliability analyses for each of the subscales yielded coefficients ranging from 0.87-0.94 also indicating very high internal consistency reliability (Martin, 2017). In addition to this, Schaufeli et al. (2006) found that scores obtained on the 9-item shortened version of the UWES correlated very well with scores obtained on the original measure, with correlation coefficients in excess of 0.85.

Similar results were found when evaluating the psychometric properties of the UWES-9 on a sample (n=369) of working adults in South Africa (De Bruin & Henn, 2013). De Bruin and Henn (2013) conducted an exploratory factor analysis (EFA) to evaluate the factor structure of the UWES-9, the results indicated the presence of three factors with three items loading significantly onto each of them with no significant cross-loadings. Additionally, a reliability analysis yielded a Cronbach's Alpha coefficient of 0.92, indicating a high degree of internal consistency reliability (De Bruin & Henn, 2013). No results were provided regarding the internal consistency reliability of the individual subscales, however there is sufficient evidence to conclude that the UWES-9 is highly reliable and accurate both globally and within the South African context (Martin, 2017; De Bruin & Henn, 2013).

#### 3.4.3. Job-Demands Resources Scale (JDRS)

The Job-Demands Resources Scale (JDRS) was used to assess participants' perceptions of the characteristics of their jobs, specifically with regard to the presence of the chosen job demands and resources. The JDRS is a closed-ended, self-report scale that consists of 40 items measured on a 4-point Likert-type scale, ranging from 1 (Never) to 4 (Always) (Rothmann et al., 2006). With regards to the psychometric properties for the overall scale, Rothmann et al. (2006) conducted an exploratory factor analysis that revealed the presence of the following factors within the JDRS: growth opportunities, organisational support, advancement, overload, and job security. A

subsequent analysis of these first-order factors revealed the presence of two underlying factors, which were labelled job demands and job resources (Rothmann et al., 2006). The overload dimension was found to load significantly onto the job demands factor, while the remaining 4 dimensions were found to load significantly onto the job resources factor (Rothmann et al., 2006).

Based on the specific job demands and resources that have been identified and discussed in the literature review, only items from the overload, organisational support, growth opportunities, and job security dimensions were used for data collection, the measure consisted of 36 items total. These dimensions were believed to possess items that were the most relevant to the chosen job demands and resources. The researcher recognises that the use of specific dimensions/subscales may have introduced potential limitations with regard to the psychometric properties of the scale, potentially reducing the reliability and possibly the validity of the scale and the results obtained. However, the use of specific subscales may have helped to improve the response rate for the questionnaires as well as reduce the likelihood of the occurrence of response bias as a result of participant boredom or fatigue (Yuksel, 2017). Rothmann et al. (2006) evaluated the psychometric properties of the JDRS on a South African sample and obtained reliability coefficients ranging from 0.76-0.92, providing evidence for the reliability and accuracy of the results obtained from the use of this measure.

### 3.5. Procedure

Once ethical clearance for this study had been obtained, following consultation with their supervisor, the researcher made formal contact with the management staff of a number of organisations based in both the tourism and hospitality industries via email. The email contained an overview of the study, what participation in the study entailed, as well as the purpose of the study, the formal access request letter (see Appendix D) served to provide additional information to better inform the management staff of contacted organisations. The contact details of the researcher and their supervisor were included in the email and the access letter, in the event that management staff had any questions or concerns regarding the study. The contact details of the University's Ethics committee was also included in the event management staff had any questions or concerns regarding the ethical framing of the study. Once permission letters had been returned by approached organisations, the link to the questionnaire was shared with the management staff to distribute throughout their organisation.

The link to the participant information sheet (Appendix E) was embedded in the questionnaire, this document was used to provide participants with a comprehensive overview of the proposed study, explaining in detail the overall purpose of the study, what participation entailed, and for what the data would be used. The questionnaire was administered online using Google forms, the IP addresses of participants were not collected and while participants were required to sign into their Google accounts, their personal information was not collected and stored.

### 3.6. Ethical considerations

Ethical clearance was obtained for this study by the researcher and their supervisor through an application submitted to the internal ethics committee at the University of the Witwatersrand. As mentioned above, permission to gain access to the sample was obtained from the management staff of the identified organisations, this was done through the issuing of a formal request for access letter to the management staff of these organisations via email. A link to the participant information sheet was included in the actual questionnaire, this served to provide participants with a comprehensive overview of the study and what will be done with the results following the conclusion of the study (Mantzorou, 2011).

In order to adhere to the ethical principles of beneficence and respect, participants were assured that they would not be subjected to any harm for the duration of the study and that they would remain completely anonymous during the study, any and all potentially identifying information was not collected during the data collection stage (Mantzorou, 2011; Wallace & Sheldon, 2015). Participants were not required to provide any personal information beyond the information pertaining to their demographic details, participants were assigned a participant number to identify them during the study. The participant information sheet contained the contact information of various support services, as participants may have become aware of potential burnout symptoms and thus may have needed counselling following the completion of the survey. As the survey was conducted online, participants' IP addresses and email addresses were not collected to ensure that their responses cannot be traced back to them.

In addition to this, the management and executive staff of the approached organisations were assured that their identities as well as the identities of their organisations would also remain completely anonymous for the duration of the study, no information regarding any of the organisations of potential participants was collected or distributed (Wallace & Sheldon, 2015). The results collected will not be distributed and have been securely stored on a password-protected external hard drive, that only the researcher and their supervisor have access to. Should the participants or their organisations request feedback on the results obtained from the study, it will be provided to them in the form of an executive summary (Wallace & Sheldon, 2015). The results of the study have been reported as group trends, no individual results have been reported to ensure the protection of the participants to the fullest extent (Mantzorou, 2011).

### 3.7. Data analysis

The data was imported into the Statistical Package for Social Sciences (SPSS) version 28 program for cleaning and analysis. As mentioned above, descriptive data was collected in the form of demographic information and has not been included in the primary or secondary analyses, this data was collected strictly for the purposes of describing the sample. In an attempt to answer the research questions posed, multiple linear regression analyses were conducted to determine the nature of the relationships between the chosen job demands and resources and work engagement and burnout. These analyses were also conducted to determine which of the chosen predictors contributed the most to the experience of work engagement and burnout syndrome. The assumptions of this analytic technique are discussed below (Field, 2009; Uyanik & Guler, 2013; Williams et al., 2013).

The assumption for normality was assessed through obtaining the descriptive statistics of the data and then evaluating the Skewness and Kurtosis statistics, if the values obtained fell within the acceptable ranges of  $-1/1$  and  $-3/3$  respectively, the data would be considered normally distributed (Field, 2009). The assumption of independence of observations was met as participants were only required to complete the questionnaire once, this was ensured by adjusting the settings of the questionnaire to allow participants to sign in and complete the questionnaire once (Field, 2009).

The linearity of the relationship between the predictor and criterion variables was assessed using a scatterplot, the presence of a linear relationship, indicated by a line-of-best-fit, would imply

that the assumption has been sufficiently met (Field, 2009; Uyanik & Guler, 2013). The presence of multicollinearity was assessed using a Pearson's test for correlation, no or weak correlations between each of the variables would imply the absence of multicollinearity (Field, 2009). The absence of multicollinearity was further ensured through the evaluation of the variance inflation factors (VIF) obtained via the analyses, with VIFs below 10 being indicative of no multicollinearity between variables (Field, 2009; Uyanik & Guler, 2013).

The assumption for homoscedasticity was assessed using a scatterplot in which the residual points have been plotted against the criterion variables (Uyanik & Guler, 2013). The data would be referred to as being homoscedastic if the points were distributed evenly around the line of best fit (Field, 2009). The presence of outliers was assessed using a scatterplot, a more or less even distribution of points around the line of best fit would indicate the absence of outliers in the data (Field, 2009). The normality of the residual points was assessed using a normality plot, a bell-shaped curve would be indicative of a normal distribution which would imply that the assumption had been met (Field, 2009).

Following the testing of all of the assumptions, the multiple linear regression analyses were conducted to provide evidence to answer the research questions posed previously and their results were interpreted. While all the data yielded from the analysis were reported, the following were of particular significance in answering the research questions posed, with regard to the multiple linear regression analysis: the correlation coefficients, standardised and unstandardised  $\beta$  coefficients will be used to determine the direction and strength of the relationship, and the degree of variance seen in each criterion variable as explained by each predictor (Field, 2009; Uyanik & Guler, 2013).

## Chapter 4: Results

### 4.1. Introduction

The results obtained from the analyses conducted during this study are presented in the sections to follow. The descriptive statistics obtained are presented first. This has been done to demonstrate the extent to which the relevant assumptions have been sufficiently met and whether the use of the chosen analytic techniques was appropriate. Following this, the results obtained from the analyses evaluating the nature of the relationships between the variables of interest will be presented to determine whether the results provide sufficient evidence to enable conclusions to be drawn regarding the research questions posed.

#### 4.2. Descriptive statistics

The descriptive statistics obtained for each predictor and criterion variable are presented in Table 2 below.

