

A Conceptualization of the Role of Economic Characteristics in
Resources Conservation: An Application to the Study of Work
Engagement

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Abstract

This thesis examines the resources conservational effect of two economic life experiences, namely, economic life demands and organisational experiences of economic adversities on work engagement. Despite the acknowledgement of the relevance of economic resources in the acquisition and sustainment of emotional resources, little is known regarding whether and through what mechanism do economic life experiences relate with work engagement. Having a conceptual account that highlights the theoretical underpinnings of economic life experiences in relation to work engagement is crucial for the development of workplace interventions that can help sustain work engagement particularly during periods of economic constraints at both the individual and organisational level.

To address this gap, two empirical studies were conducted. Specifically, it was examined whether i) economic life demands and ii) organisation experiences of economic adversities relate adversely with work engagement, and if yes, why and under what conditions will this relation be salient. In addressing these questions, this thesis drew from the conservation of resources theory. Using a three-wave (approximately one week apart) panel data set (N= 145), this thesis finds that i) employees' economic life demands and ii) organisational experiences of economic adversities relates negatively to work engagement.

Moreover, analyses of mediation relationship showed that economic life demands relate negatively and indirectly with work engagement through the mediating effects of emotional distress. Likewise, it was found that organisational experiences of economic adversities relate negatively and indirectly with work engagement through (i) role ambiguity and (ii) organisational support for strength use. Analysis of moderation-mediation relationship elucidated that that off-job detachment mitigated the detrimental influence of economic life demands on work engagement through emotional distress such that the strength of the adverse influence was less under conditions of high economic life demands and high off-job detachment. Furthermore, results of moderation-mediation analysis revealed that detachment buffered the indirect negative influence of organisational experiences of economic adversities on work engagement. Specifically, it was discovered that the mediating influence of role ambiguity and organisational support for strength use was less salient under conditions of high organisational experiences of economic adversities and high detachment.

The thesis's findings that economic life demands relate negatively with work engagement through emotional distress help substantiate the desperation and resource loss spiral principle

of the conservation of resources theory. Likewise, findings of this thesis, in particular, the conditioning influence of detachment in the indirect relation between economic life demands and work engagement provides support for the resource passageways principle of the conservation of resources theory. Furthermore, the negative indirect influence of organisational experiences of economic adversities on work engagement through role ambiguity and organisational support for strength use substantiate that the desperation principle of the conservation of resources theory at the level of the organisation. From a practitioner perspective, findings of this thesis demonstrate that intervention measures that are centred towards the promotion of off-job detachment is a core medium through which organisations can promote employee work engagement.

Keywords: Economic life demands, Organisational experiences of economic adversities, economic well-being, the conservation of resources theory, off-job detachment, work characteristics and employee well-being.

Dedication

This thesis is dedicated to my wonderful and irreplaceable grand-mother, Abiodium Medinat Yekini.

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CHAPTER 1. INTRODUCTION

1.1 Introduction

Conceptualised as a positive, fulfilling, work related state of mind (Bakker and Demerouti, 2008) that is characterised with feelings of vigour, dedication and absorption towards work (Schaufeli et al., 2002), the subject matter of work engagement has over the last decade, received much research attention in the literature in positive organisational psychology (Bakker et al., 2008; Hakanen et al., 2006; Rich et al., 2010; Venz et al., 2018). A central tenet emerging from discourses, is that work engagement is closely linked with indicators of favourable employee wellbeing and that this in turn subsequently induce for desired organisational outcomes (Bakker and Bal, 2010; Xanthopoulou et al., 2009; schaufeli et al., 2008). Elucidating further, work engagement has been found to be directly related with client satisfaction and with service quality (Salanova et al., 2005). This finding is identical with those of Prins et al. (2009) who found that engaged resident physicians commit fewer errors during medical engagement with clients compared to less engaged physicians.

While several vital research themes on work engagement have emerged over the years, from the literature, the antecedents of work engagement have majorly inclined towards drivers encompassing employees' experiences of their work characteristics (Bakker et al., 2011; Schaufeli et al., 2009). In promoting work engagement, prudence tends to be applied in ensuring that intrinsically motivating factors are integrated in the design of work (Bakker and Demerouti, 2017; Barbier et al., 2013; Christian et al., 2011). Dominant models such as the demand-control-support model (Van der Doef and Maes, 1999), the job characteristics model (Hackman and Oldham, 1975) have championed the idea that features of an employee's work which induce for affective states are central to work behaviours. Following this, many have sought to elucidate the antecedents of work engagement by focusing on employee experiences of core features of the work environment such as the degree of control, support and how these features interact with hindrance job demands and the resulting impact of such interactions on work engagement (Crawford et al., 2010; Knight et al., 2017; Salmela-Aro, 2018). Overall, this have led to little conceptual awareness regarding whether nonwork-related experiences may have unique consequences for employee's well-being and in turn impact employees' work attitudes and behaviours within the organisation (Olde-Dussea et al., 2018).

Undoubtedly, it is of immense theoretical and practical relevance to comprehend the role of economic characteristics in the experiences of employee work engagement. This is because evidence suggests that economic characteristics may be experienced as a form of hindrance stressors that discourages employees from investing subjective resources into desired work behaviours (Probst et al., 2020). Indeed, exposure to strenuous economic life experiences may trigger strain and in turn cultivates a desperation to conserve depleting resources. Conceptually, this may likely limit employee investment of resources into work thereby likely to undermine work engagement. This leads to the conceptual underpinning that reactions on account of economic related strain may nurture within employees, the desperate need to conserve on their available resources thereby constraining the investment of resources into the manifestation of work. Indeed, anecdotal evidence illustrates that employees' experiences of economic characteristics, such as financial insecurity relates positively with negative affectivity and negatively to relationship satisfaction (Munyon et al., 2019).

Moreover, financial insecurity has been found to be positively related with perceived stress, dysfunctional health symptoms and sleep disturbances. It is inferred that the adverse impact of financial insecurity, an economic life experience, is in part, due to the positive effect of financial insecurity on work-to-family conflict (Olde-Dussema et al., 2018). Building upon this, negative affectivity can be inferred to be conceptualised to be an emotional reaction that is associated with the depletion of resources. The conservation of resources theory (COR) (Hobfoll and Shirom, 2001), elucidate that the experience of depletion of resources trigger a defensive need wherein individuals seek to conserve on their available resource. This is accomplished by holding back on the investment of resources into work. Because consistent investment of emotional resources is instrumental for work engagement (Halbesleben, 2010; Crawford et al., 2010), this guides to the assumption that economic characteristics which are experienced as a threat to employees' emotional resources, may have unique consequences for employees' decision to invest emotional resources into work engagement. This illustrates that economic characteristics may as well be conceptualised to be a core antecedent of work engagement. Despite the theoretical underpinnings, little is known regarding whether, and if yes, how economic life experiences at both the organisation and the individual level relates to work engagement.

In a nutshell, while several studies have been conducted in examining the antecedents of work engagement, it comes to light that these studies share a general limitation in that, studies so far have focused on the conceptual implications of work characteristics on

employees' health (Olde-Dussea et al., 2018; Munyon et al., 2019). The literature so far have not considered the conceptual implications of economic life experiences on employees and organisations' experiences of resources conservation, and how this in turn may be an experience that may undermine work engagement. For instance, employees work and earn an income. Exercising volition on how to spend one's income is an experience that is fulfilling and as such, may likely have a positive influence on employees' experiences of resource vitality. However, several social demands that are external to the employee, may be considered whilst making decisions on how to dispose of the income. These demands are such that they constraint the employees' feelings of volition over their income and as such, may undermine the employees' emotional resource that in turn, may cause employees to invest less from their emotional resources into work engagement, thus subsequently undermining their work engagement. There is thus a conceptual relevance to investigate the role of economic characteristics in resources conservation and the implications of this for employees work engagement.

The aim of this thesis was to address the gap in literature in relation to the conceptual link between economic characteristics and employees' work engagement. To actualise the research aim, I draw upon the COR theory to address whether economic life experiences influence employees' work engagement, and if yes, why and under what circumstances do economic life experiences, namely: employees' economic life demands, and organisation experiences of financial distress relate to work engagement. Two conceptual models were developed to explicitly unravel the relation between the two economic life experiences and work engagement. The two models were developed around the following two primary research questions.

Primary Research Question 1

Do employees' economic life demands adversely impact their work engagement? If yes, why this adverse relation occurs, and what can organisations do to minimise the salience of the adverse impact?

From Research Question 1, this thesis addresses the following specific sub-questions:

- i) Do economic life demands relate negatively with work engagement?
- ii) Does detachment lessen the negative indirect influence of economic life demands on work engagement?

Primary Research Question 2

Do organisations' experiences of economic adversities adversely influence employee experiences of work engagement? If yes, why there is an adverse impact, and what can organisations do to promote employee work engagement in times of economic crises at the organisational level?

From Primary Research Question two, this thesis addresses the following specific sub-questions:

- i) Do organisational experiences of economic adversities relate directly with i) role ambiguity and ii) organisational support for strength use?
- ii) Is the relation between organisational experiences of economic adversities and work engagement mediated by role ambiguity and organisational support for strength use?
- iii) Does detachment buffer the moderated-mediation relation between organisational experiences of economic adversities and work engagement?

1.2 Theoretical Underpinnings of Primary Research Questions One and Two

The COR postulate that individuals strive to acquire, sustain, and protect against resource loss. Resources such as job income, job control, role clarity, among others have been conceptualised as referring to objects of significance that renders unique value to individuals in that these resources are linked to goal attainment (Halbesleben et al., 2014). A major characteristic as to why resources are valued is because resources trigger for positive affective states such as feelings of competency and revitalisation, wherein these states are instrumental for realization of intrinsic desires. Following this, the COR theory holds that a major cause of individualized experiences of stress is that of perceived or the actual loss of resources (Hobfoll, 1989; Hobfoll and Shirom, 2001). Moreover, the COR theory put forward the motion that when exposed to environmental circumstances which lead to further loss of resources, individuals and organisations will engage in behaviours that are aim towards defending against further loss in resource.

To address primary research question one, this thesis draws on the COR theory to advance a model of employee economic life experiences, in focus, the employee's economic life demands, and how employee encounter with these demands in turn, relate to work engagement. In this model, I postulate that employees who report high in economic life demands, will equally report low in work engagement. The thesis goes further to assert that the negative relation between employee's economic life demands and work engagement manifest because these demands nurture for feelings of emotional distress, which in turn, can induce within the employee, the desperate need to conserve emotional resources. The employee actualises this by investing less of available emotional resources into work, thereby adversely impacting work engagement. The behaviour of investing less from depleting resources to conserve available emotional resources is inferred to as the desperation principle of the COR theory (Hobfoll and Shirom, 2001).

This thesis conceptualises economic life demands as economic life experiences that entails spending behaviours such that motives for spending from one's economic resources tend to be influenced by factors which are external to the employee. Primary research question one was examined by way of regression analysis. The results of regression analysis showed that economic life demands are positively related to emotional distress, and that emotional distress in turn related negatively with work engagement. Findings of moderation-mediation relation showed that the negative in-direct relation between economic life demands and work engagement through emotional distress is stronger under conditions of high off-job detachment.

Similarly, this thesis draws on the COR theory to formulate a conceptual model that addresses primary research question two. The model describes organisational experiences of financial distress to be a relevant economic life experience at the organisational level that adversely impacts employee work engagement of employees. Here, the question of how and when financial distress at the organisational level relates negatively with work engagement was addressed. Building on premises contained within the conservation of resources theory (Hobfoll and Shirom, 2001), this thesis posits that because financial resources of organisations are instrumental in the provision of job resources, and because job resources aid in triggering for work engagement, then it therefore follows that organisations who struggle to direct and sustain financial resources will seek to conserve resources by investing less of its depleting financial resources in the provision of job resources for its employees.

Indeed, the idea that organisations will react to an experience of depleting financial resources by investing less in the provision of job resources for its employees is a phenomenon which authenticates the desperation principle of the conservation of resources theory (Halbesleben et al., 2014). Because job resources are posited to be instrumental for the manifestation of work engagement (Demerouti et al., 2001; Halbesleben, 2010; Kühnel et al., 2012), this thesis subsequently argues that organisational experiences of financial distress will relate inversely with work engagement.

In addition to above illustrations, study two further discerns that a likely medium through which organisational experiences of financial distress may be inferred as being negatively related with work engagement is through the mediating role of role ambiguity, and organisational support for strength use. This thesis illustrates further that the salience of the mediating role ambiguity will be contingent (i.e., buffered) upon availability of key financial independent job resources (i.e., detachment).

1.2.1 Theoretical Contribution: Empirical Study One

Utilising the conservation of resource theory as an approach in the framing of the conceptual framework that addresses primary research question one, this thesis contributes to theory by validating some of the core tenets posited in the conservation of resources theory. The main contribution of the theoretical model for empirical study one is that this thesis conceptualises and empirically illustrates that economic life demands is an economic life experience that triggers for the activation of desperation need within employees, and that these demands ultimately nurture for experiences of resources loss spiral thereby resulting in work engagement (Hobfoll and Shirom, 2001; Halbesleben et al., 2014).

Specifically, it is argued that because involvement in economic life demands undermines the possession of basic resources, in particular, control over one's economic resources, individuals will experience a significant degree of stress in the form of emotional distress. Because experiences of emotional distress further undermine one's intrinsic desires for accumulation of valued resources (Chi and Liang, 2013), the experience of emotional distress will in turn lead to the less investment of emotional resources into work engagement. This is because, in an attempt to protecting against the further loss of depleting emotional resources, emotionally distressed employees will react by engaging in actions that are self-concordant to the immediate desires to conserve resources. The model developed in this thesis

establishes that employees will accomplish this by withdrawing to invest emotionally into engagement in work.

1.2.2 Theoretical Contribution: Empirical study Two

Empirical findings in the authentication of the conceptual framework addressing primary research question two demonstrate a contribution to our understanding of how resources conservation at the macro level impacts work engagement at the micro level. The main contribution of this study to the conservation of resources theory is that findings of this thesis illustrate that organisational experiences of financial distress is a hindrance workplace contextual factor that undermines employee work engagement.

This thesis argues that organisational experiences of financial distress constrain organisations' ability to deploy resources into the design of enriching jobs. As firms seek to minimise the detrimental impact of loss in financial resources, organisations will react by investing less of its depleting resources into the provision of jobs characterised by clarity in job roles and support in employees' use of their core strengths at work. This finding is in congruence with the desperation and the resource loss spiral tenets of the conservation of resources theory (Halbesleben et al., 2014).

Findings of hypotheses test in this thesis showed that organisational experiences of financial distress did relate negatively with work engagement. It was found that this adverse relation occurred through the mediating role of role ambiguity and organisational support for strength use. By validating the mediating role of role ambiguity and organisational support for strength use, this thesis advances current understanding regarding how economic life experiences at the organisational level tend to adversely impact employee work engagement.

1.3 Outline of the Thesis

To advance our current understanding of the subject matter of work engagement, two core primary research questions were highlighted. To address these questions, this thesis has been structured with the following chapters: the presentation of the detailed analysis of core literatures, methodological chapter detailing the research philosophy and methods this thesis

adopts, empirical study one and two and a conclusion chapter outlining the answers to the research questions highlighted above.

CHAPTER 2. LITERATURE REVIEW

2.1 Introduction

This chapter examined several arguments from the literature regarding the antecedents and consequences of work engagement. As the literature emphasises the role of work characteristics in employees' experiences of work engagement, this chapter subsequently reviewed significant arguments on the subject matter pertaining to work design.

Specifically, this chapter commenced by reviewing papers from the earliest period as regards the job design literature, specifically, the Tayloristic approach to work design. This approach emphasises work processes systems that prioritised job simplification and economic efficiency. Thereafter, the chapter reviewed influential work design theories that have gained the interest of organisational theorists over the years. This chapter explores discourses related to the job characteristics model, job-demand-control-support model, job-demands-resource theory, self-determination theory of motivation, along with the conservation of resources theory and its connection with work engagement.

A core theme discovered from the review of literature is that studies on work engagement have significantly focused on work design theories that mostly positions work characteristics as the antecedents of work engagement. Less attention has been directed at resource tensions that may arise because of economic related stressors. For the reason that economic life experiences play a unique role in the nurturing of healthy and optimal functioning of both the organisation and employees, it is therefore crucial to elucidate how and why economic variables at both individual and organisational levels relate to work engagement. Indeed, an examination of how economic experiences may impact work engagement is vital as this will simplify the development of policy interventions that benefit inducing and sustaining work engagement. This is paramount, particularly during periods of economic difficulty at both levels, namely the level of the individual employee and the organisation. This chapter highlights two core primary research questions such that if addressed, will facilitate the current understanding regarding the mechanisms through which economic life experience may be inferred to as being a core antecedent of work engagement. The subsequent chapter outlines the methodological approach through which these two primary questions will be addressed.

2.2 The Content School of Thought and Work Design

Current understanding with respect to the design of jobs and how organisations can optimise work in a manner that promotes employees' satisfaction of the basic needs and well-being can be linked with much of the contentions pertaining to the content school of thought (Fried and Ferris, 1987; Hackman and Oldham, 1976; Meijman and Mulder, 1998; Parker et al., 2001; Humphrey et al., 2007; Parker et al., 2017). The earliest such contentions are attributed to the Taylorist school of thought – a compilation of understanding the support of a rigid and automatic approach to the design of jobs (Davis and Taylor, 1972; Rose 1975).