**Table 2. Descriptive statistics for job demands and resources and work engagement and burnout.**

[illegible]

As mentioned in the previous chapter, the Skewness and Kurtosis statistics will be used to determine whether the data is normally distributed. Based on the Skewness and Kurtosis statistics obtained for each variable, each value falls within the acceptable ranges of  $-1/1$  and  $-3/3$  respectively, providing evidence that the data is sufficiently normal and that the assumption for normality has been sufficiently met. The midpoints of each of the scales used to measure the independent variables were calculated and compared with the means obtained for these scales, after which it was determined that each independent variable displayed moderate levels as the means fell relatively close to the calculated midpoints. This was also done for the criterion variables, following the comparison of the calculated midpoints against the means for the work engagement and burnout variables, it was revealed that the levels of work engagement were reasonably higher as the mean was greater than the calculated midpoint which would imply that the sample experienced elevated levels of work engagement. With regard to the burnout variable, the calculated midpoint was greater than the mean for this scale, implying slightly lower levels of burnout.

Additionally, the reliability of the chosen scales was also assessed using a Cronbach's Alpha test for reliability. The results from this analysis are presented in Table 3 below.

**Table 3. Results for reliability analysis for Job-Demands Resources Scale (JDRS), Maslach Burnout Inventory-Health Services Survey (MBI-HSS), and the Utrecht Work Engagement Scale (UWES-9).**

| <b>Scales</b>                                                     | <b>No. of Items</b> | <b>Cronbach's Alpha</b> | <b>Cronbach's Alpha based on standardised items</b> |
|-------------------------------------------------------------------|---------------------|-------------------------|-----------------------------------------------------|
| <b>Job-Demands Resources Scale (JDRS)</b>                         | 36                  | 0.91                    | 0.91                                                |
| <b>Maslach Burnout Inventory-Health Services Survey (MBI-HSS)</b> | 22                  | 0.91                    | 0.91                                                |
| <b>Utrecht Work Engagement Scale (UWES-9)</b>                     | 9                   | 0.89                    | 0.90                                                |

As seen in the table above, each of the scales used in this study has been found to be sufficiently reliable, with each scale yielding Cronbach's Alpha coefficients in excess of 0.8. More specifically, with reference to the JDRS, the reliability analysis yielded a Cronbach's Alpha coefficient of 0.91 which would imply very high internal consistency reliability. Similarly with reference to the MBI-HSS, the reliability analysis yielded a Cronbach's Alpha coefficient of 0.91, which would imply very high internal consistency reliability. Lastly with reference to the UWES-9, the reliability analysis yielded a Cronbach's Alpha coefficient of 0.89, which also indicates very degrees of high internal consistency reliability. Please refer to appendices G, H, and I for the item-total statistics for the JDRS, MBI-HSS, and UWES-9 scales respectively. With reference to the item-total statistics for the JDRS, the results indicate that the overall reliability of the scale does not change significantly as items are removed. This was the case with the MBI-HSS and UWES-9, as the overall reliability of these scales did not change significantly with the removal of items.

#### 4.3. Results for research questions

##### 4.3.1. Relative contributions of job resources to work engagement

Pearson's correlations and multiple linear regressions were used to evaluate the nature of the potential relationships between the chosen variables, as well as to determine the relative contributions of the chosen predictor variables. To reiterate, the chosen job resources under investigation are job autonomy and control which have been referred to collectively as work independence, perceived supervisory support (PSS), and perceived organisational support (POS). Table 3 presents the results obtained for the Pearson's correlations that were used to assess the strength and direction of the relationship between the chosen variables. The table also presents the results for the correlations concerning the chosen job demands, however, these results will not be interpreted in this section, as the relevant correlations will be interpreted in relation to each research question and the associated multiple linear regression results.

**Table 4. Pearson's correlations for job demands, resources, work engagement and burnout.**

|                              | <b>Work<br/>engagement</b> | <b>Burnout</b> | <b>Role stress</b> | <b>Work<br/>independence</b> | <b>POS</b> | <b>PSS</b> | <b>Job<br/>insecurity</b> |
|------------------------------|----------------------------|----------------|--------------------|------------------------------|------------|------------|---------------------------|
| <b>Work<br/>Engagement</b>   | 1.00                       | -0.60**        | -0.04              | 0.52**                       | 0.52**     | 0.32*      | 0.324*                    |
| <b>Burnout</b>               |                            | 1.00           | 0.30*              | -0.26*                       | -0.30*     | -0.26*     | -0.03                     |
| <b>Role Stress</b>           |                            |                | 1.00               | 0.16                         | 0.21       | 0.18       | 0.04                      |
| <b>Work<br/>independence</b> |                            |                |                    | 1.00                         | 0.66**     | 0.39**     | 0.07                      |
| <b>POS</b>                   |                            |                |                    |                              | 1.00       | 0.69**     | 0.06                      |
| <b>PSS</b>                   |                            |                |                    |                              |            | 1.00       | 0.08                      |
| <b>Job insecurity</b>        |                            |                |                    |                              |            |            | 1.00                      |

\*Correlation significant at the 0.05 level

\*\*Correlation significant at the 0.01 level

POS= Perceived Organisational Support; PSS= Perceived Supervisor Support

Table 5 presents the results obtained for the multiple linear regression analysis used to assess the relative strength with which the chosen job resources predict the experience of work engagement. These results are used to determine the relative contributions of the chosen job resources to the experience of work engagement.

**Table 5. Results for multiple linear regression for job resources on work engagement.**

| Variable          | R    | R <sup>2</sup> | F    | B     | $\beta$ | Collinearity diagnostics |      |        |
|-------------------|------|----------------|------|-------|---------|--------------------------|------|--------|
|                   |      |                |      |       |         | Tolerance                | VIF  | p      |
| (Constant)        | 0.58 | 0.30           | 9.06 | 12.61 |         |                          |      | <0.001 |
| Work Independence |      |                |      | 1.15  | 0.32    | 0.59                     | 1.71 | 0.03*  |
| POS               |      |                |      | 0.43  | 0.34    | 0.36                     | 2.78 | 0.07   |
| PSS               |      |                |      | -0.07 | -0.03   | 0.53                     | 1.89 | 0.85   |

p<0.05

Note: POS= Perceived Organisational Support; PSS= Perceived Supervisory Support

Addressing the first research question, which was aimed at determining the relative contributions of the work independence, POS, and PSS to the experience of work engagement. Both the results from the Pearson's test for correlation and the multiple linear regression analysis will be considered. With reference to the relevant correlation results, the Pearson's test for correlation yielded significant correlation coefficients for work independence ( $r=0.52$ ), perceived organisational support ( $r=0.52$ ), and perceived supervisory support ( $r=0.32$ ). The results obtained for the Pearson's test imply the presence of weak to moderate, positive relationships between the chosen job resources and work engagement.

With reference to the regression model generated to evaluate the relative contributions of work independence, perceived organisational support (POS), and perceived supervisor support (PSS) to the experience of work engagement. The analysis produced a significant regression model,  $F(3,57)=9.06$ ,  $p<0.001$ . The  $R^2$  value was  $=0.30$ , indicating that 30% of the variance in work engagement was explained by the job resources. The individual predictors were examined further and it was found that Work independence ( $t=2.18$ ,  $p=0.03$ ) was a significant predictor, while perceived supervisor support ( $t=0.19$ ,  $p=0.85$ ) and perceived organisational support ( $t=1.85$ ,  $p=0.07$ ) were not significant predictors. Although perceived organisational support ( $\beta=0.34$ ) accounted for most of the variance seen work engagement, the result was non-significant. Therefore, work independence ( $\beta=0.32$ ) has been found to be the most significant contributor to

the experience of work engagement, accounting for approximately 32% of the variance seen in work engagement. The remaining variables yielded non-significant contributions.

#### 4.3.2. Relative contributions of job resources to burnout

Table 6 presents the results obtained for the multiple linear regression analysis used to assess the nature of the relationships between the chosen job resources and the experience of burnout. These results will be used to determine the relative contributions of the chosen job resources to the experience of burnout.

**Table 6. Results for multiple linear regression analysis for job resources on burnout.**

| Variable                                                                        | R    | R <sup>2</sup> | F    | B     | $\beta$ | Collinearity diagnostics |      |        |
|---------------------------------------------------------------------------------|------|----------------|------|-------|---------|--------------------------|------|--------|
|                                                                                 |      |                |      |       |         | Tolerance                | VIF  | p      |
| (Constant)                                                                      | 0.48 | 0.19           | 5.24 | 98.93 |         |                          |      | 0.003* |
| Work Independence                                                               |      |                |      | -1.73 | -0.21   | 0.64                     | 1.56 | 0.18   |
| POS                                                                             |      |                |      | -0.10 | -0.03   | 0.37                     | 2.73 | 0.87   |
| PSS                                                                             |      |                |      | -1.92 | -0.33   | 0.48                     | 2.10 | 0.07   |
| *p<0.05                                                                         |      |                |      |       |         |                          |      |        |
| Note: POS= Perceived Organisational Support; PSS= Perceived Supervisory Support |      |                |      |       |         |                          |      |        |

With reference to the results obtained from the Pearson's test for correlation, the results indicated that work independence ( $r=-0.26$ ), PSS ( $r=-0.26$ ), and POS ( $r=-0.30$ ) were significantly correlated with burnout, with each job resource possessing a weak, negative relationship with the burnout.