Grounded within Adam Smith's (1776) and Charles Babbage's (1835) submission of the relevance of work specialisation, the division of labour on the maximisation of economic returns, scientific management emphasised the design of jobs in ways that are supportive of the antecedents of economic efficiency. By prioritising job processes as an end to a means, traditional job designers such as Smith (1776) and Babbage (1835), employed frameworks similar to those of the judgmental approach to staffing decisions (Parker and Wall, 1998).

A significant feature of the judgmental approach in regard to the design of jobs is such that job designers prioritise the minimisation of completion time, output quality, in addition to the minimisation of skill requirements (Frederick, 1911; Wall and Martin, 1987). These systems objectives were perceived to explain differences with respect to the realisation of economic efficiencies. This was thought to be true, particularly when compared with systems objectives tailored towards the satisfaction of employees' work-related needs (Davis et al., 1955). By adopting such systems objectives, job designers disregarded the role of the main underlying individual work-related needs (Vernon et al., 1924; Harding, 1931; Walker and Guest, 1952; Gooding, 1970). However, workplace needs that have been overlooked will, in the next couple of decades, be evaluated to be a contributing workplace experience that triggers employee workplace attributes.

As will be illustrated in-depth in the later sections of the current chapter, positive work attributes on outcomes related to the minimisation of work-related tensions, in particular feelings of burnout have been found to significantly explain greater variances with respect to the understanding of quantifiable performance. Nonetheless, early support for the utilisation of a simplified approach to the design of jobs, is to some extent found to have been reinforced by the time and motion study conducted by Gilbreth (1911). This study examined and

provided authoritative support for the possible existence of an interactive relationship between physical job demands, employees' mental competency and the fulfilment of economic efficiency. Exploiting the results and recommendations from the findings of the study conducted by Gilbreth (1911), Henry Ford subsequently designed his automotive production plant (automobile) in accordance with the recommendations inferred from the simplification and control of task processes.

Years later, unfavourable attitudinal and health related symptoms of job simplification gradually became profound. This later came to the attention of organisational theorists. Here, the control of task processes was determined to significantly cause varying degrees of unexpected workplace attributes, for example job disembodiment. This is because repetition at work was perceived by workers to be boring and less engaging (Walker and Guest, 1952; Fraser, 1947). Following this, enquires regarding the antecedents of healthy and interesting jobs became prevalent. This prompted studies that achieved the initial versions of job redesign strategies, in particular, evolved job redesign strategies, such as job rotation and enlargement. This was later accompanied by numerous recommendations following results of the Hawthorne study.

Irrespective of the enlargements made in relation to the design of jobs, subsequent studies found the principle of job rotation and improvement to be unsustainable (Aldag and Brief, 1979). The unsustainability of early job redesign strategies can be inferred from the suggestion that these strategies were introduced on the basis of the importance of integrating into job descriptions, emergent employee work-related needs (Nadler, 1963). Specifically, the incorporation of employees' needs into the design of horizontal job redesign, such as job rotation and enlargement, is such that combined workplace needs are determined to be limited in their scope, with scant reference directed towards employees' actual experiences and the perceptions that employees have with regard to their work characteristics (Likert, 1967; Hsueh, 2002).

Elaborating further, job rotation and enlargement redesign strategies is believed to have been framed on an intuitive framework, one certain of the belief that the encouragement of positive employee work related attributes are contingent upon an emergent unsatisfied employee work related need. These needs were later determined to be those of the intrinsic and/or autonomously contingent desires by employees to engage in work that was intrinsically challenging (Asplund, 1981; Buchanan, 1979). This necessitated the motion that the design of jobs that only sought to achieve job rotation and enlargement overlooked the role of several

employee workplace needs. The claims above can also be said to be corroborated by the prevalence of various industrial disputes that emerged prior to the industrial relations movement. Following extensive organisational studies introduced during the industrial relations era, a particular theme noticeable within studies is that of the need to take into account employees' own thoughts and feelings in regard to the design of jobs (Hsueh, 2002). Implications as a result of linking multiple employee workplace needs contingencies into the design of jobs, is such that the integration of these needs are associated with less workplace pressures that ultimately related positively with increased employee attention stability, control and efficiency, i.e., proactive behaviours, with respect to task objectives. By integrating various workplace needs into the design of jobs, this can also be said to mark the beginning of the content approach to the design of jobs.

2.3 Motivational Approaches to Work Design

Following the recognition of the role of work-related needs in the structuring of jobs, numerous studies in job design literatures can generally be categorised into two main lines of discourse – the motivational approach and the stress inducement approach (Bakker and Demerouti, 2014). Literature on the motivational approach to the design of jobs refers to discussions by job design scholars on what aspect of jobs should be understood as ultimately valid in producing greater levels of work-related motivational propensities. Within this line of discourse, motivational propensities are typically streamlined or identified together with two main categories of workplace outcome variables: attitudinal, i.e., subjective and objective performance, absenteeism and turnover intent and behavioural, such as perceived workplace satisfaction, job involvement, organisational commitment, etc., outcomes (Humphrey and Morgeson, 2007).

2.3.1 Motivator - Hygiene Factor Theory

Early studies examining the role of various workplace needs in the design of jobs can be traced to studies initiated by Herzberg and colleagues. Enlightened by the ongoing assertions of the Hawthorne studies, Herzberg and colleagues were of the opinion that two significant workplace characteristics, namely motivational and hygiene factors, correlated with job satisfaction (Herzberg et al., 1959; Herzberg, 1966; Herzberg et al., 1967). While

motivational factors were proposed to be intrinsic to job execution and thus facilitative of the framing of positive employee job attributes and attitudes, hygiene factors such as workplace policies, working conditions, pay, in addition to managerial supervision were highlighted to be extrinsic and inhibitive of the framing of positive work-related attributes (ibid).

The main premise that can be inferred from Herzberg's two-factor theory is that the design of jobs should be less simplified. Elimination of the process of job simplification in turn implies that the design of jobs should incorporate relevant motivators. Overall, motivational factors include achievement, recognition, autonomy and promotional prospect. Here, motivators were deemed to be directly associated with job satisfaction as compared to hygiene factors. Moreover, while hygiene factors were emphasised to be directly associated with job dissatisfaction, the absence of hygiene factors nonetheless was not expected to explain satisfaction. Following this line of thought, Herzberg and colleagues concluded that the inclusion of motivators in jobs is the core determinant in enhancing employee work motivation.

While the premise developed by Herzberg and colleagues expanded over the years to be influential in management thought, ten years into its introduction, scholars began questioning the tenets of two-factor theory. Irrefutably, the irrationality of the theory was attributed to the theory's shortcomings with respect to three main shortcomings within the research: the theory's methodological shortcomings, subjectivity and empirical inconsistencies (Vroom, 1966; Malinovsky and Barry, 1965; Dunnette, 1965; King, 1970; Ambrose and Kulik, 1999). For instance, scholars highlight the lack of an informed framework guiding how varying dimensions of workplace characteristics can be classified as being either intrinsic or extrinsic (Haslam, 2008).

In addition to this, the emergence of contemporary process theories of motivation, such as "self-determination theory" has similarly had an impact on invalidating the key premise of the two-factor theory. In such a case, it is explained that on the basis of value internalisation, workplace factors which are regarded to be extrinsic in nature can likewise function as an intrinsic (autonomously induced) motivating factor. Furthermore, additional research has pointed to the ineffectiveness of the two-factor theory in accommodating the role of individual difference in ability and the implications of this as regards the encouragement of varying dimensions of attitudinal and behavioural outcomes (Hulin and Blood, 1968; Locke and Henne, 1986; Hackman and Oldham, 1976).

2.3.2 The Job Characteristics Model

With studies highlighting the practical issues regarding the applicability of the motivator-hygiene factor theory, the theory nonetheless paved the way for recognition of the role of job enrichment as an inducement for job satisfaction. Following this, later studies began to examine how employees reacted to varying dimensions of task attributes (Walker and Guest, 1952). Highly relevant within this line of discourse is the conclusions of studies initiated by Turner and Lawrence (1965). Their study raised the notion of the descriptive nature of jobs into five key domains: behavioural, technical, organisational, social and personal perspectives. In their analysis, Turner and Lawrence (1965), focused on the behavioural perspective as this was believed to relate more to job satisfaction.

The behavioural perspective entailed job designers comprehending the core behaviours that are expected to be initiated by employees themselves during the execution of a task, such that activation of these behaviours is deemed necessary for the completion of task objectives. From this, six multidimensional task attributes: task variety, autonomy, required interaction, optional interaction, required knowledge and skill, along with responsibility were highlighted (Turner and Lawrence, 1965). These task attributes were further presumed to assist in generating within employees, workplace attitudinal and behavioural responses that are in agreement with task completion. In addition to the multidimensional features of task, Turner and Lawrence (1965), communicated the role of additional task attributes, these attributes were concluded to be integrative of the actual task itself, however these task attributes were not regarded to be the core feature that trigger the accomplishment of task objectives.

Utilising a sample size of 470 employees working on 47 different categories of jobs, the findings from the study conducted by Turner and Lawrence (1965), revealed that multidimensional, i.e., required task attributes explained the higher levels of positive work attribute, for example job satisfaction. The incentive of job satisfaction, however, was only within jobs executed in small towns compared to jobs specified in urban settings. The implications and conclusions from this study was that cultural factors might have played a significant role (i.e., such as a moderator) in influencing the effect on the task attributes of employee workplace behaviours that subsequently impact on the attainment of task objectives.

Combining the frameworks from the study conducted by Turner and Lawrence (1965), in addition to the work of Vroom (1964), Hackman and Lawler (1971), considered the possibility of employees' workplace attitude and behaviours to be endogenous of four core job dimensions, namely, task variety, autonomy, task identity and feedback. In their analysis, Hackman and Lawler (1971), hypothesised that the influence of core job dimensions will have a significant impact on employees that score high on need for self-accomplishment and personal growth than employees who score low as regards these needs. With the relative empirical support found in support of Hackman and Lawler's (1971) presumptions of the endogeneity of positive workplace attributes, this paved the way for the emergence of an influential theoretical contemporary job design model referred to as the 'Job Characteristics Model' (JCM).

Applying the core tenets associated with earlier works, Hackman and Oldham (1976), developed the Job Characteristics Model. The JCM was developed with the presumption that core job dimensions, in focus task significance, will encourage three critical affective states within employees, namely, experienced meaningfulness, responsibility of outcomes and comprehensiveness of the results of one's work efforts (Hackman and Oldham, 1975; 1976; Oldham and Hackman, 2005). The critical states were highlighted to be directly associated with behavioural and attitudinal outcomes, for instance internal motivation, job quality, job satisfaction and negatively related to absenteeism and turnover intent (ibid). In their study, Hackman and Oldham (1976), illustrate that the motivating potential of a job can be determined by understanding the meaning of task significance, task identity and skill variety.

Similar to previous works, it was likewise proposed that the relationship between core job dimensions, critical states and outcome variables will be moderated by an employee's desire to grow within a job. The moderation effect suggested that the greater an employee's desire to develop in a job, the stronger the impact of the core job dimensions on employee's affective states. The second stage of the moderation-mediation mechanism illustrates that a greater desire to develop within a job will boost the effect of an affective state on outcome variables.

Following empirical support substantiating the principles hypothesised by Hackman and Oldham (1975), the JCM developed to be a core model of job design (Morgeson and Campion, 2003). Here, the JCM came to the attention of organisational psychologists and theorists who conducted various empirical tests to further determine the theoretical and methodological rigorousness of the model. Underlying within these studies, is a meta-analytic

study undertaken by Fried and Ferris (1987), who noticed that core job dimensions explain a significant proportion of the variances in attitudinal outcomes. Though while this was found to be relatively so for each aspect of job dimensions, claims from the literature with respect to the nature of associations between job contents and outcomes were categorised into two relevant discourse domains.

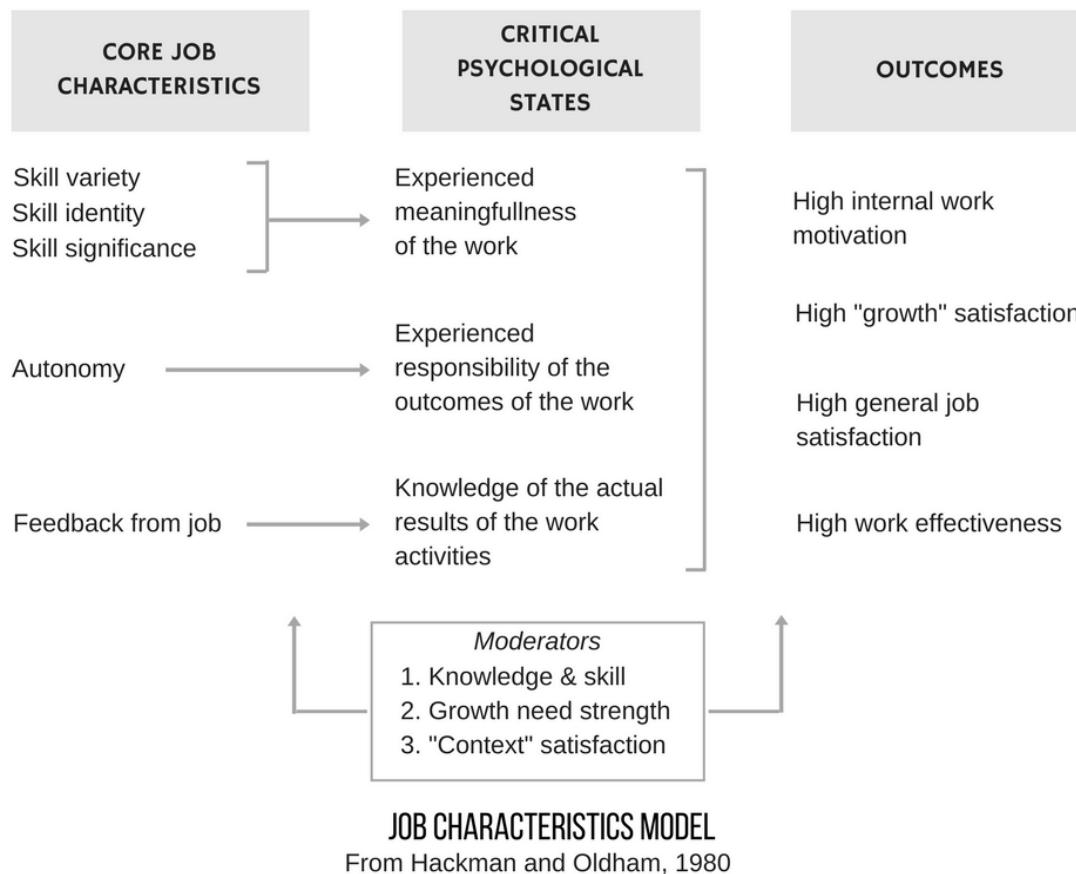


Figure 2.1 Hackman and Oldham's Job Characteristics Model

Firstly, the effect of job dimensions on outcomes are found to be noticeable and consistent only within the main subsets of attitudinal and behavioural outcomes, i.e., subjective performance). However, these findings were not effectively replicated in other subsets of behavioural outcomes, particularly outcomes relating to objective performance and turnover intents (Aldag et al., 1981). Explaining this further, in a meta-analytic study conducted by Kelly (1992), it was ascertained that job enrichment is directly associated with job satisfaction more than work performance. Similar results were likewise replicated in prior studies (Wall and Wartin, 1987; Miller and Monge, 1986). Despite the fact that relatively few studies had

uncovered significant associations between job contents and performance (Kopelman, 2006), Humphrey et al. (2007), established autonomy to be positively correlated ($r=0.17$) with objective performance.

Similarly, several contentions have been highlighted with regards to the strength of the correlation coefficient between job dimensions and employee satisfaction with their job. For instance, Stone (1985), emphasised this to be an average of $r=0.63$. Further studies expand upon lower strength of association (for review purposes, see Wall and Martin, 1987; Glick et al., 1986; Loher et al., 1985). Moreover, in relation to explained variation, autonomy has been determined to account for a higher proportion of explained variation on attitudinal outcomes (ibid; Parker and Wall, 1998; Spector, 1985; Loher et al., 1985; Johns et al., 1992).

Although the central tenet distinguishing the JCM from Herzberg's two-factor theory is the introduction of experienced critical states, in relation to the literature however, studies are generally focused on the direct impact of job dimensions on outcome variables (Humphrey et al., 2007). In as much as there exist relative studies which account for the mediating effects of critical states, findings emerging from these studies corroborate the outcomes of partial empirical validity (Renn and Vandenberg, 1995; Behson et al., 2000), as well as the inconsistent findings. Regarding why findings have been mixed, some have attributed this to the influence of moderating variables. Firstly, introduced as a single construct, i.e., growth needs strength (GNS), the JCM was later revised to be integrative of two additional moderators, specifically, knowledge and skill, along with context satisfaction (Hackman and Oldham, 1980). In a study completed by Kelly (1992), it was established that the hypothesised moderating effect of knowledge and skill, GNS and context satisfaction within the JCM were not significant.

The findings obtained by Kelly (1992), raises several questions regarding the reliability of the core theoretical tenets of the JCM. This is in keeping with the arguments raised by Graen et al. (1986) and Ferris (1987), who both concluded in their review of the JCM that the moderating potentials of the hypothesised moderating effect of knowledge and skill, GNS and context satisfaction are inconclusive. This is held to be so on the basis that the results of the studies conducted by these authors revealed the outcomes of the significant moderating potentials between GNS and performance outcomes (ibid). In addition, the findings of subsequent studies by Morgeson and Campion (2003), exhibited insufficient evidence for the moderating effects of GNS. Following this, researchers have been sceptical about the conceptual relevance of moderating variables in the JCM. For instance, while this

could be explained on the basis of methodological shortcomings, others have likewise advocated that inconsistencies in the result could be inferred from the theoretical groundings because the moderating potentials of GNS may be context specific (Loher et al., 1985; Johns et al., 1992).

2.3.3 Extension of the Job Characteristics Model

With the introduction of the JCM, several calls were issued to extend job characteristics. In a combination of the literature on work design, Parker (2001, 2014), highlighted that the need for employees to achieve a balance between work and family life made the relevance of designing jobs that offer employees, autonomy over working hours significant. Similarly, highlighted in the review, is the suggestion that the exponential rise in the consumption of non-manufacturing products necessitated the need to examine the impacts of emerging job characteristics that focus the cognitive and emotional demands of a job on employee workplace behaviours. In addition, Clegg and Spencer (2007), argued that theoretical generalisations within the job design literature had not evolved in line with the changes in modern job practices. From studies, it is observed that similar demands were likewise raised eleven years following the introduction of the revised version of the JCM. Wong and Campion (1991), when examining the methodological groundings of the JCM, highlighted the need for further studies to differentiate between individual level tasks and tasks at the aggregate level, i.e., work. By distinguishing tasks into these different levels, Wong and Campion (1991), championed the need to evaluate the definitional context of jobs, wherein jobs are considered as composites of task activities to be executed by employees.

Given that the JCM postulates that the motivation potentials of a job, i.e., aggregate level construct are endogenous of core job dimensions, the main subsets of core job dimensions, for instance, task identity and task significance, tend to be defined within the task construct domain rather than that of job constructs. Wong and Campion (1991), therefore criticised the JCM based on uncertainties with regards to the levels in which core job dimensions have motivating potentials. Thereafter, Wong and Campion (1991), developed a mediational model with the core premise that attitudinal outcomes are endogenous of the characteristics of a job at the task level. Results from this study provided partial support for the role of job characteristics as a mediator of the relationship between task level characteristics and attitudinal outcomes (ibid).

Years later, studies concerned with the relationship between task and job level characteristics gradually emerged. For instance, Taber and Alliger (1995), illustrated that incomplete findings found in studies performed by Wong and Campion (1991), were for the reason that employees utilised different mental constructs when perceiving a task in relation to a task at the aggregate level (Dierdorff and Morgeson, 2007; Morrison, 1994). With constructs being defined externally, Taber and Alliger (1995), thereby argued that the

construct measurement in studies by Wong and Campion (1991), may not have fully captured how employees perceive their task versus overall job level constructs.

Following the studies of Wong and Campion (1991), a significant call for the elaboration of job characteristics is noticed and salient within the works of Parker et al., (2001). Here, an developed work design model was proposed. Within this model, a call was made to examine how varying dimensions and interconnections between external, internal and individual level factors in addition to how identified factors may influence the direction of work design decisions were highlighted. Central to the ideas raised is that environmental, political and the availability of technology may drive changes in internal organisational factors, thereby altering changes in existing organisational strategy. Moreover, it should be noted that changes in strategic direction were viewed to be accompanied with changes in the scope of existing work characteristics.

Though concluding job features within the traditional JCM, i.e., control, skill variety, feedback as extremely relevant, Parker et al. (2001), extended this to include four job demand dimensions, i.e., cognitive, physical, emotional and role conflict with the opportunity for skill acquisition functioning as job resources. In addition to the design of individual level jobs, the elaborated model of work design integrates work features peripheral to the design of jobs at the group level of analysis, for example, member cohesion, team composition, group norms, interdependence and shared knowledge, as relevant workplace contingencies impacting the effect of work characteristics on a list of various workplace outcome variables.

Although the notion that the identified additional work characteristics within the expanded work design model tend to be a collection of work characteristics contained within fragmented work and organisational literatures - its most significant insight perhaps lies within the highlighted mechanisms on how work characteristics can trigger varying dimensions of outcome propensities. Continuing the elaborated work design model is the expanded work design model created by Humphrey et al. (2007), a paradigm shift challenging methodological constructs that have long dominated the work design literature for over three decades (Grant and Parker, 2009; Morgeson and Campion, 2003). The uniqueness of the expanded work design model resides within several limits. First, it is believed to be the first formal meta-analytical study of Hackman and Oldham (1976) hypothesised mediational, for example critical states process mechanism (Humphrey et al., 2007). Their study likewise represents a detailed study of the meta-analytical studies conducted by Fried and Ferris

(1987). Furthermore, the model takes a radical shift from the dominant work design research norm by identifying and integrating four social work characteristics into the design of jobs.

While the first three hypotheses highlighted by Humphrey et al. (2007), attempted to replicate previously established construct associations within the traditional JCM (Christian et al., 2011), hypothesis four nonetheless identified a methodological shortcoming contained in the application of the diagnostic survey of a job. Here, the construct task variety was highlighted to be developing within work design studies. Task variety is regarded as the extent to which a specific job is integrative of numerous task roles (Morgeson and Humphrey, 2006). Task variety is illustrated to be divergent from skill variety - given that, as regards the former, centrality is directed towards actual task(s) performed, whilst the latter focuses on the individual core competencies that are supportive of task execution.

On outcomes that past studies conceptualised, task and skill variety as a single construct measurement within the job characteristics inventory, Humphrey et al. (2007), proposed that on the grounds of conceptual similarities with other job dimensions, i.e. autonomy, feedback, task significance and task identity, task variety will have identical direct associative outcomes with positive behavioural and attitudinal outcomes and proportionately with negative behavioural outcomes.

In addition to task variety, additional motivational characteristics are likewise identified in the works of Humphrey et al. (2007). Similar to assumptions following the identification of additional work characteristics in the developed work design model, additional non-tasks which focused on motivational characteristics in the expanded work design model emerged. This was on the basis of ongoing changes on how jobs were being performed. In the expanded work design model, four knowledge demand, specifically information processing, job complexity, specialisation and problem solving were proposed to be directly related with desired behavioural and attitudinal outcomes.

Other presumptions highlighted within the expanded work design model are centred on various factors through which autonomy could be tailored. The main arguments within studies are that work autonomy can be categorised into several dimensions. Here, similar to the notion of control over working hours, Parker (2014) as well as Morgeson and Humphrey (2006), hypothesised that work scheduling, work methods and decision-making autonomy is positively related with behavioural and attitudinal outcomes. In their analysis, Humphrey et al. (2007), established motivational characteristics to account for 25% of unique variances in

regard to subjective performance, 24% in organisational commitment, 34% in job satisfaction and 2% in turnover intent. Further developments within the literature concerning work design was the growth of the interdisciplinary approach pertaining to work redesign.

During the late 1980s, researches on the study of optimal processes in work design had begun to decline in several senior management, as well as industrial and organisational psychology literatures (Humphrey et al., 2007). Nonetheless, studies were becoming important within the industrial and applied sciences – with significant focus directed at the design of jobs taking into account, the physical and environmental context of jobs (Morgeson and Campion, 2002; Campion et al., 2005; Humphrey et al., 2007). Owing to this, the interdisciplinary approach to work design emerged. By attributing physical demands, work conditions and ergonomics as aspects relating to job processes that result in physiological reactions, Humphrey et al. (2007), thus incorporated physical demands, work conditions and ergonomics in the expanded work design model.

In addition, another conceptual extension of the expanded work design model is the incorporation of social characteristics into work design. The social context of work is regarded to be essential in the design of contemporary work on the basis that the social aspect of the job is skilled in altering how individuals experience work itself (Grant and Parker, 2009). For instance, Myers (2003), emphasised that interpersonal relationships within organisations were amongst the most significant determinants of well-being within the workplace. By social aspect of work, Grant and Parker (2009), asserts this to be inclusive of interpersonal interactions and relationships performed during the course of job involvement. However, while the social characteristics of work have increased over the last decade to be a prominent feature within the design of jobs, Oldham and Hackman (2010), explain that its conceptual beginning dates back to the era preceding the introduction of the JCM.

Undoubtedly earlier versions of the JCM had initially focused on determining the nature of the associations between four job dimensions, namely, skill variety, autonomy, task identity, feedback and two social contexts relating to jobs, interactions with others at work and friendship opportunities (Hackman and Lawler, 1971). Sims et al. (1976), in addition to early works by Turner and Lawrence (1965) and Trist and Bamforth (1951), also examined the impacts of social contexts on employee work behaviour. Studies on the impacts of social context were however, believed to be less paramount compared with task and job attributes (Grant et al., 2007; Morgeson and Campion, 2003; Morgeson and Humphrey, 2006).

In a study by Grant and Parker (2009), the decline in studies on the social characteristics of jobs were attributed to three factors. Firstly, findings with respect to weak associations between social characteristics and motivational outcomes. This in turn led several organisational theorists to contend that the social context of work was less relevant in job design. Similarly, this era witnessed the rise of social information processing theory. Here, rather than examining for possible interconnects between social and job characteristics, several studies sought to establish a clear distinction between work and social clues (ibid).

The complexity of jobs in contrast generated tremendous growth in the use of teams to separate job demands into smaller units (Iigen, 1999; Osterman, 2000; Griffin et al., 2007). Following this, many began to emphasise the need for employees to be equipped with appropriate interpersonal predispositions that support team effectiveness. Such predispositions entail competencies relating to how employees establish reciprocal interactions that are supportive of team interdependence workplace behaviours. Overall, this leads to recognition of task interdependence as a core characteristic of jobs. It should be noted that recognition however was directed at the design of jobs within teams (see Hackman and Oldham, 1980; Ulich and Weber, 1996; Gulowsen, 1971) and only recently within micro-level organisational studies.

In a sample review of the findings of 259 studies, Humphrey et al. (2007), identified four social characteristics of jobs as capable of significantly impacting how employees experience and react with their work environment. Specifically, it was hypothesised that interdependence, feedback from others, social support and interaction outside the organisation will be directly associated with positive behavioural and attitudinal outcomes and inversely with negative behavioural outcomes. The study identified social attributes to explain 24% of unique variances in behavioural outcomes, i.e., turnover intent, 18% in role perception outcomes, 40% in organisational commitment, 9% in subject performance and 17% in regard to job performance (ibid).

Whereas to some degree, one may contend that the empirical validity of the role of motivational and social characteristics in impacting outcome variables are addressed within the expanded work design model, central to the findings within the expanded work design model are a number of practical implications, particularly those peripheral to the subject matter pertaining to employee retention. Elaborating further, the results of studies by Humphrey et al. (2007), suggest that the interactive activities contained within dimensions of

social characteristics rather than motivational, undermines the retainment of employees - this however could be asserted regarding its applicability on the retainment of talented employees.

Irrespective of the satisfying observations, the results contained within the expanded work design model are not without detractors. The identified contention comprises theoretical links between outcome variables and accompanied work characteristics. For instance, while motivational characteristics were found to explain higher levels of role overload and internal motivation than social characteristics - the expanded work design model however, failed to illustrate how motivational characteristics are related, i.e., theoretical grounding with well-being outcomes and how well-being in turn is related to attitudinal outcomes, i.e., particularly internal motivation and organisational commitment.

An understanding of the illustrated theoretical interlink is deemed crucial to current generalisations of the subject matter of work engagement as within the motivational characteristics, job features (i.e., job demands), theoretically defined as triggers of motivational propensities are observed. However, studies likewise raise the notion of such job characteristics **to impair the inducement** of motivational propensities (Karasek, 1979; Karasek and Theorell, 1990; Hakanen et al., 2006; Podsakoff and LePine, 2005; Podsakoff et al., 2007).

2.4 Stress Inducement Approach to Work Design

By way of exploring the expanded work design model, it is observed that job characteristics, such as task variety, problem solving, job complexity, information processing, are conceptually illustrated to act as triggers of motivational propensities. Studies, however, have similarly raised the notion of subsets of these categories to function as unique dimensions of job demands - particularly those of challenge job demands (Podsakoff et al., 2007; Van den Broeck et al., 2010; Crawford et al., 2010). These demands are such that they are possibly able to facilitate motivational propensities (Tadic et al., 2015). Discussions on the subject of job demands and its implications for employee workplace behaviour have extensively been evaluated within the literature (Van der Doef and Maes, 1999; Karasek et al., 1998; Luchman and Gonzalez-Morales, 2013). Prior to the introduction of the JCM, the Demand-Control job design model emerged. Unlike motivational approaches to work design, the job demand-control model emphasises the role of work characteristics in impacting health and well-being outcomes and subsequently, work attitudes and performance.

2.4.1 The Job Demand-Control Model

The Job Demand-Control (JD-C) model, a theoretical framework illustrating the potential effect of the nature of work characteristics on the physical and mental well-being of employees, was introduced in the job design literature by Karasek in 1979. The development of the job demand control model was built upon core findings of earlier work undertaken by Whyte (1948). Several other researchers have used the work of Whyte (1948), to ascertain several claims and findings, such as the conclusions or core premises which have been combined to become fragmented premises. Caplan et al. (1975) and Karasek (1979) attempted to incorporate these fragmented premises within studies into motivational and well-being. This was completed by introducing the notion of the impacts of the additive and multiplicative effect of the relationship between job demands and decision latitude in impacting workplace well-being. At this point, job demands refers to dimensions of work characteristics into which energetic efforts are exerted, examples of which include workload and time pressures (Karasek and Theorell, 1990). Bakker and Demerouti (2001, 2014), expanded upon Karasek and Theorell's (1990) definition of job demands to be inclusive of efforts exerted on: the physical, psychological, social or organisational features of a job and are associated with the physiological and/or psychological cost. Other definitional constructs have likewise endeavoured to conceptualise job demands in relation to individual coping mechanisms, one undermining development and/or the retainment of personal resources required to address workplace difficulties (Hobfoll, 2001).

The view of job demands as peripheral within the sphere of individual resource depletion, are grounded within key organisational stress theories, in particular, the transactional and conservation of resource theories. Though while other key theories related to stress are likewise communicated within the literature on stress (see Edwards, 1992, Harrison, 1978, Warr, 1987, for an overview of practical implications of these theories), the transactional and conservation of resource theories have more or less become extremely prominent within contemporary work design literatures.

While job demands are conceptualised in inducing dysfunctional forms of workplace affective (positive) stance with respect to one's job, control conversely, entails the degree to which one possesses an appropriate level of decision latitude implemented over task responsibilities. Originally categorised into two main features (i.e., skill discretions and

decision authority), Humphrey et al. (2007), identifies job demands to comprise three prominent dimensions, namely: work scheduling autonomy, work methods and decision-making autonomy. Following this, Karasek, (1979), combined the two work related constructs: job demand and job control to be core antecedents in comprehending the subject matter of workplace well-being. In this case, the concept of job strain was communicated by way of jobs categorised as either high in stress or one low in stress (ibid). High strain jobs were concluded to refer to the design of jobs in ways in which discrepancies exist between job demands and job control, specifically, jobs characterised by high job demands and low job control and vice versa for low strain jobs.

From the works conducted by Karasek (1979), Ganster and Fusilier (1989) recognised two primary hypotheses: strain and buffer hypothesis, upon which the theoretical framework of the JD-C model is believed to have been framed. In this instance, it is illustrated that high strain jobs will trigger the largest amount of health-related illness and as a consequence, employee withdrawal tendencies (i.e., strain hypothesis) within the workplace. Similar to high strain jobs, low strain jobs are likewise accompanied within well-being reactive tendencies, although this is emphasised to be relatively low, compared with behavioural tendencies within high strain jobs. The fundamental notion within this assumption is that of the illusion that withdrawal tendencies are endogenous of outcomes as regards an interactive, i.e., multiplicative or additive relationship between job demands and control.

Other key contentions suggested within the JD-C model is that of buffering hypotheses: one illustrating how job demands and control may come to interact, such that control protects against the anticipated health implications of job demands (Van der Doef and Maes, 1999a). The practical implications produced from the JD-C model is such that, organisational intervention practices concerning the improvement of well-being in the workplace does not necessarily imply a reduction in job demands but rather, necessitates that demands ought to be accompanied with a certain degree of control. This is because control is believed to be directly associated with the activation of proactive work tendencies, one in which induced tendencies are directly related with the outcomes of favourable primary and secondary stress appraisal outcomes, which therefore, counteract the inducement of strain. For buffering hypothesis to be the standard, researchers have likewise raised the importance of the existence of a non-additive interactive association between job demands and control (Van der Doef and Maes, 1999a).

Notwithstanding that Karasek (1989), highlighted control to safeguard the effect of demands at both an interactive and additive level, later studies nonetheless held contrary views, such that it was concluded that the buffering potentials resulting from control within an additive process outcome will be less prominent. This assumption is believed to be so as outcomes of the strain effect resulting from high demands will outweigh the anticipated buffering potentials of control (Kasl, 1996; Schnall et al., 1994; De Jonge and Dormann, 2006). With the introduction of the JD-C model in the stress inducement approach to the design of jobs, studies over the years have sought to explore the validity of the model's key propositions. With regards to the empirical validity of strain hypothesis, this is acknowledged to be well established within the discourse (Van der Doef and Maes, 1999; Ganster and Rosen, 2013; Crawford et al., 2010; Bond and Bunce, 2003). Sonnentag and Zijlstra (2006), elucidated that the existence of a direct outcome association between high job demands and a dysfunctional form of workplace well-being occurs because excess demands hinder work recovery which in turn results in the application of valuable resources.

Furthermore, with regards to the empirical validity contained within the interaction effect, the findings so far portray this to be somewhat mixed (Taris et al., 2003; Taris, 2006; Bakker et al., 2010). However, where support is found, studies have shown this to be inversely related to well-being outcomes (Van der Doef and Maes, 1999; Taris, 2006).