With reference to the regression model generated to evaluate the relative contributions of work independence, PSS, and POS to the experience of burnout, the results were as follows. A multiple linear regression analysis was run to predict the experience of burnout from work independence, PSS, and POS. The analysis produced a significant model ( $F(3,56)=5.24$ ,  $p=0.003$ ) with an  $R^2$  of 0.19. However, examination of the individual predictors revealed that none of the

job resources alone contributed significantly to burnout. However, the direction of the relationship between the specific job resources and burnout was negative as expected; Work independence ( $t=-1.36$ ,  $p=0.18$ ), PSS ( $t=-1.88$ ,  $p=0.066$ ), and POS ( $t=-0.171$ ,  $p=0.87$ ).

#### 4.3.3. Relative contributions of job demands to burnout

Table 7 presents the results obtained for the multiple linear regression analysis used to assess the relative strength with which the chosen demands predict the experience of burnout. These results will be used to determine the relative contributions of the chosen job demands to the experience of burnout.

**Table 7. Results for multiple linear regression analysis for job demands on burnout.**

| Variable                                                                        | R    | R <sup>2</sup> | F    | B      | $\beta$ | Collinearity diagnostics |      |         |
|---------------------------------------------------------------------------------|------|----------------|------|--------|---------|--------------------------|------|---------|
|                                                                                 |      |                |      |        |         | Tolerance                | VIF  | p       |
| (Constant)                                                                      | 0.38 | 0.11           | 4.79 | -19.17 |         |                          |      | 0.01*   |
| Role stress                                                                     |      |                |      | 2.17   | 0.37    | 0.998                    | 1.00 | 0.004** |
| Job insecurity                                                                  |      |                |      | -0.46  | -0.06   | 0.998                    | 1.00 | 0.59    |
| *p<0.05; *p<0.01                                                                |      |                |      |        |         |                          |      |         |
| Note: POS= Perceived Organisational Support; PSS= Perceived Supervisory Support |      |                |      |        |         |                          |      |         |

With reference to the results obtained from the Pearson's test for correlation, the analysis yielded a significant correlation coefficient for role stress ( $r=0.30$ ) indicating a moderately weak, positive relationship, and a non-significant correlation coefficient for job insecurity ( $r=-0.03$ ). A multiple linear regression analysis was conducted to predict burnout from role stress and job insecurity. The analysis yielded a significant regression model ( $F(2,60)=4.79$ ,  $p=0.01$ ,  $R^2=0.11$ ). The analysis further revealed that role stress ( $t=3.02$ ,  $p=0.004$ ) was a significant predictor of burnout, while job insecurity ( $t=-0.07$ ,  $p=0.59$ ) was not a significant predictor of burnout. Based on the results obtained, role stress ( $\beta=0.37$ ) accounted for approximately 37% of the variance seen in burnout, thus contributing the most to the experience of burnout.

#### 4.3.4. Relative contributions of job demands to work engagement

Table 8 presents the results obtained for the multiple linear regression analysis used to assess the nature of the relationship between the chosen job demands and the experience of work engagement. These results will be used to determine the relative contributions of the chosen job demands to the experience of burnout.

**Table 8. Results for multiple linear regression analysis for job demands on work engagement.**

| Variable                                                                        | R    | R <sup>2</sup> | F    | B     | $\beta$ | Collinearity diagnostics |      |        |
|---------------------------------------------------------------------------------|------|----------------|------|-------|---------|--------------------------|------|--------|
|                                                                                 |      |                |      |       |         | Tolerance                | VIF  | p      |
| (Constant)                                                                      | 0.32 | 0.07           | 3.22 | 34.38 |         |                          |      | 0.048* |
| Role stress                                                                     |      |                |      | -0.02 | -0.01   | 0.99                     | 1.01 | 0.94   |
| Job insecurity                                                                  |      |                |      | 0.96  | 0.32    | 0.99                     | 1.01 | 0.02*  |
| *p<0.05                                                                         |      |                |      |       |         |                          |      |        |
| Note: POS= Perceived Organisational Support; PSS= Perceived Supervisory Support |      |                |      |       |         |                          |      |        |

With reference to the results obtained from the Pearson's test for correlation, the analysis yielded a significant correlation coefficient for job insecurity ( $r=0.32$ ) indicating a moderately weak, positive relationship with work engagement, and a non-significant correlation coefficient for role stress ( $r=-0.04$ ). A multiple linear regression analysis was then conducted to predict the experience of work engagement from role stress and job insecurity. The analysis yielded a significant regression model ( $F(2,57)=3.22$ ,  $p=0.048$ ,  $R^2=0.07$ ). The individual predictors were examined further and it was revealed that; job insecurity ( $t=2.52$ ,  $p=0.02$ ) was a significant predictor of work engagement, while role stress ( $t=-0.07$ ,  $p=0.94$ ) was not a significant predictor of work engagement. The analysis further revealed that job insecurity ( $\beta=0.32$ ) was the most significant predictor of the experience of work engagement, accounting for approximately 32% of the variance seen in work engagement.

#### 4.4. Summary

The results obtained from the Pearson's test for correlation indicate that the job resources and demands were significantly related to the experience of work engagement and burnout, with the exception of the correlation coefficients generated when assessing the job insecurity and burnout pairing and the role stress and work engagement pairing. The multiple linear regression analyses conducted to assess the nature of the relationship between the chosen variables as well as the relative contributions of the chosen job demands and resources to the experience of work engagement and burnout, yielded results that would enable conclusions to be drawn for the research questions posed.

The multiple regression analyses concerning the job resources yielded significant regression models and it was further determined that the relative contributions of the chosen job resources to work engagement were as follows, POS ( $\beta=0.34$ ) accounted for approximately 34% of the variance seen in work engagement, while work independence ( $\beta=0.32$ ) accounted for 32% of the variance. PSS was found to be a non-significant predictor of work engagement, and yielded a negligible effect size ( $\beta=-0.03$ ). The relative contributions of the chosen job resources to burnout were as follows, PSS ( $\beta=-0.33$ ) accounted for 33% of the variance seen in burnout, while work independence ( $\beta=-0.21$ ) accounted for 21% of the variance in burnout. POS ( $\beta=-0.03$ ) yielded a negligible effect size.

The multiple linear regression analyses concerning the job demands in the study yielded significant regression models. The relative contributions of the chosen job demands to the experience of burnout were as follows, role stress ( $\beta=0.37$ ) accounted for 37% of the variance seen in burnout, job insecurity was found to be a non-significant predictor of burnout. The relative contributions of the chosen job demands to the experience of work engagement were as follows, job insecurity ( $\beta=0.32$ ) accounted for 32% of the variance seen in work engagement while role stress ( $\beta=-0.01$ ) was found to be a non-significant predictor of the experience of work engagement.

## Chapter 5: Discussion

### 5.1. Introduction

The following chapter presents a discussion of the results and relates them to the broader literature evaluating the relationships between the chosen job demands and resources and the experience of burnout and work engagement. In doing so, greater insight will be obtained regarding the nature of the relationships between the chosen job demands and resources and burnout and work engagement, as well as the relative contributions of each of the job demands and resources to the experience of burnout and work engagement. Following this, the practical and theoretical implications of the results obtained during the study will be presented. Lastly, the limitations of this study will be evaluated followed by propositions for possible future directions for research in this area will be presented.

As stated previously, the primary aim of this study was to gain insight into the current state of the psychological well-being of individuals currently working in the tourism and hospitality industries in South Africa in light of the end of the COVID-19 pandemic. This was done through the exploration of the potential relationship between specific job demands and resources and the experience of work engagement and burnout, as the latter two have been established as indicators of individual psychological well-being (Lee & Cho, 2019; White, 2010; Wright & Cropanzano, 2000). The COVID-19 pandemic had a particularly significant impact on all industries, with the resultant travel bans and hard lockdowns having especially negative implications for the tourism and hospitality industries. Following the onset of the COVID-19 pandemic in 2020, the South African tourism and hospitality industries saw approximately 320 000 jobs lost as a result of the pandemic (StatsSA, 2020).

Since the onset of the COVID-19 pandemic, several studies have been conducted to evaluate the impact that it had on the psychological well-being of individuals in general and within these industries specifically, evaluating the ways in which the mass job loss, among other factors, affected individuals working in these industries (Yu et al., 2021; Adam et al., 2023). As discussed previously, psychological well-being at work has proven reasonably difficult to study on account of it being affect-based and context-free (Wright & Cropanzano, 2000). Psychological well-being at work has been conceptualised with reference to the relationship between job demands and resources and individual psychological well-being, with ideal levels of psychological well-being

being associated with the experience of fair job demands in the presence of sufficient resources (Lee & Cho, 2019).

The experience of burnout and work engagement were evaluated as indicators of individual psychological well-being, using the Job-Demands Resources (JD-R) model as an overarching theoretical framework (Schaufeli & Taris, 2014; Bakker & Demerouti, 2007). As mentioned previously, the relationship between the chosen job demands and resources and the experience of burnout and work engagement is understood with reference to the health impairment and motivational processes respectively (Schaufeli, 2017; Schaufeli & Bakker, 2004). It is via these processes that individuals experience the conditions that ultimately result in the experience of burnout or work engagement, with the former being the result of the depletion of one's energy and the latter being the result of the satisfaction of one's psychological needs (Bakker & Demerouti, 2007). Using the JD-R model as an overarching theoretical framework, the evaluation of the relationships between the chosen job demands and resources and burnout and work engagement was done to gain insight into the current state of psychological well-being of individuals working in the tourism and hospitality industries in South Africa (Bakker & Demerouti, 2007; Lee & Cho, 2019).

## 5.2. Job resources and Work engagement

As mentioned previously, the job resources of interest in this study were job autonomy, job control, perceived organisational support (POS), and perceived supervisor support (PSS). For the purposes of the data analysis and due to their conceptual similarities, job autonomy and job control were collectively referred to as work independence (Malinowska et al., 2018; Parker et al., 2010). The research question posed was aimed at determining the relative contributions of the chosen job resources predicted the experience of work engagement.

With reference to the first research question, POS accounted for approximately 34% of the variance seen in work engagement, while work independence accounted for 32% of the variance seen in work engagement. PSS was found to have a negligible effect size, accounting for 3% of the variance seen in work engagement. While the overall regression model produced from the analysis was significant, closer inspection of the individual predictors revealed that work independence and PSS were found to be non-significant predictors of the experience of work engagement. This could attributed to the reasonably small sample used in this study, as across

previous research a sample size in excess of 150 participants would be ideal for conducting a multiple linear regression analysis (Green, 1991; Bujang et al., 2022). The reason for this being that smaller sample sizes limit the ability of the analytical technique to detect true relationships between the chosen variables (Green, 1991).

Additionally, a comparison of the midpoints and mean scores obtained for the work independence, POS, and PSS variables indicated the presence of moderate levels for each of these variables. This would imply that the participants perceive themselves to have reasonable degrees of access to these job resources within their organisation. A similar comparison was done to assess the levels of work engagement in the sample and it was found that the sample displayed slightly elevated levels of work engagement. This seems appropriate as the presence of or the perception that individuals possess reasonable degrees of access to various job resources has been shown to result in elevated levels of work engagement (Kanjankan et al., 2021; Bakker & Demerouti, 2007; Malinowska et al., 2018).

The results obtained for the overall regression model are consistent with previous research as in the presence of sufficient job resources individuals are likely to experience greater degrees of work engagement, on account of the intrinsic and extrinsic motivational properties of these specific resources (Schaufeli & Bakker, 2004). As discussed previously, the relative contribution of the specific resources is dependent on the level at which that resource is found within the organisation, with resources at the task-level being the most significant and consistent predictors of the experience of work engagement (Hakanen et al., 2021; Lesener et al., 2019).

With this in mind and with reference to the individual predictors, the results obtained are in slight contradiction to what has been found in previous studies (Hakanen et al., 2021; Lesener et al., 2019). Of the job resources investigated work independence was expected to contribute the most to the experience of work engagement on account of it being a task-level job resource as well as it being identified as a vital job resource within these industries (Lesener et al., 2019; Nielsen et al., 2017; Pienaar & Willemse, 2008). It was assumed that POS and PSS would significantly contribute to the experience of work engagement, however, given their status as organisational-level resources, their capacity to do so was expected to be less than that seen with work independence (Hakanen et al., 2021). The results obtained do contradict this notion as POS was found to be the most significant predictor. This is, however, consistent with what has been found

when investigating which resources employees within these industries value the most (Pienaar & Willemse, 2008).

Although these results were collected after the COVID-19 pandemic had mostly passed, the results obtained could potentially be explained by what has recently been found in studies evaluating the nature of the relationship between perceived organisational support and work engagement (Chatzittofis et al., 2021; Nguyen & Tran, 2021). Given the unique effect that the COVID-19 pandemic had on most organisations, particularly those located within the hospitality and tourism industries, the support offered to individuals by their organisations was central to ensuring their adjustment to the new ways of working was as easy as possible (Chatzittofis et al., 2021). It could therefore be argued that during the peak of the COVID-19 pandemic, POS may have been a particularly strong predictor of work engagement, with greater degrees of POS being more likely to elicit greater degrees of effort and energy from individuals (Jin & McDonald, 2017; Nguyen & Tran, 2021). To my knowledge, there have not been studies evaluating the relative strength with which POS predicts work engagement with specific reference to the COVID-19 pandemic since the end of the COVID-19 pandemic.

### 5.3. Job resources and burnout

The second research question posed was aimed at determining the relative contributions of the chosen job resources to the experience of burnout. As mentioned previously, while the overall regression model was found to be significant, closer inspection of the individual predictors revealed that none of the individual job resources in this study significantly predicted the experience of burnout. As has been stated previously, a potential reason for this could be the relatively small size of the sample used as smaller samples hinder the power of the analysis to detect true relationships between the predictor and criterion variables (Bujang et al., 2022; Green, 1991). While the individual predictors were non-significant, the direction of the relationships between the chosen job resources and the experience of burnout was largely consistent with what has been found across previous studies and with what has been found in the correlational analyses conducted in this study (Bakker & Demerouti, 2006; Hakanen et al., 2021; De Braine & Roodt, 2011).

Although the individual predictors were found to be non-significant, as mentioned previously, a comparison of the midpoints and means for each scale indicated the presence of

moderate levels of each job resource. This could imply that the participants may have perceived themselves to have reasonable access to various job resources, this may be further supported by the fact that similar comparisons revealed the presence of slightly lower levels of job burnout reported by the sample. This seems appropriate as the job resources being investigated are classified as task-, interpersonal-, and organisational-level resources, all of which have been found to be consistent and negative predictors of the experience of burnout (Schaufeli & Taris, 2014; De Braine & Roodt, 2011; Hakanen et al., 2021).

In reviewing the literature examining the proposed association between job resources and the experience of burnout, the majority of studies conducted have focused primarily on investigating the nature of the relationship between job resources and burnout or on the moderating effects of various job resources on the relationship between job demands and burnout (Bakker & Demerouti, 2005; Xanthopoulou et al., 2007; Schaufeli & Taris, 2014). Similar to what has been discussed regarding the relative contributions of the chosen job resources to the experience of work engagement, it may be appropriate to assume that the relative contributions of these job resources to the experience of burnout are dependent on the type of resource (Hakanen et al., 2021; Lesener et al., 2019). Hence, it would have been reasonable to assume that work independence would have contributed the most to the experience of burnout in the sample, on account of its proximity to the individual and its significance in satisfying the basic psychological needs of the individual (Hakanen et al., 2019). This may be further supported by what has been found in previous studies investigating the relevance of various job resources in preventing the onset of burnout (Chen & Chen, 2012; Pienaar & Willemse, 2008).

#### 5.4. Job demands and Burnout

As mentioned previously, the job demands under investigation were job insecurity and role stress, which was used to refer collectively to role conflict, role ambiguity, and role overload. The research question posed was aimed at determining the relative contributions of the chosen job demands to the experience of burnout. With reference to the overall model, the results obtained are reasonably consistent with what has been found in previous studies evaluating the nature of the relationship between role stress and job insecurity and the experience of burnout (Maslach et al., 2001; De Braine & Roodt, 2011; Schaufeli, 2017). As discussed in previous sections, the presence of excessive job demands results in the exhaustion of the mental and physical resources of an

individual, which subsequently results in the depletion of their energy and the impairment of their health (Schaufeli & Taris, 2014). With reference to the individual predictors, role stress was found to be a significant contributor to the experience of burnout, accounting for 37% of the variance seen in burnout. Job insecurity was found to be a non-significant predictor of burnout.

Additionally, the levels of the role stress and job insecurity variables were evaluated and it was determined that the sample perceived moderate levels of both variables, which could imply that participants perceived the job demands they experienced to be fair. A similar process was followed to determine the levels of burnout in the sample, it was found that the sample displayed slightly lower levels of burnout, lending further credibility to the assumption that participants perceive their job demands to be fair. Given that it was determined that the participants perceived reasonable degrees of access to necessary job resources, assuming the presence of potentially fair and manageable job demands and lower levels of burnout is appropriate. According to previous literature, the perception of fair job demands in the presence of sufficient resources has been shown to result in lower levels of burnout and elevated levels of work engagement (De Braine & Roodt, 2011; Schaufeli, 2017). The reason for this being that under these conditions individuals believe they are better able to cope with their job demands, resulting in the adoption of more proactive coping strategies thus reducing the likelihood of the onset of adverse health outcomes (Lesener et al., 2019; De Braine & Roodt, 2011).

With reference to the individual predictors, the results obtained are reasonably consistent with what has been found in previous studies evaluating the relationship between these job demands and the experience of burnout, as both have been classified as hindrance job demands (Crawford et al., 2010). As hindrance job demands, these characteristics were expected to contribute significantly to the experience of burnout, due to their tendency to hinder the development of individuals as well as their tendency to impede the completion of tasks (Crawford et al., 2010). Research has shown that individuals respond negatively when faced with hindrance job demands, experiencing intense negative emotions and opting for the use of emotional or passive styles of coping (Crawford et al., 2010). This results in individuals being less willing or able to invest greater degrees of energy toward the completion of their work and the achievement of their goals, as they perceive themselves to be incapable of coping with their job demands (Crawford et al., 2010).

With reference to the results obtained regarding the association between job insecurity and the experience of burnout, the results largely contradict what has been found in previous studies as job insecurity has been found to be a consistent and positive predictor of the experience of burnout (Crawford et al., 2010; De Braine & Roodt, 2011). While the non-significance of the results obtained could be attributed to the small size of the sample, it is worth considering recent trends in the research on job insecurity which suggests that this construct can be understood as both a challenge and a hindrance job demand (Piccoli et al., 2019). As mentioned above, the perceived threat of losing one's job results in the experience of a series of negative emotions which may result in the development of adverse health conditions, the display of withdrawal behaviours, and the onset of burnout (Stander & Rothmann, 2010; Blom et al., 2015; Darvishmotevali et al., 2016).