2.4.2 Extending the JD-C Model: The Job Demand-Control-Support Model

With regards to possible explanations in relation to the occurrences of weak empirical support obtained for the identified multiplicative effect, studies have attributed this to be possibly induced on the outcomes of methodological limitations (De Lange et al., 2003; Kristensen, 1995). Other studies have likewise raised the notion of psychological flexibility (Bond and Bunce, 2003), in addition to the presumption that the buffering potentials of control may be contingent on received social support (Johnson and Hall, 1988). By incorporating social support into the demand-control model, it is thought that the combined effects of these two workplace constructs will inevitably account for greater buffering possibilities within both the additive and interactive level of construct analysis.

Given that research findings on the relationship between received social support (RSS) and outcome variables have been discussed previously, such as the review of the expanded work design model, earlier studies nonetheless were not inclusive of discourse on the

associations between the social characteristics of work and well-being. Research findings on the associations between RSS and well-being, illustrate RSS to be associated with employee work-related cognitive and behavioural competencies. These competencies in turn have likewise been determined to account for greater abilities in relation to skill mastering, embedded strength use, in addition to coping mechanisms (Theorell and Karasek, 1996; Daniels and Harris, 2005; Grant and Parker, 2009; Van Woerkom et al., 2016). Subsequently, earlier studies sought to extend the demand-control model to be inclusive of social support. By integrating social support into the Job demand – Control model, the terminology Job Demand-Control-Support model thus evolved within the work design literature (Karasek and Theorell, 1990; Bliese and Britt, 2001).

Organisational research on the possible implications of social support has been categorised into various perspectives (Grant and Parker, 2009), with each perspective acting as a core framework to explain various aspects of behavioural tendencies within an organisation. However, several of these perspectives have already been highlighted within the current chapter, i.e., Demand-Control model, for instance, the job demand resource model, organisational support theory and the social undermining perspective (ibid). Additional research has likewise noted the role of RSS in the framing of task boundaries within the context of primed workplace reciprocate exchange during the formation of differentiated exchange relationships between leaders and employees (Wayne et al., 1997; Seo et al., 2017; Harris et al., 2014).

Distinct from earlier established control constructs, social support is recognised to be supportive of improved well-being. The premise leading to the above concept is based on the notion that received interactions with members of an organisation, may act as opportunities for employees to acquire relevant information on work processes, one taking the self as a core component of reference point. On the basis that intentions to engage in a task are goal directed, employees with considerable access to social capital are thought to utilise these capitals in ways that help to reduce the psychological cost incurred as regards the outcomes of exposure to undermining job demands.

The key attributes of received social support have been highlighted within literature. Concerning these is the presumption that social support could be received either from co-workers or supervisors (Ng and Sorensen, 2008). While both sources of RSS are understood to have a similar effect on the receipt, Terry et al. (1993), explained that because employees were more likely to engage in frequent interactions with fellow colleagues than supervisors,

the buffering potentials of RSS from co-workers were likely to be accompanied by more practical implications than those of received social support from supervisors. While the above illustrations are identical in conjunction with the practical implications of the role of social characteristics of work within the expanded work design model (Humphely et al., 2007), in their study, Ng and Sorensen (2008), contend that the effectiveness of RSS on well-being is contingent on the recipient's mental framing of RSS. On the basis that the mental framing of RSS from supervisors is likely to be empty of workplace power tactics with its direct implications for the attainment of personal goals, Ganster et al. (1986), therefore held the view that RSS from supervisors is more valuable to employees and as such, plays a unique role in the buffering process compared to the contentions held by Terry et al., (1993).

Moreover, the current discourse in comprehending associations between job demands and RSS from supervisors. Within this line of intellectual discourse, two distinct mediums have been proposed to clarify how RSS from supervisors may play a role in how employees choose to cope with job demands. The first of these emphasises the perceptions of the availability of social support itself. When an employee mentally decides that they are equipped with a significant amount of support from an organisation, this could go a considerable way to influencing how they may perceive this cumulative level of adverse influence on their well-being. Within this line of thought, social ties with supervisors are viewed as beneficial to employees, since with the successful build-up of relational boundaries among both parties (employees and supervisors), employees could access and thus gain from the resource core competencies that supervisors have when completing activities that have an adverse impact on their well-being.

Regarded as the existence of a mismatch amongst numerous task objectives and demands attributed to engagement in a variety of defined task roles (Rizzo et al., 1970), jobs subconsciously designed in ways in which engagement in a known task implies less resource utilisation for the understanding of a yet equally valued task, has been suggested to impair employee well-being. This sort of unexpected job design has been found to be directly related to burnout (Toker and Biron, 2012). Chung and Schneider (2002), explain that incidences of these dysfunctional types of workplace affect are more prominent within the services sector. These may also be attributed to the existence of high levels of role ambiguity following the adoption of business models characterised by a customer-centric approach to market competitiveness.

2.4.3 Received Social Support from Supervisors and Coping with Job Demands

Following previous views on the perceptions of the availability of support, it has been suggested that employees with significant relational ties with supervisors are more likely to interpret adverse work situations as less stressful. This is for the reason that perceptions of the availability of support from supervisors implies the possibility of gaining access to both instrumental and emotional support from supervisors. Likewise, it has been argued, although controversial, that such perceptions in turn may well be inversely associated with a drain on resources. While instrumental support (IS) is connected to fulfilment of task goals (Harris et al., 2007; Ganster et al., 1986), the provision of emotional support (ES), i.e., affection, caring behaviours from a resource match perspective, have been ascertained to be more relevant in protecting against burnout generated by the results of emotional exhaustion.

With both forms of supervisory support having been linked to safeguarding against health impairments, the operationalisation of these constructs nonetheless differs in terms of their accompanied impacts on personal resources and their underlying boundary conditions. As provisions of instrumental aids are tangible, their impacts on task performance are typically quick and observable. Owing to this, the provision of IS has been associated with the fostering of tangible performance rewards, workplace recognition, mastery skills and the development of self-efficacious beliefs. Furthermore, feelings of self-efficacy have similarly been suggested to be directly related to the build-up of other dimensions of personal resources (optimism and control focus), with personal resources regarded as core antecedents supportive of job demand resilience.

Contrary to the observable outcomes of the provision of ES, well-being and performance impacts explained on account of the supply of ES have been established to be less relevant and necessitating that such support be provided over time (Golan and Bamberger, 2015). It should also be mentioned that the belief that unregulated provision of instrumental support undermines the build-up of personal resources are likewise noted. In addition, it is acknowledged that the provision of substantial amounts of IS to new recruits might delay the development of mastery skills over task demands thereby having a negative impact on one's feelings of competency and self-efficacious beliefs. Toegel et al. (2013), have likewise indicated possible situations in which the provision of ES maybe subconsciously encouraged by both parties, thus resulting in difficulties, particularly in the case of receivers of ES in connecting signs of the provision of support with the overall task goals.

A yet underlying difference between IS and ES lies within the notion of experienced resource trade-offs by providers of these particular types of support. The provision of support has been discerned as not only useful as regards resource gains for both parties, but likewise the ability to provide social support might be a drain on resources and cause burnout. On account of exchange reciprocity by means of the receivers of both types of support, the idea that the provision of these supports may serve as an avenue for providers to acquire subgroups of ascribed power and the achievement of implicit motives (Yukl and Falbe, 1991; Nahum-Shani and Bamberger, 2011), do not however underscore the belief that provision of ES rather than IS may be more detrimental to the well-being of supervisors and providers of support.

In fact, it has been demonstrated that the ability to provide ES is typically more demanding than that of the provision of IS (McGuire, 2007). This implies that more valued resources are required to be sacrificed in the case of the provision of ES. Elaborating on this, Strazdins and Broom (2007), suggest why this may be so. They explained that the ability to provide ES to a colleague includes the provider regulating not just the emotions of the self, but likewise those to whom the ES are been targeted at (*ibid*; Hochschild, 1989). It should be noted that regulating self-emotions and others have typically been assumed to be a specific dimension of emotional labour. Meta-analytical studies conducted by Hülshager and Schewe (2011), revealed results in which emotional labour directly explained observed variations in emotional exhaustion. Within this same area of interest, the conclusions of studies by Bono and Vey (2005), likewise offered similar contentions as to those established by Hülshager and Schewe (2011).

The practical implications of the above discern lies within the notion that because the provision of ES is continuous over time and emotionally demanding, the provision of ES is thus expected to illustrate the resources available for ES providers and in so doing, undermine their overall potential to recover from burnout. In their publication, Figley (2002), describe the idea of the spill-over of burnout form receivers of ES to providers of ES as “compassion fatigue”. Considering the above examples, Luchman et al. (2013), explain that the support from supervisors is not necessarily subject to provisions of IS and ES but could in fact be structural. They stress that because supervisors possess meaningful influence over the design of jobs, by way of the development of valued interpersonal ties, employees and supervisors could engage in diplomatic negotiations (i.e., I-Deals). This may typically lead supervisors to draw upon their organisational influence to change aspect of the working environment. Such a change will ordinarily be directed in a way that aims to improve the meaningfulness component of work when employees’ are engaged in work (*ibid*).

With the inclusion of social support within the JD-C model, researchers have sought to examine the validity of the additive and multiplicative effect of work features and whether they significantly explain the occurrence of both strain and buffer hypothesis. Like the JD-C model, the effects of the dysfunctional form of well-being were viewed to be the consequences of jobs with high demands, low control and low support. Within this discourse, social support is understood to protect from the possible occurrences of strain within the JD-C model. From this, Johnson and Hall (1988), suggested the possibility of a three-way interaction relationship, in which social support moderates the impacts of the relationship between control and job demands.

Given that the introduction of social support was in its infancy during the meta-analytical studies of Van der Doef and Maes (1999), Hausser et al. (2010), a more recent meta-analytical study was conducted with the aim of providing answers to a number of conceptual issues contained within the JD-C and JD-CS models. Specifically, Hausser et al. (2010), sought to understand the practical relevance of the additive and interaction effects of both these models, such that the focus was on determining if much support exists for a three-way interaction effect (ibid). While gender and homogeneity within sample characteristics have been suggested to act as moderators producing support for the premises contained within these two models (Van der Doef and Maes, 1999; de Lange et al., 2003), the need to critically evaluate the role of content in relation to the validity of the premises are similarly highlighted as being reasonable for conducting a revised meta-analytical study of the JS-C and JD-CS models (Hausser et al., 2010).

Combining research findings from a total of 83 studies, Hausser et al. (2010), ascertained adequate support for the additive effect amongst associations between demand, control and social support on general well-being outcomes and that such support was expected to be replicated within studies utilising large sample sizes (ibid). From a methodological point of view, the results of Hausser et al. (2010), further communicate that regarding the additive effect validity was significant in studies employing a cross-sectional methodological framework in contrast to those using a longitudinal approach. The practical implications of this study further clarified earlier debate with regards to support for a three-way interaction. In this instance, Hausser et al. (2010), concluded that similar to the results observed within the JD-C model, support for a three-way interaction effect was determined to be reasonably weak. Taris (2006), had earlier suggested that the buffer hypothesis may also be an unrealistic proposition but continues to attract the interest of studies. Hausser et al. (2010), objected to

presumptions of Taris (2006) and explained that the considerable fit between demands dimensions and control were more likely to be associated with valid interaction effects.

2.5 The Motivational-Stress Inducement Approach to Work Design

An evaluation of the argument put forward by Hausser et al. (2010) as regards the fit between demands and control illustrates that job demands within the workplace could manifest in various ways. This therefore illustrates that the buffer effect will likely result from workplace interventions that sufficiently address unsatisfied workplace needs accompanying developing job demands. While this could intuitively be contended as justifying the need to extend the JD-C model, the stress inducement approaches to work design in addition to the premises contained within the motivational approaches have been disparaged on several grounds. For instance, while motivational approaches to the design of jobs have failed to account for the role of health impairment in directing motivational processes, Cox et al. (1993), asserted that experiences of health impairment processes were inversely associated with work motivation. Following this, it has been claimed that perceptions of loss spiral were significant components of self-concepts within the working environment. This component of knowledge of the self has likewise been assumed to be capable of directing construal views of work meaningfulness and work motivation thus developing our understanding regarding the interconnections between stress and motivational process in generating numerous dimensions of employee outcome variables (Bakker et al., 2008).

2.5.1 The Job Demand-Resource (JD-R) Model

With the advent of the interdependent nature of stress and motivational processes, in addition to those of the simplicity and static features of models contained within the motivational and stress perspective in regard to job design (Bakker, 2014), Bakker and Demerouti (2001), developed a comprehensive framework illustrating the antecedents of exhaustion and disengagement. The framework titled: “the job demands-resources model of burnout” emerged from a substantial number of the earlier studies, particularly the meta-analytical studies conducted by Lee and Ashforth (1996), in addition to the research of Maslach et al. (1996).

Grounded within the conservation of resource theory, with further insights drawn from Hockey's (1997) compensatory control model, the JD-R model of burnout hypothesised two vital developments concerning burnout. Bakker et al. (2001), postulated that sustained high levels of job demands characterised with recovery deficiencies are directly associated with feelings of exhaustion, generate burnout and as a consequence job disengagement (Demerouti et al., 2001; Schaufeli and Taris, 2014). The second hypothesis relating to the model contends that job resources are critical in addressing withdrawal intent and that unlike the JD-CS model; job resources are not limited to perceptions of job control and support only, but rather compressive in nature (Bakker et al., 2001). While work demands are conceptually linked with exhaustion, job resources on the other hand are associated with work activities (Demerouti et al., 2001; Bakker et al., 2005; Hansen et al., 2009).

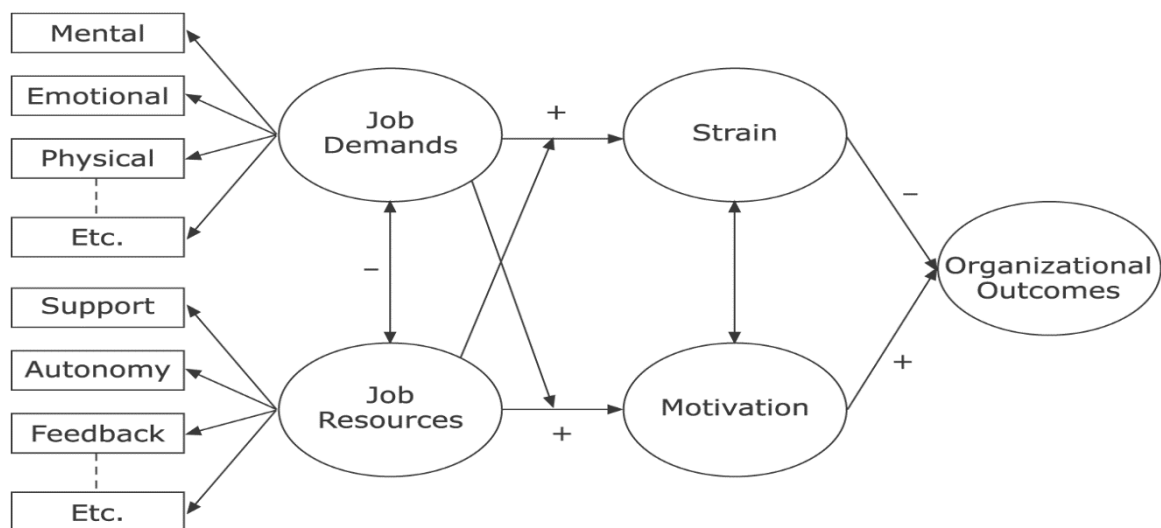


Figure 2.2 The Revised Job Demands – Resources Model

Source: Bakker and Demerouti, 2007

Identical to the concepts included in the JD-C model, conceptual embodiments within the JD-R model further illustrate job resources to protect (directly) against the interactive outcomes of job demands and exhaustion. While the earlier version of the JD-R model focused on the interactions between demands and job resources in causing episodes of exhaustion and disengagement, a revised version of the model was later introduced. The most important

dissimilarities between these versions were that while the JD-R model developed by Demerouti et al. (2001), communicates the antecedents of negative workplace outcomes, the revised JD-R model by Schaufeli and Bakker (2004), sought to communicate the determinants of both a negative and positive process outcome resulting from workplace interactions. Within the revised version, strain (burnout) was identified as the mediating variable of the relationship between job demands and health problems with well-being (work engagement) identified as a mediator of the relationship between job resources and positive outcome variables (ibid).

With the inclusion of mediators within the revised version, two distinctive interactive mechanisms emerged: health impairment and motivational process. The health impairment process simply refers to observed direct associations between burnout and experienced depression, along with psychosomatic complaints (Schaufeli and Bakker, 2004). This sort of association was similarly presented as resulting from working conditions characterised by high job demands and shortcomings in job resources. From the studies undertaken by Meijman and Mulder (1998), Schaufeli and Bakker (2004), determined the motivating potentials of job resources. These resources are such that they are regarded as a typical form of workplace contingencies comprising contingencies supportive of the desired components of employees' workplace needs thus, encouragement to act (i.e., motivation).

Other than the influential nature of job resources, Schaufeli and Taris (2014), likewise illustrate that due to the nature of these resources in assisting the attainment of vital human needs with respect to control, relational and competence – job resources by their virtue have intrinsic motivating potential (Nahrgang et al., 2011; Bakker, 2011; Deci and Ryan, 2000). When essential and other helpful needs contingencies are met, Schaufeli and Bakker (2004), contends that these states of human fulfilment explain the reasons for engaging in one's job, with engagement further producing incidences of positive work-related results, which therefore mediate the associative outcomes between job resources and positive outcomes.