Recent research investigating the associations between job insecurity and the experience of burnout, and it has been proposed that the perception of a threat toward the security of an individual's job may elicit positive and proactive responses from the individual (Piccoli et al., 2019). In line with the premise that challenge job demands elicit more proactive behaviour from individuals, the perception of a threat to the security of one's job may result in the individual expending more effort towards the completion of their work and the achievement of their goals (Piccoli et al., 2019). This is largely due to the inherent belief of the individual that achieving or displaying elevated levels of performance may indirectly enhance the security of their position (Piccoli et al., 2019).

### 5.5. Job demands and work engagement

With reference to the fourth research question, which was aimed at determining the relative contributions of the chosen job demands to the experience of work engagement, the results yielded from the analysis were inconsistent with what has been found in previous studies. Previous studies evaluating the nature of the relationship between job demands and work engagement have found job demands to be consistent negative predictors of the experience of work engagement, the results of this study indicate that job insecurity was found to be a significant positive predictor and that role stress was a non-significant predictor (Bakker & Demerouti, 2007).

Additionally with reference to the levels of role stress and job insecurity, a comparison of the midpoints and means for these scales revealed the presence of moderate levels of role stress and job insecurity, which may imply that the sample perceived their job demands to be fair and challenging as opposed to distressing and hindering. As mentioned previously, similar comparisons revealed the presence of slightly elevated levels of work engagement. Given that it has been established that there were moderate levels of the job resources of interest in the study, this seems appropriate as when individuals perceive their job demands to be reasonable and fair as well as access to the necessary job resources, they are more likely to experience elevated levels of work engagement (Crawford et al., 2010).

With reference to role stress, the results obtained from this analysis are reasonably inconsistent, as role stress has been found to consistently, negatively predict the experience of work engagement (Kim & Stoner, 2008; Seada, 2017; Moura et al., 2014). Unlike challenge job demands, which are often appraised more positively and elicit proactive behaviours and responses from individuals, hindrance job demands tend to deplete the energy of the individual and as a result elicit dysfunctional and inappropriate responses from individuals (Crawford et al., 2010). In line with the health impairment process and as a hindrance job demand, excessive degrees of role stress would be expected to be more likely to deplete the energy of individuals and result in the development of adverse health conditions (Crawford et al., 2010; Peiro et al., 2001).

With reference to job insecurity, the results obtained from this analysis are somewhat contradictory to what has been established regarding the relationship between job insecurity and the experience of work engagement (Blom et al., 2015; Stander & Rothmann, 2010; Piccoli et al., 2019). The results obtained revealed that job insecurity was a positive predictor of the experience of work engagement, which is largely inconsistent with several other studies as most have positioned job insecurity as a negative predictor of work engagement (Standar & Rothmann, 2010). Similar to what has been discussed above, the results obtained could potentially be explained using the notion that job insecurity may be perceived more as a challenge and less as a hindrance demand (Piccoli et al., 2019). This would mean that, when faced with a perceived threat to the security of their, individuals are likely to respond more proactively in an attempt to re-establish or improve the perceived security of their job (Piccoli et al., 2019). Understood this way, it then becomes reasonable to assume that job insecurity may lead to the experience of work engagement as individuals experience elevated levels of extrinsic motivation which may better enable the completion of their work and the achievement of their goals (Piccoli et al., 2019; Schaufeli & Taris, 2014).

## 5.6. Practical and theoretical implications

Following the discussion of the results obtained during this study, it can be clearly seen that both job demands and resources significantly contribute to the experience of work engagement and burnout and thus may have significant implications for the psychological well-being of individuals currently working in the tourism and hospitality industries in South Africa. While extensive research on the relationships between job demands and job resources and the experience of burnout and work engagement has been conducted both globally and within South Africa, the results obtained may have various practical implications for the implementation of Human Resource Management (HRM) and Human Resource Development (HRD) within these industries, particularly with regard to the design of work in these industries.

With reference to the relationship between the chosen job resources and the experience of work engagement, the results obtained are largely consistent with what has been found across previous literature evaluating the significance of work independence, POS, and PSS in contributing to the experience of work engagement (Bakker & Demerouti, 2007; Vera et al., 2016; De Spiegelaere et al., 2016; Jin & McDonald, 2017; Jose & Mampilly, 2015). In addition to this,

the results obtained may be considered further confirmation of what has been found in previous studies evaluating the most valued job resources within the tourism and hospitality industry (Pienaar & Willemse, 2008; de Villiers, 2015).

Previous research has indicated that job autonomy and supervisory support are particularly vital resources to employees within the tourism and hospitality industries, likely due to their ability to fulfil the basic psychological needs of the individual in addition to their functionality in the completion of tasks and the achievement of goals (Pienaar & Willemse, 2008; Lesener et al., 2019; Hakanen et al., 2021). The insight gained into the nature of these relationships could better inform job crafting efforts within the tourism and hospitality industries, potentially allowing for greater degrees of fit between the demands individuals face and the resources they have at their disposal (Tims et al., 2013).

The results obtained regarding the relationship between the chosen job demands and the experience of burnout could also aid in better informing job crafting efforts within the tourism and hospitality industries. As discussed above, role stress contributing the most to the experience of burnout is largely consistent with previous literature evaluating the nature of the relationship between this construct and burnout, on account of it being classified as a hindrance job demand (Crawford et al., 2010). These findings are also largely consistent with studies evaluating which job demands employees in the tourism and hospitality industries perceive to be responsible for the experience of adverse health outcomes, such as burnout (Pienaar & Willemse, 2008; Chen & Chen, 2012). With this in mind, interventions aimed at improving the balance between the strain placed on individuals by this particular demand and the support individuals receive to cope with this strain are central to addressing the adverse effects this has on individual psychological well-being (Lee et al., 2017).

With reference to the results obtained regarding the relationships between job insecurity and work engagement and burnout, the presence of a significant, positive relationship with the former and a non-significant, negative relationship with the latter may have interesting theoretical implications for the way this construct is perceived in relation to work engagement and burnout (Piccoli et al., 2019). The results obtained may provide some evidence in support of the notion that job insecurity could be conceptualised as both a hindrance and challenge job demand, meaning that certain degrees of job insecurity may result in the display of positive or negative behaviours

in response to the perceived threat (Piccoli et al., 2019; Crawford et al., 2010). Research evaluating job insecurity as a potential challenge demand has indicated that the display of positive or negative reactions to perceived threats to job security to be largely dependent on the individual and how they respond to challenges and difficulties at work (Piccoli et al., 2019).

### 5.7. Limitations

Although this study does confirm what has been established across previous studies evaluating the nature of the relationships between job characteristics and work engagement and burnout and evaluations of the relative strength with which the former predict the latter two, this study is not without its limitations. As mentioned in previous chapters, the nature of the sample and the sampling technique employed may have introduced some limitations regarding the representativeness of the sample and the generalisability of the results (Etikan et al., 2017). Given that the sample was relatively small ( $n=65$ ) and that the sample was collected using a non-probability, purposive sampling technique the sample obtained and used in this study may not be an accurate representation of the broader population of employees in the tourism and hospitality industries in South Africa (Etikan et al., 2017). Additionally, the use of purposive sampling techniques has been shown to be quite prone to researcher bias, this could reduce the representativeness of the sample and thus the generalisability of the results (Etikan et al., 2017).

Attempts were made to control for these limitations, as the use of a non-experimental, correlational research design has been identified to somewhat mitigate the limitations that arise from small sample sizes as well as the use of purposive sampling techniques (Belli, 2009). The reason for this being that non-experimental, correlational studies focus primarily on the observation and measurement of variables without manipulating them which allows for the evaluation of variables and relationships between variables to be done with reference to broader contexts (Belli, 2009). With reference to the potential researcher bias, as the aim of this study was primarily to explore the nature of the relationships between the variables of interest and the implications these may have for the current state of individual well-being in the tourism and hospitality industries, the selection of the sample was not informed by any vested interests of the researcher, their supervisor, or the institution they are affiliated with.

In addition to these, it has been stated that the length of the instrument used may have introduced some limitations regarding the accuracy and reliability of the results obtained (Yuksel, 2017). The length of the questionnaire may have increased the susceptibility of the results to forms of response bias that may have resulted from individuals becoming bored or fatigued when completing the questionnaire (Yuksel, 2017). Further bias was anticipated on account of the nature of the concepts being evaluated, it was expected that individual responses may have been informed by what the individual believes others, possibly their superiors or colleagues, may deem socially desirable (Kreitchmann et al., 2019). These limitations were accounted for through inclusion of items that require reverse-scoring, as this would enable particular scoring patterns to be detected with greater ease (Yuksel, 2017; Kreitchmann et al., 2019).

#### 5.8. Recommendations for future research

As mentioned previously, the results obtained in this study are reasonably consistent with the results of previous studies evaluating the relationships between job demands and resources and the experience of burnout and work engagement, both globally and within the South African context (Bakker & Demerouti, 2007; Schaufeli & Bakker, 2004; Schaufeli, 2017). The results obtained regarding job insecurity and the experience of both work engagement and burnout warrant further inquiry into the nature of these relationships, as they could be said to challenge the way in which these relationships have been conceptualised across previous studies (Piccoli et al., 2019). The ability of job insecurity to be conceptualised as a challenge job demand represents an interesting avenue in future research on the concept and its relations to work engagement and burnout and thus psychological well-being. As it raises interesting questions regarding whether job insecurity's conceptualisation as a challenge demand is entirely dependent on the way the individual perceives the threat, and at what point would perceived threats to the security of one's work start resulting in the experience of negative individual outcomes (Piccoli et al., 2019).

## 5.9. Conclusion

To reiterate, the primary aim of this study was to determine the current state of individual psychological well-being of employees currently working in the tourism and hospitality industries in South Africa. This was done through the evaluation of the relationships between job demands and resources and the experience of work engagement and burnout, with the latter two being conceptualised as indicators of individual psychological well-being at work (Lee & Cho, 2019; White, 2010). Additionally, this study also evaluated the relative contribution of each of the chosen job demands and resources to the experience of burnout and work engagement.

The results obtained provide sufficient evidence in response to the research questions posed, yielding significant regression models and providing clear indications regarding the relative contributions of the chosen predictors to the chosen criterion variables. As mentioned previously, POS was found to be the most significant predictor of the experience of work engagement. It was proposed that a potential reason for this could be the significance of this job resource to individuals within these industries during the peak of the COVID-19 pandemic, as this resource was identified as being highly functional in ensuring the transition from previous ways of working to ways more suited to the context of the time were easier as well as in alleviating potential uncertainties that arose as a result of the pandemic (Chatzittofis et al., 2021; Nguyen & Tran, 2021).

The results indicated that role stress was the most significant predictor of the experience of burnout, as mentioned previously, this is due to this construct's classification as a hindrance job demand (Crawford et al., 2010). Hindrance job demands are more likely to result in the experience of burnout as they largely function to impede the successful completion of work and the achievement of goals, which may subsequently result in the development of negative health conditions and the experience of negative emotions, which in turn result in the experience of burnout (Crawford et al., 2010; Schaufeli, 2017; Maslach et al., 2001).

This study produced interesting results from the evaluation of the relationships between job insecurity and both work engagement and burnout, as job insecurity was found to relate positively to the former and negatively to the latter. As mentioned previously, the reason for this could be that job insecurity could be understood as both a hindrance and challenge job demand (Piccoli et al., 2019). Understood as a challenge job demand, job insecurity could be proposed to possess intrinsic and extrinsic motivational properties, as perceived threats to an individual's job

may elicit greater motivation and performance in an attempt to reestablish a sense of job security (Piccoli et al., 2019; Crawford et al., 2010). To my knowledge, there has not been extensive research conducted evaluating job insecurity's potential as a challenge job demand, however, the results obtained from this study may contribute to further investigations into this area.

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## Appendices

### Appendix A: Utrecht Work Engagement Scale-9 (UWES-9)

The statements below refer to your feelings at work how often you experience various feelings at work. Please read each statement carefully and answer them in terms of how often you experience the feelings described. None of the items on the UWES-9 need to be reverse scored.

The scores are classified as follows:

- 0- Never
- 1- Almost never
- 2- Rarely
- 3- Sometimes
- 4- Often
- 5- Very often
- 6- Always

| Questions:                                                     | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
|----------------------------------------------------------------|---|---|---|---|---|---|---|
| At my work, I feel bursting with energy. (VI1)                 |   |   |   |   |   |   |   |
| At my job, I feel strong and vigorous. (VI2)                   |   |   |   |   |   |   |   |
| I am enthusiastic about my job. (DE2)                          |   |   |   |   |   |   |   |
| My job inspires me. (DE3)                                      |   |   |   |   |   |   |   |
| When I get up in the morning, I feel like going to work. (VI3) |   |   |   |   |   |   |   |
| I feel happy when I am working intensely (AB3)                 |   |   |   |   |   |   |   |

|                                                 |  |  |  |  |  |  |  |
|-------------------------------------------------|--|--|--|--|--|--|--|
| I am proud of the work that I do. (DE4)         |  |  |  |  |  |  |  |
| I am immersed in my work (AB4)                  |  |  |  |  |  |  |  |
| I get carried away when I am working .<br>(AB5) |  |  |  |  |  |  |  |

## Appendix B: Maslach Burnout Inventory- Health Services Survey (MBI-HSS)

The following items are used to assess the risk of burnout. Please choose the option that corresponds most with your experience. The items on the reduced sense of professional efficacy scale will be reverse scored.

The items are measured on a 7-point Likert-type scale and are scored as follows:

- 0- Never
- 1- A few times a year
- 2- Once a month
- 3- A few times per month
- 4- Once a week
- 5- A few times per week
- 6- Every day

| Questions                                                            | Never    | A few<br>times<br>per year | Once<br>a month | A few<br>times<br>per<br>month | Once<br>a<br>week | A few<br>times<br>per<br>week | Every<br>day |
|----------------------------------------------------------------------|----------|----------------------------|-----------------|--------------------------------|-------------------|-------------------------------|--------------|
| <b>Emotional Exhaustion:</b>                                         | <b>0</b> | <b>1</b>                   | <b>2</b>        | <b>3</b>                       | <b>4</b>          | <b>5</b>                      | <b>6</b>     |
| 1) I feel emotionally drained by my work.                            |          |                            |                 |                                |                   |                               |              |
| 2) Working with people all day long requires a great deal of effort. |          |                            |                 |                                |                   |                               |              |
| 3) I feel like my work is breaking me down.                          |          |                            |                 |                                |                   |                               |              |

|                                                                                             |              |                             |                     |                              |                    |                             |                  |
|---------------------------------------------------------------------------------------------|--------------|-----------------------------|---------------------|------------------------------|--------------------|-----------------------------|------------------|
| 4) I feel frustrated by my work.                                                            |              |                             |                     |                              |                    |                             |                  |
| 5) I feel I work too hard at my job.                                                        |              |                             |                     |                              |                    |                             |                  |
| 6) It stresses me too much to work in direct contact with people.                           |              |                             |                     |                              |                    |                             |                  |
| 7) I feel like I'm at the end of my rope.                                                   |              |                             |                     |                              |                    |                             |                  |
| <b>Questions</b>                                                                            | <b>Never</b> | <b>A few times per year</b> | <b>Once a month</b> | <b>A few times per month</b> | <b>Once a week</b> | <b>A few times per week</b> | <b>Every day</b> |
| <b>Depersonalisation:</b>                                                                   | <b>0</b>     | <b>1</b>                    | <b>2</b>            | <b>3</b>                     | <b>4</b>           | <b>5</b>                    | <b>6</b>         |
| 1) I feel I look after customers impersonally, as if they are objects.                      |              |                             |                     |                              |                    |                             |                  |
| 2) I feel tired when I get up in the morning and have to face another day at work.          |              |                             |                     |                              |                    |                             |                  |
| 3) I have the impression that my colleagues make me responsible for some of their problems. |              |                             |                     |                              |                    |                             |                  |
| 4) I am at the end of my patience at the end of my workday.                                 |              |                             |                     |                              |                    |                             |                  |
| 5) I really don't care about what happens to some of my colleagues.                         |              |                             |                     |                              |                    |                             |                  |
| 6) I have become more insensitive to people since I've been working.                        |              |                             |                     |                              |                    |                             |                  |

|                                                                        |              |                                     |                         |                                          |                            |                                         |                      |
|------------------------------------------------------------------------|--------------|-------------------------------------|-------------------------|------------------------------------------|----------------------------|-----------------------------------------|----------------------|
|                                                                        |              |                                     |                         |                                          |                            |                                         |                      |
| 7) I'm afraid that this job is making me uncaring.                     |              |                                     |                         |                                          |                            |                                         |                      |
| <b>Questions</b>                                                       | <b>Never</b> | <b>A few<br/>times<br/>per year</b> | <b>Once<br/>a month</b> | <b>A few<br/>times<br/>per<br/>month</b> | <b>Once<br/>a<br/>week</b> | <b>A few<br/>times<br/>per<br/>week</b> | <b>Every<br/>day</b> |
| <b>Reduced sense of professional efficacy:</b>                         | <b>0</b>     | <b>1</b>                            | <b>2</b>                | <b>3</b>                                 | <b>4</b>                   | <b>5</b>                                | <b>6</b>             |
| 1) I accomplish many worthwhile things in this job.                    |              |                                     |                         |                                          |                            |                                         |                      |
| 2) I feel full of energy.                                              |              |                                     |                         |                                          |                            |                                         |                      |
| 3) I am easily able to understand what my customers feel.              |              |                                     |                         |                                          |                            |                                         |                      |
| 4) I look after my customers' problems very effectively.               |              |                                     |                         |                                          |                            |                                         |                      |
| 5) In my work, I handle emotional problems very calmly.                |              |                                     |                         |                                          |                            |                                         |                      |
| 6) Through my work, I feel that I have a positive influence on people. |              |                                     |                         |                                          |                            |                                         |                      |
| 7) I am easily able to create a relaxed atmosphere with my customers.  |              |                                     |                         |                                          |                            |                                         |                      |
| 8) I feel refreshed when I have been close to my customers at work.    |              |                                     |                         |                                          |                            |                                         |                      |