More than a decade after its introduction, the JD-R model has developed to be the dominant model in relation to the antecedents of numerous work outcomes. Bakker and Demerouti (2014), explained that this was because of the flexibility features associated with the model. Its use in the literature is observed to be extremely significant throughout studies on work outcomes, such as task enjoyment and organisational commitment (Bakker et al., 2010). The application of the JD-R model has likewise been adopted for studies into the nature of task connectedness in addition to sickness absenteeism (Schaufeli et al., 2009;

Clausen et al., 2012; Lewig et al., 2007). Moreover, studies have also adopted the JD-R model in the study of work engagement amongst medical doctors. In fact, job resources have been determined to relate positively with work engagement. In addition, work engagement was discovered to relate negatively with errors/mistakes made by medical doctors. The results from this study demonstrate work engagement to have correlations with workplace mindfulness.

2.5.2 Advancement in the JD-R Model: Decomposing Job Demands

Though most studies implementing the JD-R model tend to give empirical support for the premises of the JD-R model, a number of studies nonetheless have proposed that demands may not necessarily be accompanied with a reduced state of needs fulfilments. Extending further on this, earlier works by Ashforth and Humphrey (1993), corroborates the belief that job demands, such as emotional labour may redefine how one may choose to interact with others within an organisation and that such a redefinition could subsequently have an impact on job satisfaction. It is argued that these demands enable the predictability of work interactions which in turn generates proactive tendencies whilst a person is engaging in their work.

Following the researches of Ashforth and Humphrey (1993), Cote and Morgan (2002) examined associative outcomes between emotional demands and job satisfaction. Their study noticed these two constructs to be directly associated. The study completed by De Jonge et al. (2008), was amongst several studies which endeavoured to replicate the findings of Cote and Morgan (2002). In contrast to previous studies illustrating non-significant relationships between labour demand and outcome variables (De Jonge and Dormann, 2006), DeJonge et al. (2008), established these associations to be directly significant. Previous studies by Heuven et al. (2006), confirm the core tenet associated with the JD-R theory – the existence of a negative relationship between job demands and indicators of employee well-being.

As an attempt to discern inconsistencies in results, Xanthopoulou et al. (2013), suggested that inconsistencies in findings were most likely as a result of the presence of a moderating variable. Bakker and Demerouti (2007), discovered that emotionally demanding working conditions (i.e., pupil misconducts) enhanced the motivating potentials of job resources on work engagement. Following the above results, Tims and Bakker (2010), argued in support of the relevance of challenge demands for job resources to have its intended effect

on work engagement. Further developments within this subject of enquiry is that of the notion that observed direct associations between job demands and employee well-being depends on the dimension of the type of demands (Bakker and Demerouti, 2014; Tadic et al., 2015).

Meta-analytical studies conducted by Crawford and Rich (2010), explained perceptions as regards the nature of job demands. Their study ascertained that while job demands were negatively associated with well-being, not all demands are operationalised in the same way. For instance, some demands have been established to be supportive of the achievement of intrinsic and/or contingent motives. Crawford and Rich (2010), thus separated demands into challenge and hindrance job demands with the former directly associated with work engagement and the latter inversely. Lepine et al. (2005), describe hindrance job demands as negatively appraised demand adversities. Due to their negative influence on the fulfilment of basic human needs including those of aspirations for the attainment of personal growth and goal striving, it has been argued that hindrance job demands are directly associated with an increased loss spiral (ibid). Though while challenge job demands requires the sacrifice of valued resources, its harmful impact on well-being is understood to be minimal. This is because these aspects of job demand operate in a similar way to job resources given that challenge job demands are connected to the satisfaction of personal growth and goal attainment and hence, compensate for the sacrifice of required resources together with motivating potentials.

With the integration of demand dimensions into the work design literature, Tadic et al. (2015), wanted to determine the role of job resources amongst these aspects of job demands. In line with Bakker and Oerleman's (2011) well-being subjectivity construct, Tadic et al. (2015), posited that job resources will moderate or protect the anticipated variance associations between hindrance demands concerning experienced daily positive affect and daily work engagement. A similar hypothesis was identified with regards to associations (or boosting effect) amongst job resources, challenge job demands, positive affect and work engagement (ibid).

The results of studies by Tadic et al. (2015), revealed support for the hypothesized model overall. Subsequently, it was therefore concluded that job resources will prompt work engagement to the extent where high level challenges rather than hindrance demands are integrated into the design of work. Specifically, Tadic et al. (2015), established that jobs with high challenge demands are associated with reasons to engage in the proactive use of the available job resources. This attribution is further illustrated to be so because of the notion

that challenge job demands stimulates an emergent need in illustrating a person's competency which in turn generates engagement stimulation. Furthermore, practical uses of job resources have likewise been suggested to create experiences of daily positive affect and work engagement (Demerouti and Bakker, 2011).

Similar to studies by Tadic et al. (2015), Bakker and Sanz-Vergel (2013), assumed that work pressures will be perceived as more of a hindrance demand and emotional demands as a challenge demand. Bakker and Sanz-Vergel (2013), further posited that perceptions of demand dimensions will moderate the relationship between person resources on i) weekly work engagement and ii) weekly flourishing. While studies by Tadic et al. (2015), controlled for the effect of personal resources, other significant developments in the JD-R model examine the role of personal resources within the health and motivational process (Bakker and Demerouti, 2014).

Conceptualised within the resilience construct, personal resources refer to internalised self-schemas of one's ability to address and modify the directions of environmental influences on activities relating to the self (Hobfoll et al., 2003). These categories of resources have been studied and observed to be related to several desired outcomes, such as goal setting, task performance and life satisfaction (Judge et al., 2004). Personal resources are considered to be supportive of outcome variables given that inculcation of these resources is directly associated with positive self-evaluations. Evaluations in turn have been highlighted as being agreeable with the desired self (Judge et al., 2015), thus resulting in the satisfaction of intrinsic motives that produce increased task performance (Luthans and Youssef, 2007).

Amongst earliest studies incorporating personal resources within the JD-R model is that of studies undertaken by Xanthopoulou et al. (2007). Their study examined the role of three personal resources, for instance self-efficacy, organisational-based self-esteem and optimism within the motivational and health impairment hypotheses of the JD-R model. Here, it was hypothesised that personal resources will moderate (inversely) the relationship between four job demands, i.e., workloads, emotional demands, emotional dissonance and organisational change, besides feelings of exhaustion. While results from this study did not support the above moderation hypotheses, evidence for the meditational effect of personal resources within the motivational hypothesis of the JD-R model was noticed. Empirical evidence of the meditational effect as found by Xanthopoulou et al. (2007), illustrates the notion that job resources contributed to the development of personal resources (ibid Bakker and Demerouti, 2014). While studies by Xanthopoulou et al. (2007), were cross-sectional in

nature, Xanthopoulou et al. (2009), sought to examine the longitudinal relationship between job resources, personal resources and work engagement. Xanthopoulou et al. (2009), noted that job and personal resources at time 1 (T1) is directly associated with work engagement in a future period (T2). This study likewise determined work engagement at T1 to be positively related with job and personal resources at T2. Similar studies were further conducted by Xanthopoulou et al. (2009).

In contrast to previous studies, Xanthopoulou et al. (2009), examined the role of day-level personal resources on the relationship between day-level job resources and day-level work engagement. Their study was likewise inclusive of the lagged effects of job resources at a specific period on i) personal resources ii) work engagement and iii) financial returns on subsequent days. In their study, Xanthopoulou et al. (2009), established support for the hypothesis of their study. Specifically, it was discovered that day-level coaching is positively associated with day level work engagement such that engagement in turn explains daily financial returns (ibid).

2.5.3 Job Crafting: A JD-R Perspective

Although the above theoretical discourses are characterised as subsets of the top-down approach to job design, this approach aims to change aspects of employees' experiences of work by changing the nature of jobs/work conditions (Tims and Bakker, 2010), by way of modifications made by an organisation (Holman et al., 2010). These changes are such that they are highly systematic with the ultimate purpose being that of the relevance of causing occurrences of positive psychological states of affects and work attributes (Parker et al., 2001; Fried et al., 2007; Grant and Parker, 2009; Parker et al., 2017).

With over three decades of job design research, considerable understandings have so far been reached in terms of the effect of job features on employees' attitudinal, well-being and behavioural tendencies. Understandings are likewise inclusive of varying contextual and individual conditions promoting such associations. Others are nonetheless of the opinion that the associative impacts of job design interventions are relatively low to moderate as opposed to one which is high (Parker et al., 2001; Demerouti and Cropanzano, 2011; Humphrey et al., 2007). Commenting on this, Fried et al. (2007), suggested that the current understanding of the impact of job design are not integrative of the role of situational context in directing

experiences of work-related affects and hence, the associative impact of work design on behavioural and attitudinal outcomes within the organisation.

Within this discourse, individualised frameworks of job design appeared. Individualisation, refers to the integration of individuals as a point of reference in shaping work environments relating to either themselves or those of others and vice versa. Based on this, two distinct perspectives within the literature on job design research have been noted to be unfounded: i) the relational perspective and ii) the proactive perspective (Grant and Parker, 2009). The relational perspective to job design focuses on the social characteristics of jobs in impacting individual's experiences of work (Ibid). In contrast to the personal perspective, the proactive approach focuses on self-initiated actions as an attempt to change the nature and/or impact of the work environment on employees themselves (Ibid Demerouti and Bakker, 2014; Frese and Fay, 2001).

In their dynamic model of work design and proactive behaviour, Grant and Parker (2009), illustrates reasons to engage in proactive behaviours to be contingent on work characteristics, with perceived ability and opportunity as the process mechanism. Engagement in proactive behaviours was likewise argued to be influenced by several moderating variables: proactive personality, core-self-evaluation and cognitive ability.

As illustrated with in the conceptual model above, proactive behaviours are such that they act not only as an endogenous outcome of interest, but also as a determinant of work characteristics via a number of work-related adjustment mechanisms (Grant and Parker, 2009). The earliest framework explicitly illustrating the changes employees may make when participating in jobs can be connected to the works of Wrzesniewski and Dutton (2001). Though the notion of employees single-handedly changing aspects of their work environment dates further back to the works of Kulik et al. (1987), who explained that employees may engage in task adjustment without consulting management, Wrzesniewski and Dutton (2001), nonetheless coined and introduced the concept of job crafting within the literature pertaining to job design.

Conceptualised as alterations in the physical, cognitive and relational boundaries of tasks when performing in jobs (Wrzesniewski and Dutton, 2001), the literature on job crafting has over the years been suggested to have complemented current understanding of the subject matter related to job design (Fried et al., 2007). Wrzeniewski and Dutton (2001), asserted that in an attempt to enhance the meaningfulness component of their job, employees engage in

crafting activities. Additionally, self-initiated changes could occur either by modifying task related dimensions of the job (roles), interactions with others and by changing cognitive beliefs about the job (Wrzeniewski and Dutton, 2001). These changes are such that they are performed in ways that facilitate the satisfaction of basic needs as regards control, positive self-worth and relatedness (ibid).

In addition to Wrzeniewski and Dutton's (2001) job crafting dimensions, it has also been suggested that crafting activities could manifest in several dimensions. Studies by Lyons (2008), communicate outcomes in which salespeople engaged in proactive steps towards skills development. Similarly, it is illustrated that under specific work situations, employees may deliberately abstain from initiating relational contact with irritating customers (Grant and Colleagues, 2010). While rating dimensions identified by Lyons (2008), have received less attention within the literature in relation to job crafting (Tims et al., 2011), illustrations posited by Grant and Colleagues (2010), have become significant as studies have endeavoured to explain if experiences of stressful job demand account for motivations in engaging in job crafting activities (Petrou et al., 2012; Tims and Bakker, 2010).

Adopting the JD-R perspective, Tims and Bakker (2010), defined job crafting as self-initiated modifications in one's job characteristics. Specifically, job crafting refers to proactive steps initiated by employees in arriving at an optimal combination of experiences of job demands and job resources. These combinations are such that they are guided on the basis of employees' perceived abilities and ongoing emergent needs (Ibid). Following this, in addition to the results of the meta-analytical studies conducted by Podsakoff et al. (2007), likewise those of Crawford et al. (2010), job crafting has recently been explained to refer to work adjustment involving: the expansion of resources and challenge seeking and contractions of demands (Petrou et al., 2012; Demerouti and Bakker, 2014). The above ideological stance is identical to the conclusions presented by Petrou et al. (2012), who illustrated that motivations to engage in job crafting arise on account of employee's wishes to protect valued resources and desired affective workplace states.

With the integration of job crafting within the job design literature, prominent personnel have argued against the detrimental impact of job crafting activities within organisations. For instance, Oldham and Hackman (2010), explains that when employees engage in hindrance job crafting and depending on the significance of these demands for organisational efficiencies, engagement in hindrance job crafting can also imply a lack of concern for a colleague's well-being/welfare. The premise illustrated here is that engagement

in hindrance job crafting has the potential to spread its dysfunctional effect on to others, as additional job demands are being transferred to a fellow colleague. For the reason that the receiving colleague will be required to relinquish additional desired resources in accommodating increased job demands, engagement in hindrance job crafting has been identified as a possible trigger of poor well-being within an organisation (ibid Karau and Williams, 1995; Fox et al., 2012). Although contentions by Oldham and Hackman (2010), lacked empirical backing, the examination of such an assertion was initiated by Tims et al. (2015), whose work could be regarded as an improvement of earlier studies conducted by Aube et al. (2009). In their study, it was hypothesised that hindrance job crafting by an employee will be positively related with increased workload and the role conflict of other employees.

Tims et al. (2015), further illustrated that the resulting workload and role conflict of B will be directly related with B's experiences of burnout (exhaustion and disengagement) such that B's experiences of burnout will mediate the relationship between A's engagement in hindrance job crafting and B's experiences of burnout. Support for the model postulated above was realised following which Tims et al. (2015), recommended engagement in collective job crafting. The recommendations made are more effective for work situations where numerous individuals independently wish to engage in hindrance job crafting. In such occurrences, employees are required to consought themselves in arriving at an agreement on the exchange of role adjustment amongst themselves prior to individuals initiating the proposed role adjustment (ibid).

Moreover, researchers have endeavoured to combine JD-R theory and job crafting in explaining the influence of hindrance job demands, in focus, customer impoliteness regarding employees' job performance. Specifically, it was discovered that although customer impoliteness impairs employees job performance by means of its positive influence on employees' emotional exhaustion, the strength of the undermining influence was less strong among service employees who experienced high job crafting (Shin and Hur, 2021). Recent studies in the job crafting literature have likewise focused on understanding the significant implications of job crafting intervention (Verelst et al., 2021; Demerouti et al., 2021; van Leeuwen et al., 2021), with a particular interest in understanding the conditions under which job crafting interventions promote actual job crafting behaviours (Knight et al., 2021).

2.6. Work Engagement

Of crucial relevance with the study of work design is that of the impact of effective design work in encouraging motivational states within employees (Parker et al., 2001). Previous research has ascertained a direct positive relationship between the three dimensions of work design and indicators of mental well-being, particularly that of work engagement (Mauno et al., 2007; Freaney & Tiernan, 2009). Work engagement is regarded as an important motivational state that has significant implications for both employee and organisational performance (Christian et al., 2011; Taris and Schaufeli, 2013; Van Beek et al., 2013). The importance of work engagement pertaining to organisational functioning has subsequently attracted the interest of practitioners wherein resources are directed towards conducting research that addresses questions relating to interventions that boost and sustain employee work engagement (Halbesleben, 2010; Christian et al., 2011; Biggs et al., 2014).

The concept of work engagement was first introduced in the organisational psychology literature by Kahn (1990). At this point, work engagement is conceptualised as a work-related experience capturing the degree to which an employee merges the self with their work role. Within the context of work and the self, the employee emerges the self physically, cognitively and emotionally with the roles associated with the work. Contrary to the concept of burnout – “a state of mental and physical exhaustion caused by one’s professional life” employees experiencing burnout are characterised by a loss of energetic resources that result in poor commitment and investment of the self in relation to the roles associated with one’s work (Freudenberger, 1974). Research over the years has consistently found burnout to be positively associated with an unfavourably affective and attitudinal state with respect to the self as regards one’s work. This is evident from consistent findings that have positively linked burnout with feelings of emotional exhaustion, depersonalisation and a general decline in perceptions of control and general feelings of work competency (Maslach and Jackson, 1981; Maslach and Leiter, 2008; Schaufeli et al., 2009).

Earlier studies on the antecedents of burnout confirmed that feelings of burnout were connected with chronic affective and social stressors associated with the work environment (Etzion, 1984). This led to the view that symptoms of burnout were prevalent within professions that required significant interactions with others. Later studies nonetheless observed burnout symptoms to be applicable throughout numerous occupational settings (Maslach et al., 2001; Shirom and Melamed, 2006). This brought about the reconceptualisation of the Maslach Burnout Inventory-General Survey, in which the

depersonalisation and diminishing personal accomplishment component of the burnout instrument was replaced with cynicism and professional efficacy, respectively (Schaufeli and Buunk, 1996). Over the years, additional measures of burnout have resurfaced with the Oldenburg Burnout Inventory (Demerouti et al., 2003; 2010) and the Shirom-Melamed Burnout Measure (Shirom and Melamed, 2006), as alternatives to the Maslach Burnout Inventory-General Survey.