### Appendix C: Job-Demands Resources Scale (JDRS)

| Questions:                                                                            | 1 | 2 | 3 | 4 |
|---------------------------------------------------------------------------------------|---|---|---|---|
| 1) Do you have too much work to do?                                                   |   |   |   |   |
| 2) Do you work under time pressure?                                                   |   |   |   |   |
| 3) Do you have to be attentive to many things at the same time?                       |   |   |   |   |
| 4) Do you have to give continuous attention to your work?                             |   |   |   |   |
| 5) Do you have to remember many things in your work?                                  |   |   |   |   |
| 6) Are you confronted in your work with things that affect you personally?            |   |   |   |   |
| 7) Do you have contact with difficult people in your work?                            |   |   |   |   |
| 8) Does your work put you in emotionally upsetting situations?                        |   |   |   |   |
| 9) Do you have enough variety in your work?                                           |   |   |   |   |
| 10) Does your job offer you opportunities for personal growth and development?        |   |   |   |   |
| 11) Does your work give you the feeling that you can achieve something?               |   |   |   |   |
| 12) Does your job offer you the possibility of independent thought and action?        |   |   |   |   |
| 13) Do you have freedom in carrying out your work activities?                         |   |   |   |   |
| 14) Do you have influence in the planning of your work activities?                    |   |   |   |   |
| 15) Can you participate in the decision about when a piece of work must be completed? |   |   |   |   |

|                                                                                                        |  |  |  |  |
|--------------------------------------------------------------------------------------------------------|--|--|--|--|
| 16) Can you count on your colleagues when you come across difficulties in your work?                   |  |  |  |  |
| 17) If necessary, can you ask your colleagues for help?                                                |  |  |  |  |
| 18) Do you get on well with your colleagues?                                                           |  |  |  |  |
| 19) Can you count on your supervisor when you come across difficulties in your work?                   |  |  |  |  |
| 20) Do you get on well with your supervisor?                                                           |  |  |  |  |
| 21) In your work, do you feel appreciated by your supervisor?                                          |  |  |  |  |
| 22) Do you know exactly what other people expect of you in your work?                                  |  |  |  |  |
| 23) Do you know exactly for what you are responsible?                                                  |  |  |  |  |
| 24) Do you know exactly what your direct supervisor thinks of your performance?                        |  |  |  |  |
| 25) Do you receive sufficient information on the purpose of your work?                                 |  |  |  |  |
| 26) Do you receive sufficient information on the results of your work?                                 |  |  |  |  |
| 27) Does your direct supervisor inform you about important issues within your department/organisation? |  |  |  |  |
| 28) Are you kept adequately up to date about important issues within your organisation?                |  |  |  |  |
| 29) Is the decision-making process of your organisation clear to you?                                  |  |  |  |  |
| 30) Is it clear to you whom you should address within the organisation for specific problems?          |  |  |  |  |

|                                                                                                      |  |  |  |  |
|------------------------------------------------------------------------------------------------------|--|--|--|--|
| 31) Can you discuss work problems with your direct supervisor?                                       |  |  |  |  |
| 32) Can you participate in decisions about the nature of your work?                                  |  |  |  |  |
| 33) Do you have a direct influence on your organisation's decisions?                                 |  |  |  |  |
| 34) Do you need to be more secure that you will still be working in one year's time?                 |  |  |  |  |
| 35) Do you need to be more secure that you will keep your current job in the next year?              |  |  |  |  |
| 36) Do you need to be more secure that next year you will keep the same function level as currently? |  |  |  |  |

## Appendix D: Formal Access Request Letter

Good day

### **REQUEST FOR ACCESS TO EMPLOYEES FOR RESEARCH PURPOSES:**

#### **Exploring the relationship between job demand, resources and psychological well-being: A study in the hospitality and tourism industries.**

I would like to request permission to invite employees at your organisation to participate in a study examining employee psychological well-being in the hospitality and tourism industries in South Africa. The study is being conducted by Professor Fiona Donald, a full-time academic at the University of the Witwatersrand and my supervisor for this project. I, Joshua Marks, am a student at the University of the Witwatersrand and I will be completing this research project as part of my Master's degree at the university.

The purpose of this study will be to gain insight into the extent to which the various aspects of one's, job demands and resources, can be said to predict the experience of work engagement and burnout, which have been identified as indicators of an individual's psychological well-being. My supervisor and I are approaching various organisations within the hospitality and tourism industries in South Africa to obtain as large a sample as possible, the sample will consist of general staff members within the organisations and will not include any individuals that hold managerial or executive positions at the time of the study. In addition to this, only individuals that have been working in these industries both prior to and following the onset of the COVID-19 pandemic will be eligible for participation. Participation in this study will include the completion of an online questionnaire about job demands and job resources, the experience of work engagement, and the experience of burnout. It should take participants approximately 15-30 minutes to complete the questionnaire.

Participation in this study will be completely voluntary, anonymous, and confidential. The names of the companies, the names of the participants, and other information that can be used to identify the employee or their employer will be collected. All the data that will be collected will be kept completely confidential and will be securely stored. Only the trends within the sample will be reported, no individual responses will be reported. Participants will be assured that should they

wish to; they will be able to withdraw from the study at any time and will not be penalized in any way for doing so.

The findings of the study will be included in the research report required for my degree in Organisational Psychology and possibly publications and conference presentations.

If you choose to grant access to employees in your organisation, I will ask you to send them a participant information sheet informing them about the study. Employees who agree to participate will be directed to the questionnaire by clicking on the following: [Insert Link Here]. After they issue consent to participate they will be able to complete the questionnaire via the online portal.

Although there are no immediate threats to the psychological health of participants in this study, however, should participants become aware of job demands that they may deem to be detrimental to their well-being, they may seek support from SADAG (0800 456 789 or [zane@sadag.org](mailto:zane@sadag.org)).

If you have any questions or concerns regarding the study, please feel free to contact myself or my supervisor. If you have any concerns regarding the ethics of the study, please contact the University of the Witwatersrand Human Research Ethics Committee (non-medical) (011 717 1408 or [shaun.schoeman@wits.ac.za](mailto:shaun.schoeman@wits.ac.za)). Should you request it, an executive summary of the findings will be sent to you via email on completion of the study.

Thank you for your time and for considering granting us access to employees in your organisation.

Kind regards

Joshua Marks

[2090155@students.wits.ac.za](mailto:2090155@students.wits.ac.za)

Prof. Fiona Donald

[Fiona.Donald@wits.ac.za](mailto:Fiona.Donald@wits.ac.za)

011 717 4507

## **EXECUTIVE SUMMARY OF THE PROPOSED RESEARCH**

**TITLE:** Exploring the relationship between job demand, resources and psychological well-being:  
A study in the hospitality and tourism industries.

The proposed study will attempt to provide insight the state of the psychological well-being of employees in this industry, it will do so by evaluating the nature of the relationship between job demands and resources and the experience of work engagement and burnout. The study will be adopting a quantitative, non-experimental, cross-sectional research design, and will survey approximately 75-110 employees across organisations in these industries. Data will be collected via an online questionnaire. This questionnaire will consist of questions about biographical and demographic variables, job demands and resources, and the experience of work engagement and/or burnout.

The hypotheses for the study are as follows:

- Job resources will positively predict work engagement
- Job resources will negatively predict burnout.
- Job demands will positively predict burnout.
- Job demands will negatively predict work engagement.
- Job resources will interact with job demands to reduce/buffer against the negative impacts of the latter.

The results of this study could have potential implications for:

- How organisations go about structuring the work of their employees.
- The degree of access that individuals have to certain job resources, given their significance in mitigating the negative impacts of job demands on employee health and the positive implications they have for work engagement and elevated performance levels.
- The relationship between employer and employee, potentially fostering a more open relationship between parties.
- The importance that employers place on the well-being of their employees.

## Appendix E: Participant Information sheet

Good day

### The researcher and the research

My name is Joshua Blaine Marks and I am currently completing my Master's degree in Industrial/Organisational Psychology at the University of the Witwatersrand. I am conducting this study as part of the requirements in fulfilment of my degree at this university. The study aims to evaluate the nature of the relationship between various job demands and job resources and the experience of work engagement and burnout using a sample obtained from the tourism and hospitality industries in South Africa.

I would like to invite you to take part in my research study. Please read the information below to familiarise yourself with aspects of the study, if you have any questions please contact me or my supervisor using the contact information provided at the end of this letter. Please note that ethical clearance for the performance of this study will be obtained prior to the start of the study.

### Participation

In line with the aims discussed above, only participants who have been working in the tourism and hospitality industries both prior to and following the onset of the COVID-19 pandemic will be considered for participation. Any participants identified to have only begun working in these industries following the onset of the COVID-19 pandemic will be removed from the dataset, and any data collected from their responses will not be considered during the analysis stage. Participation in this study will be entirely voluntary; any participants that feel they no longer wish to participate in the study, for any reason at all, may opt out of the study without any fear of penalisation for doing so.

Participation in this study will require you to complete a questionnaire that will be evaluating your perception of the various characteristics of your job (job demands and resources), your experience of work engagement, and your experience of burnout. The questionnaire will be made available to you online via Google forms, the link to the survey itself is attached to the end of this letter as well as to the end of the request for access letter issued to your supervisors, and in the online

advertisement posted on the social media platforms Instagram, Facebook, and Twitter. The survey should take you approximately 15-20 minutes and consists only of closed-ended questions that will require you to provide a rating of some sort.