In contradiction to the symptoms associated with burnout, engaged employees develop and sustain a sense of energetic and compelling connection with their work. Maslach and Leiter (1997), argued that engagement consists of three principal components - energy, involvement and feelings of efficacy. These components are further illustrated to be the antithesis of the three dimensions pertaining to feelings of burnout - exhaustion, cynicism and ineffectiveness (Maslach and Leiter, 1997; Cole et al., 2012). Systematically, this led to the view that engagement could be measured by the instrumental scores opposite to the three dimensions of the Maslach Burnout Inventory-General Survey. This argument was supported by the findings of a meta-analysis that portrayed correlations between work engagement and burnout (Cole et al., 2012).

Nonetheless, a number of other scholars posit that work engagement is a work-related experience in its own right, having unique antecedents wherein engagement is argued to be negatively related to burnout (Demerouti et al., 2010; Crawford et al., 2010; Nahrgang et al., 2011). At this point, Schaufeli and Salanova (2011), highlighted that the absence of feelings of burnout by an employee does not imply an immediate state of work engagement. It is posited that correlations between the work engagement and burnout are small enough to permit the simultaneous occurrences of both states (Halbesleben, 2010).

Theoretically, such distinctiveness lead towards the stance that work engagement and burnout correlated differently in relation to the various dimensions of individual, task and social characteristics of work. Longitudinally, this implied that experiences of work engagement should subsequently have incremental impacts on burnout (Hakanen and Schaufeli, 2012). Moreover, both constructs are alleged to correlate dissimilarly with the big-five personality traits (Langelaan et al., 2006). Conceptually, the distinctiveness of these two constructs have led to researchers asserting that work engagement and burnout represent connected yet opposing forms of well-being (Schaufeli and Salanova, 2004).

2.6.1 Contemporary Issues in Work Engagement and Burnout Studies

Considered as an antidote for burnout, the conceptualisation of work engagement has over the years been inferred to as ‘... a positive, fulfilling, work-related state of mind that is characterised by vigour, dedication and absorption’ (Schaufeli et al., 2002, p.74). Following the theoretical conceptualisation of work engagement and burnout, numerous studies have been conducted to unravel the antecedents of both constructs. At the centre of these studies are questions relating to the nature and the role of work conditions in stimulating work engagement and burnout (Tremmel et al., 2019; Bakker et al., 2006). Following this, numerous mediation and moderation models have been developed as an attempt to explain why and when do some employees become prone to symptoms of burnout (Garrick et al., 2014; Schmitt et al., 2016). Despite the fact that numerous theoretical approaches have been adopted to explain the causes of burnout, there is unanimity among scholars that the causes of burnout can be categorised into three major themes (Schaufeli and Enzmann, 1998), namely individual (intrapersonal factors), interpersonal (burnout resulting from interactions with others) and organisational (the resulting impact of a mismatch between the person and the job). Moreover, further research posits the causes of burnout into two general categories - situational and individual factors (Bakker and Demerouti, 2008).

From a situational perspective, aspects of the work environment requiring physical and emotional efforts are believed to be the primary causes of burnout (Lee and Ashforth, 1996; Demerouti et al., 2001). A key theme reoccurring frequently within this perspective is the idea that job demands are the most significant predictors of burnout (Lee and Ashforth, 1996; Alaron, 2011; Macey and Schneider, 2008; Christain et al., 2011; Byrne et al., 2016). This is in disagreement with the view that a lack of job resources is an important cause of burnout. The results of meta-analysis performed by Lee and Ashforth (1996), demonstrated role stressors (role ambiguity, conflict and overload), workload and work pressure to be the cause of exhaustion and depersonalisation. Similar findings were replicated in another meta-analysis study where Alarcon (2011), revealed that role conflict, role ambiguity and workload were significant predictors of burnout. It is worth noting that display rules refers to organisational norms defining the acceptable expression of outward emotions during employees’ interaction with their job (Ashforth and Humphrey,1993). Here, emphasis is placed on emotions which are publicly perceptible rather than employees’ genuine feelings.

Even though the prevalence of display rules has been linked with emotional exhaustion (Wilk and Moynihan,2005) and ill-health (Schaubroeck and Jones,2000),

stipulation to asseverate negative emotions was determined to have minimal impact on burnout (Zapf and Holz, 2006). Consequently, many have examined the impact of emotional dissonance; the degree of discrepancy between display rules and employees' true emotions concerning burnout. This is because conceptually, emotional dissonance is regarded as an emotional demand given that the experience of emotional dissonance requires employees to proclaim unfelt emotions. Such an assertion can ultimately demand the use of emotional energy thereby subsequently producing feelings of emotional exhaustion (Lewig and Dolard, 2003).

While job demands are considered as the primary cause of burnout, job resources are posited as the primary predictor of work engagement (Halbesleben, 2010; Bakker and van Wingerden, 2021; Kundi et al., 2021). Job resources such as having high decision latitude have consistently been linked with higher levels of work engagement (Mauno et al., 2007). In addition to control, task variety, feedback, leadership and the availability of social support are core job resources positively associated with work engagement (Christian et al., 2011; Scharp, et al, 2021; Wibawa and Takahashi, 2021). While much of the literature emphasises that job demands are negatively associated with work engagement, the strength of this association is nonetheless less when compared with the relationship between job resources and work engagement (Halbesleben, 2010). Moreover, contemporary studies have illustrated that not all job demands necessarily have the conceptual feature of energy depletion (Van den Broeck et al., 2010; Tims et al., 2013) and that the impact of job demands on work engagement will depend on the type of job demand in question. Specifically, certain research has determined challenge job demands such as time pressure and workload to be positively related to work engagement (Xanthopoulou et al., 2009). These demands are explained to be motivational given that they are functional in accomplishing task goals (Crawford et al., 2010; Van den Broeck et al., 2010).

Challenge demands are distinct from job resources because these demands are positively associated with both work engagement and burnout. Job resources on the other hand are positively associated with work engagement and negatively associated with burnout (Crawford et al., 2010). While challenge demands are instrumental in relation to goal accomplishment thus having an autonomous and motivating feature, hindrance job demands undermine the successful achievement of task goals and therefore, act as a form of constraint on rewards (Dorman and Zapf, 2004).

Administrative difficulties, situational constraints, role conflicts and role ambiguity are examples of job demands assumed as undermining the accomplishment of task goals (Crawford et al., 2010). Demographically, those employed on occupational roles reflecting higher managerial positions have generally scored higher on work engagement thereby highlighting the unique role of demographics in affecting work engagement. It has been explained that this occurs because of the abundance of job resources associated with managerial positions (Schaufeli et al., 2007; Mauno et al., 2007; Fürstenberg et al., 2021). Furthermore, individual predispositions such as the possession of feelings of self-efficacy, optimism (Xanthopoulou et al., 2007) and trait like resource features, such as extraversion and lower neuroticism is likewise presumed to be associated with work engagement (Langelaan et al., 2006).

2.6.2 Work Engagement Interventions

Research on the antecedents and consequences of work engagement encouraged later studies whose aim was to evaluate the effectiveness of work engagement interventions (Biggs et al., 2014; Knight et al., 2017; Vuori et al., 2012). In this regard is the understanding that job resource interventions related well with task performance. Hitherto, interventions on the basis of the physical aspect of the work environment are observed to be effective in improving the absorption component of work engagement (Coffeng et al., 2014). This form of intervention largely relies on influencing or increasing the availability of job resources (Naruse et al., 2015). This approach to work engagement interventions and its impact on work engagement are strongly associated with the motivational processes underpinning the job demand-resources model of work.

In addition to job resource building interventions, others have sought to enhance employees' experiences of work engagement through the development of leadership workshops. These workshops comprise training designed to improve the knowledge and skills of managers and its consequential impact on employees' work engagement of (Rigotti et al., 2014). Facilitated by employees' perceptions of work-culture support and strategic alignment, leadership interventions were determined to positively impact work engagement (Biggs et al., 2014). Conversely, while evidence of the positive impact of leadership interventions on work engagement was found within German samples, this positive effect was not replicated with Swedish samples (Rigotti et al., 2014). In terms of the effectiveness of leadership training

interventions on work engagement, findings have so far been inconsistent. This has led to the view that the effectiveness of leadership interventions will ultimately be conditional upon context, such that the success of these interventions is depended on how best these training workshops align with employees' circumstances and the current needs of an organisation (Nielsen et al., 2010; Briner and Walshe, 2015).

From the conceptual underpinnings associated with the motivating potentials of personal resources, studies have been conducted concurrently to examine the effectiveness of personal resource interventions as an alternative to job resources in order to improve work engagement. The primary aim of these interventions is to initiate and sustain within employees, the development of positive self-attributes and strengths (Ouweneel et al., 2013). These interventions are thought to relate with work engagement given that positive self-attributes help in the development of feelings of resilience which in turn assist in proactively dealing with job demands and improving employees' well-being (Bakker et al., 2007).

For those previously low on work engagement, personal resource building interventions have been established to relate positively to work engagement (Ouweneel et al., 2013). This finding corroborates the arguments posited by Briner and Walshe (2015), who highlighted the relevance of examining the need for interventions in advance of the actual implementations of job resources. However, further researches have found these interventions to boost only some of the components of work engagement. For instance, while a positive and significant effect between personal resource interventions and all three components of work engagement were unearthed in a variety of studies (Sodani et al., 2011), non-significant relationships were found in all of the work engagement sub-components (Vuori et al., 2012; Chen et al., 2009).

Proceeding personal resource interventions are interventions designed to foster healthier lifestyles and the minimisation of feelings of stress among employees. Unequivocally, interventions in agreement with relaxation and psychological detachment are acknowledged to be able to positively impacting employee well-being and the direction of work engagement (Tims et al., 2014; Strijk et al., 2013). The feelings associated with the positive affect of participating in exercise and other related social activities may help in developing employees' thought processes that subsequently develops actions and the development of personal resources (Fredrickson, 2000; Sonnentag et al., 2010). Mindfulness training intervention such as the Mindfulness-Based Stress-Reduction (MBSR) training

programme is yet another form of health promoting interventions that it is argued relate with work engagement (Fredrickson et al., 2008; Chiesa and Serretti, 2009).

In this case, mindfulness training interventions are alleged to generate greater internal awareness, which in turn facilitates employee awareness and acts in accordance with ones' unique self with consequential outcomes being the stimulation of autonomous motivation and work engagement (Meyer and Gagne, 2008; Kernis and Goldman, 2006). It should also be mentioned that findings on the effectiveness of health promotion interventions have also been mixed, with some research reporting significant relations only within the vigour dimensions (Strijk et al., 2013), some reporting no effects (Van Berkel et al., 2014), whilst another revealed a minute significant effect (Imamura et al., 2015).

While some claim that the role of context and relevance is a core feature underlying the success of these interventions, studies have nonetheless asserted that despite these interventions, employees still report on resource shortages. This indicates that these interventions have not translated into a better job or personal resources for employees. This is shown to occur because interventions that seek to enhance resources are somewhat difficult to implement (Venz et al., 2018). This has resulted in interest in investigating whether and through what mediums can employees themselves prevent a harmful outcome as a result of a lack of resources (Halbesleben et al., 2014). Selective optimisation with compensation (SOC) has been discovered to be a unique form of employees' use of self-management strategies through which employees may counteract the negative effect of a lack of resources (Abele and Wiese, 2008; Wiese et al., 2000; Venz et al., 2017). Conceptualised as the interaction of diverse cognitive and behavioural methods encompassing the selection and ranking of goals according to goal relevance, in addition to procedures for goal pursuit, SOC is ascertained to relate positively to numerous indicators of healthy work functioning. Specifically, SOC is positively related with in-role performance. Its positive associations with work engagement have further been confirmed by subsequent studies, such as Weigi et al., (2014). Findings have likewise illustrated that SOC effectively compensates for work circumstances characterised by poor job and personal resources (Young and Steelman, 2017; Demerouti et al., 2014).

2.6.3 Self-Determination Theory and Work Engagement

Originating from studies pertaining to cognitive evaluation theory (Deci and Ryan, 1980), self-determination theory (SDT) is an explanatory mechanism through which job demands and resources tend to have a motivational effect on employee work attitudes and behaviours (Van den Broeck et al., 2008; Fernet et al., 2013). At the core of SDT is the hypothesis that employee well-being and their motivation towards work is largely dependent upon the satisfaction of basic psychological needs. These needs have been identified as i) needs for control over the outcome of one's work, ii) the need to connect with others within the workplace, and iii) the need to feel competent (Van Beek et al., 2012). Upon satisfaction of these needs, an employee's sense of self-determination is stimulated. SDT suggests that employee work behaviours are a function of the type of motivation an employee derives from their interaction with work (Ryan and Deci., 2000; Fernet et al., 2012). Hence, SDT categorises motivation into different levels based on how one's job satisfies the individual's basic psychological needs. Here, motivation have been categorised into two broad themes, intrinsic and extrinsic motivation.

Intrinsic motivation refers to activities which are autonomous in nature. Motivation stems from the activity itself thus motivation within this category is independent of the presence of external stimulus (Cerasoli et al., 2014). Intrinsically motivated employees perceive their job to be fun and interesting. This in turn results in a superior sense of well-being for employees. Employees in turn invest themselves whole-heartedly into their work as they display greater commitment and organisational citizenship that gives rise to a better performance from the company. Extrinsic motivation in contrast refers to employees' engagement in activities which are essentially not autonomous, however employees may engage in these activities because these activities serve as a means to an end (Burton et al., 2006).

At the core of the SDT is the assumption that extrinsic rewards can have a motivational impact ranging from minimal to an increased sense of autonomous motivation. Extrinsic motivation have therefor being argued to have practical work implications that either enrich, subdue or have no relevant impacts on intrinsic motivation (Ryan and Deci et al., 2000). Whether an activity will be perceived as either high or low on motivation will depend on the degree in which the activity satisfies an employees' need for competency, relatedness and control (Baumeister and Leary, 1995; Ryan, 1995). These needs are labelled as basic psychological needs because they are essential for psychological health and functioning.

Research in SDT has so far categorised extrinsic motivation into four major continuums namely: external regulation, introjected motivation, identified regulation and integrated motivation.

External regulation is referred to as the least autonomous continuum of extrinsic motivation. In this case, employees tend to feel that they have minimal control over their behaviour as this is perceived to be controlled by others using mediums such as contingent rewards and ultimatums (Gagne et al., 2005; Nie et al., 2015). While external regulation can motivate employees to undertake specific behaviours, its prevalence can however impair autonomous motivation that results in a dysfunctional state of well-being (Deci and Ryan, 2012). Introjected regulation requires employees to perform internal processes involving self-regulation from which reasons for behaviours originate. These internal processes are generally centred on approval against feelings of rejections (Gagne and Deci, 2005). Attributes directed towards the self, such as ego-involvement, guilt, self-esteem, status and recognition act as regulatory mechanisms from which behaviours are contingent.

It is important to mention that identified regulation refers to motivation that arises as a result of employees identifying the value of their work roles. For instance, employees high on empathic concern are more likely to perceive work that necessitates providing care to others to be more autonomous, indicating that employees are likely to sustain their engagement in the work role. This is because the work of caring for others is in line with the employee's core values. Additionally, because identity conflicts can suppress the autonomous feature resulting from identified regulation, the assimilation and integration of this identification enables the undertaking of behaviours by means of integrated regulation. Integrated regulation is thus considered as the most autonomous form of extrinsic motivation.

Following the multidimensional view of extrinsic motivation, researchers have attempted to examine how motivation types relates to employees' work attitudes. Indeed, findings have exhibited a negative relationship between autonomous work motivation and burnout (Schreurs et al., 2014). An earlier study conducted by Richer et al. (2002), presented similar findings as those of Ferent et al. (2010). Essentially, it was discovered that autonomous motivation is significantly related (positively) to work satisfaction and emotional exhaustion. In addition, Richer et al. (2002), found work satisfaction to mediate the relationship between autonomous motivation and turnover intent. The relationship between motivation types and employee's motivation with regard to knowledge have likewise been examined within the context of the SDT. For instance, in a sample of 186 participants,

intrinsic motivation related positively with knowledge sharing. Controlled motivation conversely related negatively with knowledge hiding, whilst its relationship with receiving knowledge was insignificant (Foss et al., 2009).

Additional research has examined whether motivation types significantly acted as a conditioning variable directing the relationship between stressors and feelings of fatigue. In this spectrum of research, findings have shown that the correlation between high job demands and burnout are significantly low when autonomous motivation is high (Trepanier, 2013). Furthermore, studies by Malinowska and Tokarz (2019), revealed that job resources interact with autonomous and impersonal orientations in predicting employee work engagement. Here, the positive relation is discovered to be weaker among employees scoring high on autonomy-oriented employees. With regards to the outcome following the fulfilment of basic needs, findings indicate that the satisfaction of the three basic psychological needs relate negatively with feelings of exhaustion (Van den Broeck et al., 2008). Moreover, employees scoring high on the fulfilment of basic needs were less likely to engage in deviant behaviours undermining organisational functioning (Lian et al., 2012). Furthermore, meta-analytical findings indicate that though the three basic needs account for unique variances in intrinsic motivation that result in well-being being enhanced, the fulfilment of basic needs is more effective in generating positive rather than negative behavioural and attitudinal dispositions (Van den Broeck, 2016).

As previously explained, job resources and job demands have been posited as the most significant predictor of work engagement. While job resources relate positively with work engagement, job demands relate negatively with work engagement. In reality, one reason as to why job demands and job resources impact work motivation can be inferred from the theoretical tenets pertaining to the SDT. Undeniably, numerous studies have adopted the use of SDT as an overarching theoretical framework in explaining why and how job resources have an impact on employee work behaviours (Crawford et al., 2010; Meyer et al., 2008; Schreurs et al., 2014; Albrecht, 2012; Van Wingerden et al., 2017), for the reason that job resources such as autonomy, feedback and co-worker support work goals that produce increased employee performance, which in turn creates positive feelings of self-worth. These feelings are such that they are indicative of the prevalence of the three basic needs. Hence, the availability of job resources have therefore been argued to be autonomous in nature given that these resources are self-concordant with the satisfaction of basic needs.

SDT has likewise been adopted in testing the validity of the model of employee workplace proactiveness. In this case, why and how proactive workplace behaviours relate to momentary and daily work engagement was examined (Bakker and Oerlemans, 2019). The study involved the use of a daily diary involving 66 participants from various occupational sectors. The results of the study revealed that employees' carrying out of proactive work behaviours involving, reducing demands, increasing structural resources, increasing social resources and increasing challenges relates positively with momentary work engagement (ibid). This relationship is explained as occurring by way of the satisfaction of basic needs – wherein employees' momentary need satisfaction effectively mediated the relationship between enactment of proactive work behaviours and momentary work engagement (Bakker and Oerlemans, 2019).

Transformational leadership, a unique form of leadership type that emphasises developing followers' goals to positively impact employees' goal pursuit behaviours (Conchie, 2013; Trepanier et al., 2012), has also been argued to relate to work engagement from the perspective of SDT. For example, a cross-sectional study involving 155 participants suggested that employees' perceptions of transformational leadership relates positively with work engagement (Chua and Ayoko, 2019). However, the positive direct impact of the perception of transformational leadership was ascertained to occur by means of several differing aspects of employees' self-determined motivation, i.e., intrinsic motivation, autonomous motivation and controlled motivation.

Similarly, SDT has been adopted in the explanation of why and when calling enactment relates to an employee's daily well-being. Calling is conceptualised as the perceived long-term work orientation employees have with regard to their work (Elangovan et al., 2010; Rosso et al., 2010), wherein orientation is integrative of the employee's beliefs and values about work that subsequently directs employees' sense of work and non-work life experiences. In their theoretical model of the link between calling and daily well-being, Conway and colleagues theorised that calling enactment positively impacts well-being. This is argued to occur because of the direct positive correlation between calling enactment and motivation types, for example, intrinsic, identified and introjected motivation.

2.6.4 The Conservation of Resources Theory and Work Engagement

Following the role of needs satisfaction as an explanatory mechanism clarifying why job resources have their positive impact on employees' experiences of work engagement, further research has sought to explain the relationship between job resources and work engagement using the premises associated with conservation of resources (COR) theory (Hobfoll, 2001; Halbesleben et al., 2014; Neveu, 2007). Additionally, COR theory posits that the well-being of employees is the outcome of the individual's transaction involving resource investment and resource gains (Hobfoll et al., 1990).

Resources are conceptualised as unique objects that provide value to individuals. It is also conceived as "anything perceived by the individual to help him/her attain his or her goals (Halbesleben et al., 2014). Halbesleben et al. (2014), state that resources in relation to goals points towards the unique role of resources for subjective and objective career success. Resources have also been linked with individual capabilities, in particular, an employee's ability to regulate the self in ways that are agreeable with goal achievement (Hobfoll, 1989). Following this, COR theory is built upon the core belief that an increase in resources is preferable in contrast to a decrease in resources. Intrinsically, individuals will strive to acquire, sustain and defend against the loss of resources (Hobfoll, 2001; Hobfoll and Shirom, 2001).

Research into the impact of resources on employee behaviours has resulted in the identification of several propositions explaining the relationship between the possession of resources and experiences of stress (Ten Brummelhuis and Bakker, 2012; Halbesleben, 2010). In this instance, stress is described as occurring primarily when one or more of the following scenarios occurs: (i) there is an imminent threat to resources, (ii) there is an actual or perceived loss in resources, and (iii) when resource investment outweighs resource gains.

Unlike the conceptualisation of stress inferred by Lazarus and Folkman's (1984) stress-appraisal theory, COR theory explains stress objectively rather than taking an implicit perceptual view of stress as grounded within Lazarus and Folkman's stress-appraisal theory. However, it should be mentioned that the perceptual conceptualisation of stress and its implications for improving employee well-being have been criticised, given that a perceptual view of stress can to some extent be victim blaming (Hobfoll et al., 2018). The prevalence of COR theory in organisational research can also be linked with the theory's relevance in explaining the triggers of similar yet different dimensions pertaining to work attitudes. The

fact that COR theory takes a broad view of resources from which the emotional energies that direct behaviours are grounded, COR theory has developed to become popular theory in research into work motivation (Sonnentag and Fritz, 2015; Halbesleben and Bowler, 2007).

Research over the years has resulted in the proposition of four principles associated with COR theory. These principles help in explaining the connection between resources and individual's behaviour. The first principle asserts that the experience of resource loss is more important than when resources are gained (Hobfoll, 2001; Park et al., 2014; Sanz-Vergel et al., 2011). The importance of resource loss over gains results in the argument that unlike resource gain, the psychological impact and behaviours following a loss in resources are greater in momentum than the experiences of resource gains. The second principle of COR theory posits that the possession of resources is instrumental for protection against a decrease in resources. In these circumstances, resources are also understood to assist employees to recover from resource loss and that resources are a requirement for gains in resources. In addition, COR theory suggests that the experience of resource gain in relation to its salience is strengthened under circumstances associated with resource loss, this is referred to as the resource paradox principle of COR theory. To illustrate further, resource paradox argues that for individuals facing a high loss in resources, the impact of a gain in resources on these categories of employees will be greater compared to employees who are faced with a low loss in resources.

The fourth principle as regards COR theory asserts that the activation of a defensive method is the consequential outcome of resource exhaustion. This is assumed to be desperation principle wherein employees whose resources have been exhausted, exhibit behaviours which may be aggressive and irrational with respect to goal achievement. Nonetheless, engagement in aggressive behaviours occur because of the need to preserve the self in the face of the resource loss.

It should be mentioned that studies have been conducted to validate the principles of COR theory, particularly desperation principle. For instance, the theory has been applied in examining the relationship between resource depletion and the processing of complex information and its impact on employee creativity. In addition, COR theory has been applied in understanding why resource depletion negatively impacts employees' workplace decisions (Wan and Agrawal, 2011; Halbesleben and Dowler, 2007). It is argued that effective decisions are the outcomes of employees' engagement in logic and reasoning (Mann, 1997). These actions are such that it requires high mental energies. Mental energies are understood to

be a unique type of resources that prompts specific behaviours. The reduction of these resources prevents employees from engaging in logical reasoning that subsequently motivates employees to depend on heuristics in relation to decision-making. The use of heuristics in decision-making in turn has been determined to undermine the quality of decisions, particularly when these decisions are complex in nature.

Similarly, COR theory has been employed as an overarching framework in explaining why and when psychological contract violation may lead to employees engaging in unethical behaviours towards third parties (Deng et al., 2018). Illustrating further, it is argued that psychological contract violation being the manifestation of a broken promise on the part of the organisation towards the employee (Morrison and Robinson, 1997), is experienced by the employee as a concern that necessitates the regulation of one's emotions (Wan and Agrawal, 2011). The regulation of unpleasant emotions in turn is posited as theoretically able in exhausting employees' psychological resources that ultimately undermine decision-making and encourages aggressive impulses that subsequently induce employees' interpersonal harming towards co-worker (Deng et al., 2018). Essentially, numerous studies have consistently supported the perspective that resource draining features, such as psychological contract violation, trigger resource depletion which in turn negatively impacts work engagement. Irrespective of this, recent studies built on the premises of COR theory have emerged to address the question of why and when the resource draining features of the social work environment, such as abusive supervisory may have a conflicting effect on perpetrators of certain work acts that are acknowledged to be resource draining.

Abusive supervision is a unique form of the social aspect regarding the work environment involving two subjects, specifically, an employee and a supervisor, such that the latter possesses some degree of authority and control over the former. A key feature surrounding this form of workplace relational interaction is the direction of non-physical aggressive behaviours by the supervisor toward the subordinate (Tepper, 2000). Abusive supervisory behaviour has been noticed to correlate positively with supervisors' self-reports on experienced stress. The implication of these findings corroborate previous studies that have found stressors to relate positively with aggression needs and the viewpoint that the display of abusive behaviours by supervisors might be the manifestation of supervisor's activation of a defensive mechanism through which supervisors attempt to conserve their resources. Building on this, Qin et al. (2018), reasoned that abusive supervisory behaviour positively impacts supervisors' work engagement because these behaviours assist supervisors to recover from acute load reactions thereby conserving supervisors' emotional resources.

It is further argued that the positive indirect effect of abusive supervisory behaviour on the work engagement of supervisors by way of supervisors' recovery level will hold to be true under two conditions, namely, supervisors' low empathic concern and high job demands. Empathic concern is posited to have a positive impact with respect to abusive supervision on the recovery level only of supervisors who are low in empathic concern. Building on COR theory, Qin et al. (2018), argued that empathic concern is incongruent with the potential gains associated with abusive supervision given that empathic concern in the face of abuse will necessitate feelings of discomfort that will weaken the benefits of abusive supervision. The findings obtained by Qin et al. (2018), not only assists with validating the desperation principle of COR theory, empirical support for the moderating role of empathic and job demands help to validate the resource caravan passageways of COR theory.

With the emergence of longitudinal methodologies and the use of diary studies in positive organisational psychology, a few contemporary studies have emerged, with each of these studies investigating and providing support for several outcomes in relation to COR theory. In their study, Xanthopoulou et al. (2009), observed job resources, in particular, autonomy, social support, and supervisory coaching at time 1 and personal resources, specifically, self-efficacy, organisational based self-esteem and optimism at time 1 to relate positively with work engagement at time 2. In addition, time 1 work engagement was determined to relate to job resources and personal resources at time 2. Overall Xanthopoulou et al. (2009), found support for the existence of a reciprocal relationship between job resources, personal resources and work engagement. While the correlation between personal resources and work engagement has been established in several studies (Weigl et al., 2010), emerging from the discourse is the identification of numerous resources which have been classified as unique types of personal resources due to their significance in promoting resilience and regulating goals that impact work engagement.

Spiritual resources, a contextual workplace resource common to employees who work in religious settings have been identified as a relevant personal resource category that helps to guide employees' work efforts (Patel and Cunningham, 2012; Chandler, 2009; Ellison et al., 2010). These resources are conceptualised as a unique type of personal resources because these resources derive from employees' personal beliefs and ritual practices, all which are closely linked with the employee's interactions with the sacred (Ellison et al., 2010; Patel and Cunningham, 2012). The consequence of the employee's interaction with the sacred is such that it contributes to feelings of resilience and a general positive impact on one's perceived locus of control. This in turn results in employees instigating actions that produce a change in

one's environment in a way that aligns with one's task goals. Unlike personal resources, spiritual resources are strengthened through spiritual practices involving meditation and reflective retreats. In effect, attachment to God, collaborative religious coping and sacred calling are three forms of spiritual resource that have received considerable attention in the literature (Dik and Duffy, 2009; Elliot and Reis, 2003).

Spiritual resources are conceived to support employees comfort job demands that are perceived as threats. In a study involving American clergy, collaborative religious coping was found to be negatively associated with emotional exhaustion (Rodgers and Piedmont, 1998). In terms of the relationship between spiritual resources and work engagement in relation to COR theory, Bickerton et al. (2014), recognised spiritual resources at time 1 to relate positively with work engagement in time 2. Work engagement in time 2 in turn related positively with job resources in time 2. Furthermore, time 1 work engagement related positively with time 3 spiritual resources via the mediating role of time 2 job resources. Collectively, these results substantiate the resource caravan passageways principle of COR theory. In addition, these results help to validate the first principle outcome of COR theory (Hobfoll et al., 2011; Hobfoll et al., 2018).

Furthermore, the premises of COR theory have been applied within the workplace in regard to understanding the antecedents and consequences of work-family conflict. Work-family conflict is conceived as the manifestation of role incompatibility between the demands of ones' work roles and those of the roles within the family (Ten Brummelhuis and Bakker, 2012). The result of role conflict is that an individual's performance in one area undermines the performance in the other area (Greenhaus and Beutell, 1985; Perlow, 2012). Cognitive work-family conflict is a unique form of interdomain conflict that has been determined to relate negatively with supervisor's assessments of employee engagement. This correlation was discovered to occur because cognitive work-family conflict consumes employees' resources over time (Amstad et al., 2011). Though it was found that emotional exhaustion mediated the negative indirect relationship between cognitive family conflict and supervisor's assessments of employee engagement, supervisor's assessments of employee engagement in turn mediated the relationship between emotional exhaustion and employees' career success (Wayne et al., 2017).

It should be mentioned also that COR theory has likewise been applied to investigate the crossover of resources between spouses. This is believed to occur through parental satisfaction (Matias and Fontaine, 2015). Parental satisfaction has in turn been examined and

established to mediate the relationship between spouses' workplace family support and spouses' work-family conflict (Matias et al., 2017). Findings presented by Matias et al. (2017), corroborates the core principle associated with self-expansion theory (Aron et al., 1991). Self-expansion theory asserts that a relevant outcome following membership of high-quality relationships, is the integration of the strengths of others into one's self-concepts (Aron et al., 2005). Additional research examined the underlying mechanisms by which relationships outside of work have an accompanying positive and detrimental impact on employee's work attitudes and behaviours (Cheung et al., 2009; Chen et al., 2015; Liu and Wang, 2013). Guanxi, a terminology linked with social relations, is conceptualised as dyadic relationships between individuals wherein the initiation and sustainment of a relationship is dependent upon mutual trust and gains between parties (Zhengguang, 1993). Guanxi is considered a social resource that impacts work positively. Indeed, supervisor-subordinate guanxi has consistently been found to relate to a subordinate's job resources (Zhang et al., 2015; Shih and Lin, 2014). This occurs because supervisor-subordinate guanxi causes feelings of trust between parties. Trust in turn has been linked with increased decision latitude with respect to subordinates (Han et al., 2012).

Framed from the cross-over of resources principle in regard to COR theory (Hobfoll et al., 2011), job crafting was noticed to relate to supervisor-subordinate guanxi through the mediating role of job resources (Guan and Frenkel, 2018). Notwithstanding that studies have demonstrated the direct positive relationship between supervisor-subordinate guanxi and subordinate's organisational citizenship behaviours, Guan and Frenkel (2018), assumed and found job crafting to positively mediate a direct correlation. Additionally, COR theory has been adopted as an overarching theory explaining the undermining impact of transformational leader behaviours on leaders themselves. Transformational leader behaviours are explained as those aspect of a leader's actions that enable employees to achieve their unique self and the determination of collective goals (Bass, 1985; DeRue et al., 2011). For instance, it was discovered that transformational leader behaviours nurture feelings of leader emotional exhaustion which in turn triggered leader turnover intentions (Lin et al., 2019). Similarly, recent studies have likewise employed COR theory to investigate the influence of leadership behaviour on employees' support behaviours and their well-being (Christensen et al., 2021; Chiu et al., 2021). For instance, drawing on COR theory, it was determined that transformational leadership relates negatively with followers' emotional exhaustion through extra efforts, particularly when followers' experiences of psychological detachment was high (Stein et al., 2021).

2.7 Emerging Issues in Work Engagement Research

To a significant extent, it can be concluded that our current understanding of the antecedents of healthy and interesting work has evolved. The literature on work design and employee engagement illustrates that the determinants of work engagement or that of the design of an optimal job, are not limited to a top-down perspective wherein decisions on crucial aspects of work characteristics are introduced at the organisational level (Tims et al., 2012, 2013; Berg et al., 2010). From the various studies, it has been argued that job resources are the most significant component generating work engagement (Christian, 2011; Halbesleben, 2010; Albrecht et al., 2015). These ideological stances are typically argued on the premise that job resources promotes employees' growth, learning and mastery skills over task. In this regard, job resources have been posited as motivating in their own right as they facilitate satisfaction concerning basic needs with respect to control, relatedness and competency (Bakker and Demerouti, 2017).

In addition to its associated intrinsic nature, others have likewise noted that job resources have motivating characteristics in that they facilitate the satisfaction of extrinsic desires, one acting as a reinforcement for the accomplishment of work objectives (Bakker and Demerouti, 2007; Bakker et al., 2013). Irrespective of the above generalisations, from the literature nonetheless, contrary positions are upheld. For instance, we now understand that experiences of vigour, dedication and absorption are not independently explained as regards the outcomes of the integration of a predefined list of job resources but are rather inclusive of individual attributes/personalities (Xanthopoulou et al., 2013).

From numerous studies, it can be asserted that several components of individual attributes, i.e., extraversion correlate with a number of self-resiliency individual predispositions (optimism, self-efficacious beliefs), in addition to those of job resources (Bakker et al., 2010). Collectively, these attributes have been established to facilitate employees' utilisation of job resources for its intended use thereby inversely impacting the overall experience of exhaustion and hence, the inducement of work engagement (Albrecht, 2010; Lorente et al., 2008).

As a result of the information found in the literature, we are now aware that the design of jobs should be one that combines both job and personal resources (Bakker et al., 2009). These nonetheless are accompanied with several theoretical issues (Schaufeli and Taris,

2014). Regarding these are issues encompassing the reciprocal associations between job and personal resources and outcome variables (Ibid; Xanthopoulou et al., 2009). These issues can be separated into several conceptual questions as highlighted below: A core issues is with respect to what can be understood regarding the nature of associations between job, personal resources and work engagement. Specifically, issues relating to if job resources are endogenous of personal resources or vice versa. Similarly, issues relating to theoretical mechanisms regarding how work engagement relates to personal development and job resources.