All data collected from these questionnaires will only be accessible to the researcher and their supervisor, the data will not be shared with anyone. The questionnaire will not require you to provide any personal information, only select demographic information and your responses to the questions will be collected. Should any participants or the supervisors of participants request feedback regarding the study, it will be provided in the form of an executive summary of the study once it has concluded.

Please note that as you complete the survey, you may become aware of signs or symptoms indicating work-related stress or burnout syndrome. Should you find yourself experiencing any distressing emotions or concerns, you are urged to seek appropriate and professional support, such as reaching out to a counsellor or a mental health practitioner. Please note that the instrument used for burnout in this study does not and cannot be used as a basis for diagnosis, again.

### Data collection

Data will be collected using an online questionnaire that will be issued to participants via Google forms. As stated above, the link to the questionnaire will be attached to the end of this letter as well as to the end of the formal request for access letter issued to the supervisors of the potential participants. Participants will be given approximately 4 weeks to complete the questionnaire, a reminder will be sent out to participants every 3 days to ensure the completion of the questionnaire. Once the specified time has passed the questionnaire portal will close, any submissions after this time will not be collected and considered during the analysis stage. Once the data has been collected it will be transferred to the Statistical Package for Social Sciences (SPSS) software to be cleaned and analysed. The data will be reported using general trends found, no individual responses will be reported to ensure the protection of the participants' anonymity and to respect their confidentiality. The data collected during this study will be stored on a password protected flash drive in the office of my supervisor at the university, only my supervisor and I will have access to this drive.

Yours sincerely

Joshua Marks

Email: [2090155@students.wits.ac.za](mailto:2090155@students.wits.ac.za)

Contact number: 074 666 7023

Professor Fiona Donald

Email: [Fiona.Donald@wits.ac.za](mailto:Fiona.Donald@wits.ac.za)

Should you have any queries regarding the ethical considerations of this study please contact:

[Shaun.Schoeman@wits.ac.za](mailto:Shaun.Schoeman@wits.ac.za)

Should you become of any signs or symptoms that you find concerning please contact South African Depression and Anxiety Group using the contact details below:

Contact number: 0800 456 789

## Appendix F: Ethics certificate



### **SCHOOL OF HUMAN AND COMMUNITY DEVELOPMENT ETHICS COMMITTEE** **CONSTITUTED UNDER THE UNIVERSITY HUMAN RESEARCH ETHICS COMMITTEE (NON-MEDICAL)**

#### **CLEARANCE CERTIFICATE**

**PROTOCOL NUMBER: MAORG/23/05**

#### **PROJECT TITLE:**

Exploring the relationship between job demand, resources and psychological well-being: A study in the hospitality and tourism industries.

#### **INVESTIGATOR**

Marks Joshua (2090155)

#### **SCHOOL/DEPARTMENT OF INVESTIGATOR**

SHCD/Psychology

#### **DATE CONSIDERED**

14 June 2023

#### **DECISION OF THE COMMITTEE**

Approved unconditionally

#### **RISK LEVEL**

Low Risk

#### **EXPIRY DATE**

31 December 2025

#### **ISSUE DATE OF CERTIFICATE**

05 June 2023

#### **CHAIRPERSON**

  
(Dr Aline Ferreira Correia)

cc: Prof. Fiona Donald (Supervisor)

#### **DECLARATION OF INVESTIGATOR**

To be completed in duplicate and **ONE COPY** returned to the Chairperson of the School/Department ethics committee.

I/we fully understand the conditions under which I am/we are authorized to carry out the abovementioned research and I/we guarantee to ensure compliance with these conditions. Should any departure be contemplated from the research procedure as approved, I/we undertake to submit an amendment of the protocol to the Committee.

  
Signature

Date

20 / 07 / 2023

## Appendix G: Table 9

*Table 9 Item-total statistics for the Job-Demands Resources Scale (JDERS)*

|              | Scale Mean if Item<br>Deleted | Corrected Item-<br>Total Correlation | Cronbach's Alpha if<br>Item Deleted |
|--------------|-------------------------------|--------------------------------------|-------------------------------------|
| RoleStress_1 | 111.09                        | .175                                 | .906                                |
| RoleStress_2 | 111.06                        | .177                                 | .906                                |
| RoleStress_3 | 110.75                        | .235                                 | .905                                |
| RoleStress_4 | 110.65                        | .226                                 | .905                                |
| RoleStress_5 | 110.63                        | .277                                 | .905                                |
| RoleStress_6 | 111.92                        | .161                                 | .907                                |
| RoleStress_7 | 111.40                        | -.068                                | .910                                |
| RoleStress_8 | 111.89                        | -.055                                | .910                                |
| Growth_1     | 111.17                        | .471                                 | .902                                |
| Growth_2     | 111.46                        | .637                                 | .899                                |
| Growth_3     | 111.23                        | .582                                 | .901                                |
| WorkIndep_1  | 111.14                        | .572                                 | .901                                |
| WorkIndep_2  | 111.23                        | .607                                 | .900                                |
| WorkIndep_3  | 111.18                        | .566                                 | .901                                |
| WorkIndep_4  | 111.32                        | .419                                 | .903                                |
| POS_1        | 111.34                        | .500                                 | .902                                |
| POS_2        | 111.18                        | .507                                 | .902                                |
| POS_3        | 110.95                        | .361                                 | .904                                |
| PSS_1        | 111.02                        | .448                                 | .903                                |
| PSS_2        | 110.84                        | .482                                 | .902                                |
| PSS_3        | 111.41                        | .556                                 | .901                                |
| POS_4        | 111.18                        | .617                                 | .900                                |
| POS_5        | 110.71                        | .484                                 | .903                                |
| PSS_4        | 111.40                        | .531                                 | .901                                |
| POS_6        | 111.25                        | .770                                 | .898                                |
| POS_7        | 111.48                        | .756                                 | .897                                |
| PSS_5        | 111.16                        | .568                                 | .901                                |
| POS_8        | 111.31                        | .736                                 | .898                                |
| POS_9        | 111.37                        | .577                                 | .901                                |
| POS_10       | 111.03                        | .560                                 | .901                                |
| PSS_6        | 111.16                        | .669                                 | .899                                |
| WorkIndep_5  | 111.17                        | .496                                 | .902                                |
| WorkIndep_6  | 111.95                        | .514                                 | .902                                |
| JI_1         | 111.57                        | .250                                 | .906                                |

|      |        |      |      |
|------|--------|------|------|
| JI_2 | 111.45 | .192 | .907 |
| JI_3 | 111.45 | .209 | .907 |

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## Appendix H: Table 10

*Table 10 Item-total statistics for the Maslach Burnout Inventory-Health Services Survey (MBI-HSS)*

|           | Scale Mean if<br>Item Deleted | Corrected Item-<br>Total Correlation | Cronbach's Alpha<br>if Item Deleted |
|-----------|-------------------------------|--------------------------------------|-------------------------------------|
| MBI_1     | 31.5415                       | .533                                 | .886                                |
| MBI_2     | 30.8185                       | .308                                 | .894                                |
| MBI_3     | 32.5877                       | .689                                 | .880                                |
| MBI_4     | 32.6954                       | .724                                 | .880                                |
| MBI_5     | 31.4800                       | .357                                 | .892                                |
| MBI_6     | 33.4338                       | .532                                 | .886                                |
| MBI_7     | 33.4338                       | .624                                 | .883                                |
| MBI_8     | 33.4800                       | .355                                 | .891                                |
| MBI_9     | 32.9108                       | .675                                 | .881                                |
| MBI_10    | 32.6492                       | .354                                 | .891                                |
| MBI_11    | 33.0800                       | .766                                 | .879                                |
| MBI_12    | 34.0031                       | .487                                 | .888                                |
| MBI_13    | 33.3846                       | .482                                 | .887                                |
| MBI_14    | 33.6185                       | .577                                 | .884                                |
| MBI15_rev | 32.9569                       | .247                                 | .894                                |
| MBI16_rev | 33.0031                       | .716                                 | .881                                |
| MBI17_rev | 33.6031                       | .571                                 | .886                                |
| MBI18_rev | 33.7415                       | .432                                 | .889                                |
| MBI19_rev | 33.3569                       | .424                                 | .888                                |
| MBI20_rev | 33.6338                       | .457                                 | .888                                |
| MBI21_rev | 33.6492                       | .444                                 | .888                                |
| MBI22_rev | 33.2800                       | .411                                 | .889                                |

## Appendix I: Table 11

*Table 11 Item-total statistics for the Utrecht Work Engagement Scale (UWES-9)*

|        | Scale Mean if Item<br>Deleted | Corrected Item-<br>Total Correlation | Cronbach's Alpha<br>if Item Deleted |
|--------|-------------------------------|--------------------------------------|-------------------------------------|
| UWES_1 | 37.97                         | .614                                 | .904                                |
| UWES_2 | 37.55                         | .808                                 | .891                                |
| UWES_3 | 36.98                         | .725                                 | .897                                |
| UWES_4 | 37.06                         | .835                                 | .888                                |
| UWES_5 | 37.67                         | .765                                 | .895                                |
| UWES_6 | 37.34                         | .709                                 | .898                                |
| UWES_7 | 36.50                         | .577                                 | .907                                |
| UWES_8 | 36.81                         | .702                                 | .899                                |
| UWES_9 | 36.98                         | .511                                 | .911                                |