The issues highlighted above are held to be of theoretical and practical relevance, particularly with regards to enhancing our understanding of the nature and operationalisation of bottom-up (i.e., job crafting) work design processes. This is what a systematic review of studies on workplace pro-activity contends: job resources, job demands and individual predispositions as drivers of proactive behavioural tendencies (Grant and Parker, 2009). Proactive tendencies in turn have been connected with varying dimensions of employee self-initiated role and relational work boundary adjustments (Ashford et al., 2003; Berg et al., 2009).

From the results of empirical studies by Tims et al. (2015), a study which validates Oldham and Hackman's (2010) claims referring to the detrimental impact of employees' engagement in job crafting activities, it can be concluded that the interactions between job resources, personal resources and work engagement are essential antecedents in understanding employees' engagement in varying dimensions of job crafting (structural, hindrance, challenge and social) activities likewise those pertaining to the well-being and engagement of fellow colleagues.

Another area of interest emerging within the literature on work design is that of the role of interactions between dimensions of job demands, job resources and work engagement. Initially appraised as a dysfunctional form of workplace affective well-being attributes (Johnson and Hall, 1988; Demerouti et al., 2001), we now understand that not all job demands are detrimental in nature. In fact, considerable evidence exists in attributing specific job demands, i.e., challenge job demands, as facilitating the achievement of task goals and hence, contributes to mastery skills and feelings of competency over one's job (Tadic et al., 2015; Dawson and Richter, 2006). This suggests that similar to job resources, job demands can also provide a motivational role, particularly those of extrinsic workplace need (Schaufeli and Taris, 2014).

The above illustrations are likewise in line with the views of Grant and Parker (2009) who argued work characteristics, for example job demands, such as time pressure, ambiguity and job complexity as contributing to engagement in proactive behaviours. Furthermore, engagement in proactive tendencies have in turn been attributed to varying dimensions of attitudinal, behavioural and well-being outcomes. Regarding this, it has been posited that the motivating potentials of job resources will manifest on the ground that challenge job demands are incorporated into the design of jobs (Bakker et al., 2013). It is important to note that these jobs have been described as active jobs (Karasek, 1979), in that they challenge employees to acquire more knowledge of task processes and thus, the performing of desired workplace behavioural tendencies (Bakker and Demerouti, 2017). Additionally, the above examples can be further aligned with the views of Deelstra et al. (2003), who highlighted the damaging impact of job resources on experiences of work, particularly when these resources are not required by the employee.

Irrespective of the current arguments attributed to the incorporation of challenge demands, this may however not be such an easy concept to for us to comprehend and integrate during the process of designing effective jobs producing individualised experiences of work engagement. Discussions emerging from recent studies illustrate that depending on contexts, challenge demands can also be appraised as a hindrance and that hindrance job demands could likewise be appraised as challenge demands (Bakker and Sanz-Vergel, 2013). The likelihood of specific demands being appraised as both a hindrance and challenge demand are similarly not left within debates, as has been further noted and discussed within recent studies (Searle and Auton, 2015; Webster et al., 2011). Subsequently, Bakker and Demerouti (2017), called for subsequent work design studies to evaluate the premise and conditions giving rise to what types of demands are likely to be appraised.

With the advent of the current understanding of the reciprocal nature amongst work engagement, individual and job resources, others have likewise noted the possibility of similar associations to occur within the health impairment propositions of JD-R theory. For instance, Ten Bummelhuis et al. (2011), ascertained that time 1, i.e., the current experience of burnout amongst financial consultants related positively with perceptions of increased job demands and burnout in subsequent task involvement. Associative outcomes in which feelings of exhaustion related positively with future job demands have similarly been noticed across various studies proceeding with those of Ten Bummelhuis et al. (2011) (see Demerouti et al., 2004; Bakker et al., 2000; Demerouti et al., 2009).

While Ten Bummelhuis et al. (2011), illustrated that experiences of loss cycle are due to the relationship between the current experiences of burnout with a subsequent, decrease in job resources and increase in job demands. On the other hand, Bakker and Costa (2014), explained why experiences of exposure to hindrance job demands may undermine the quality of work, which in turn may undermine employees' related well-being. In this instance, it was illustrated that current experiences of burnout gave rise to current withdrawal tendencies as regards work. Moreover, this sort of attitudinal intent has in turn been discerned to be associated with low task commitment, shortcomings in interpersonal interactions, as well as an increase in task errors and conflict, resulting in the creation of accumulative job demands (Ibid) over time. In keeping with this line of thought, increases in job demands and therefore experience of burnout over time were explained to occur via a self-undermining process mechanism (ibid Bakker and Wang, 2016), as depicted below (see Fig. 2.3)

With the emergence of varying dimensions concerning job demands, Schaufeli and Taris (2014), insisted on a review of the nature of job demands and job resources. The basis of their argument was centred on understanding whether the absence of job resources implies a work environment that is characterised by high hindrance job demand. Owing to this, it is claimed that job demands and job resource need to be re-conceptualised in terms of their value attributions. Attributions within this context are directed at the physical, social and organisational features of work, in addition to accompanying impairment, such as job demands and motivation, for instance, job resources outcomes resulting from work features (ibid).

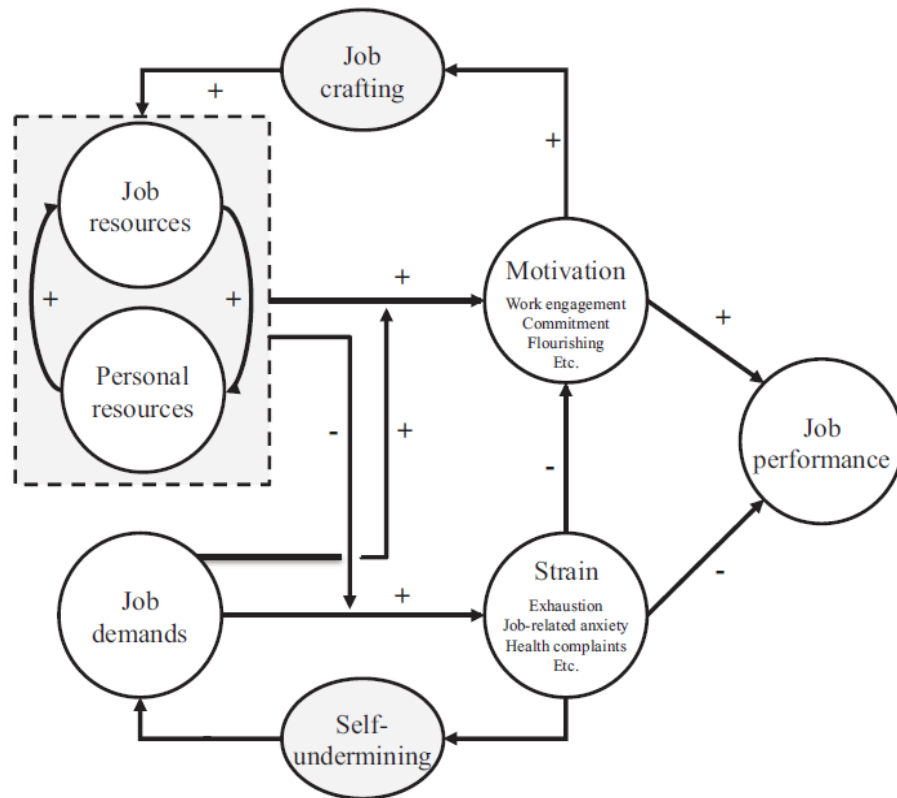


Figure 2.3 The Job Demands - Resources Model

Source: Bakker and Demerouti, 2018

In the previous arguments highlighted above, Schaufeli and Taris (2014), further criticised studies for having focused predominantly on the motivational process, given that within these studies, aspects of the health impairment process are ignored. Similar to the justifications for the conceptualisation of the revised JD-R model, Schaufeli and Taris (2014), raised the idea that an ideal enquiry into the nature and scope of work engagement should incorporate both the direct and indirect role of the health impairment processes. Moreover, it has also been illustrated that such a combination would be more noticeable upon the adoption of a value-based orientation view of job demands (ibid).

In relation to the issues above, others have likewise suggested the need to integrate the role of employees' personal demands within the theoretical propositions of the JD-R model within work design models (Barbier et al., 2013; Bakker and Demerouti, 2017). Personal demands have been conceptualised as referring to self-induced conditions as regards the required levels of self-performance and work behaviours (ibid). Like the concept of goal

setting, these stipulations have been suggested as triggering and sustaining effortful behaviours requiring the sacrifice of valued resources. From this, personality features such as workaholic have been highlighted as a unique subset of personal demands (Bakker and Demerouti, 2017). Closely related to the concept of work engagement, workaholic has nonetheless been ascertained to be directly related with feelings of burnout (Schaufeli et al., 2009).

In their study, Barbier et al. (2013), explored the possible role of performance expectations on individualised experiences of work engagement. Their study found expectations, i.e., an increase in performance to be directly related to work engagement. Bakker and Demerouti (2017), explained that depending on the scope and contexts, personal demands could act as an internal dimension of challenge demands. In this case, these categories of demands were explained to be motivating in that they should facilitate goal commitment, thereby resulting in the achievement of task goals (ibid). Conversely, personal demands associated with workaholic trait feature(s), could have the opposite outcome, seeing as such demands will generate results for increased experiences of health impairments (ibid).

2.7.1 Research Gap and Statement of Primary Research Questions

Thus far, this chapter has focused on the antecedents of the design of healthy and interesting jobs, from which several developing conceptual issues have been highlighted. As illustrated in the previous sections of the current chapter, intellectual development on what constitutes meaningful jobs; a job defined as high in motivating characteristics and low on health impairment - have in the majority of cases, resulted in the outcomes of changes on how employees are engaging with contemporary jobs. These have likewise been shown to be inclusive of experienced affect accompanying engagements in developing jobs (Grant and Parker, 2009; Challenger et al., 2012). Most of these developments have in the majority of cases been noted to emerge from changes within organisational and macro-level processes.

Illustrating further, various authors have developed several models and illustrations of the impact of technology on work processes, employee well-being and engagement (Lyytinen and Yoo, 2002; Parker et al., 2001; Boswell and Olson-Buchanan, 2007). A particular model for instance is that of the model developed by Derks and Bakker (2014), which adopts the diary methodological approach. Using this method, Derks and Bakker (2014), found intensive smartphone use by employees to be directly associated with daily work-home interference

(WHI). In addition to this, their study likewise found Smartphone use to moderate the relation between experiences of daily recovery and daily work- home interference (WHI). The overall conceptualisation of their model was such that WHI mediate the relationship between experiences of daily recovery and experiences of burnout, such that intensive Smartphone use by moderated the direct relation between WHI and burnout.

From the literature, we understand that perceptions of experiences of burnout will have a tendency to stimulate within employees, increased motivation to engage in several job crafting activities, particularly those relating to hindrance job crafting (Tims et al., 2013; Tims et al., 2015). It can also be understood that experiences of burnout will be associated with motivation to engage in the crafting of social job resources. The current paper illustrates that such crafting intent could manifest either in the form of increased demands for instrumental support (IS) or emotional support (ES) from fellow work colleague(s). While the literature suggests that the provision of instrumental support will possibly promote job resources for both seekers and providers of IS, from the review of studies, we are able to comprehend that the provision of ES is more likely to be accompanied with a number of health related issues for both providers and seekers of ES.

The above discourse demonstrates how developments in technology may alter not only the work characteristics of an employee, but also those of a colleague and consequently impact the organisation. This substantiates the interdependent feature of jobs, such that jobs are not simply interdependent upon internal factors at the organisational level, but also those of events occurring both at the social and macro level of organisational analysis. A job design model that incorporates the interdependent nature of work systems is that of the social-technical systems (STS) framework. With origins attributed to the works of Trist and Bamforth (1951), it was observed that the introduction of new technologies into work processes created imbalances within existing work systems, thereby impacting overall systems effectiveness.

The STS framework posits that organisations are a complex system consisting of numerous sub-systems, together with sub-systems that are characterised as mutually interconnected (Carayon, 2006; Clegg, 2000; Cherns, 1987). From the interconnective nature of sub-systems, the main propositions as regards STS are that dynamism within the functioning of a particular system component will require an examination of how such a change may impact the performance(s) of other mutually interconnected systems and thus, the overall effectiveness of the organisation (Davis et al.,

2014). Challenger and Clegg (2011), extended Leavitt's (1965) framework to consist of six interconnected sub-systems: goals, people, processes, building/infrastructures, technology and culture, with these sub-systems operating within the boundaries of events occurring within the external environment of an organisation (Davis et al., 2014). In their modified framework, external systems were highlighted to be events occurring within the: regulatory frameworks, stakeholders and economic dynamics (ibid).

With regards to the role of economic characteristics in the design of jobs, studies on work design have been keen to attribute changes in macroeconomic outcomes to have a number of psychological impacts on how employees' experience their job characteristics (Parker et al., 2017a; van Veldhoven et al., 2017). These studies, like the STS framework, inform our understanding that economic related variables either at both the individual and organisational level may ultimately impact the occurrence of resources availability that subsequently result in various consequences for employee work behaviours. To date however, no unifying model exists that explicitly explores the microlevel implications of economic stressors within the broader scope of research into employee well-being (Parker et al., 2017a; Odle-Dusseau et al., 2018).

At the individual level, considerable studies have been conducted in an attempt to discern the antecedents of work engagement (Naruse et al., 2015; Ouweneel et al., 2013). The findings from these studies have focused significantly on employee work related experiences. Of concern within these studies is unravelling questions relating to why and when employees' experiences of specific job resources, interact with job demands in influencing resource exhaustion and work engagement (Bakker and Sanz-Vergel, 2013; Crawford et al., 2010). However, less evident, is whether and through what mechanisms do non-work life experiences, particularly those relating to individuals' economic life experiences, have a substantial impact on employees' mental resources (Odle-Dusseau et al., 2018).

Essentially, considerable evidence points towards the idea that relational stressors in the non-work life domain, such as family role overload or the provision of care to disabled loved ones thereby depleting employees of their emotional resources (Bainbridge et al., 2006; Li et al., 2015). These types of stressors are understood to relate negatively with desired work outcomes. This is because dealing with these stressors results in fewer resources to invest in work (Wilson and Baumann, 2015). Similarly, the occurrence of economically motivated relational stressors in the non-work domain, for instance economic life demands, can apply comparable demands on employees' emotional resources and as such have unique

implications with respect to how employees may choose to engage with their work. Drawing on COR theory, this thesis addresses the following primary research questions.

Primary Research Question 1

Do employees' economic life demands influence their work engagement? If yes, why does the influence occur and what can organisations do to promote employees' work engagement?

Central to COR theory is the premise that individuals have an innate nature to acquire resources and to defend against threats that lead to a loss of resources (Hobfoll and Shirom, 2001). In fact, previous studies have sought to adopt several theoretical mechanisms to explain how work engagement has a positive impact on firm performance. These studies have examined this question by adopting models that position work engagement as the exogenous variable and firm economic performance as the endogenous variable (Schaufeli and Salanova, 2004; Tremmel et al., 2019; Crawford et al., 2010; Knight et al., 2017). The acknowledgement of a positive relationship implies that poor economic performance will have an undermining impact on work engagement. Despite this, there is scant information regarding the theoretical mechanism through which economic life experiences at the wider macro level, impacts, in particular, organisational experiences of financial distress may impact employees' experiences of their work characteristics and ultimately result in several employee workplace behaviours (Parker et al., 2018).

Moreover, at the organisational-wide level, empirical evidence leads to the idea that employees report frequently on acute load reactions, particularly when their organisation is experiencing financial difficulty (Miron-Spektor et al., 2018). In addition, a significant proportion of the variance in employee experiences of work engagement are in part understood to be explained by employees' experiences of varying dimensions of work characteristics (Naruse et al., 2015; Rigotti et al., 2014). This indicates that there is a unique mechanism linking economic pressures at the wider macro-level with work characteristics and subsequently work engagement at the micro-level.

Having a theoretical account that explains how employee work engagement is impacted by experiences of loss in economic resources at the organisational level has considerable theoretical and practical relevance. Theoretically, such a narrative can improve our understanding of how resources are interlinked across different levels within the organisation. From a practical perspective, such a narrative can guide practitioners to create interventions that help foster work engagement, particularly when organisations are

witnessing economic pressures. Drawing on conservation of resources theory (Hobfoll and Shirom, 2001), this thesis addresses the following second primary research question.

Primary Research Question 2

Do organisations' experiences of economic adversity influence employee experiences of work engagement? If yes, why does the influence occur and what can organisations do to promote employee work engagement in times of economic crises at the organisational level?

CHAPTER 3. **METHODOLOGY**

3. 1 Introduction

This chapter presents and reviews several methodological approaches utilised in gathering and analysing data within the social sciences. In addition, this chapter explains the methodological stance adopted for this thesis and the rationale that leads to the adoption of these methods. Specifically, it has been illustrated that the thesis's research questions will be addressed using a positivist philosophical approach and that in addressing the research questions, the thesis will adopt a deductive approach involving the utilisation of several quantitative research strategies and techniques. This chapter likewise presents information concerning the nature of data collection, instruments used and the various steps that the thesis adopted in ensuring the reliability and validity of constructs used to address the research questions. Information about the choice of statistical procedures, mediation and moderation analysis are likewise discussed in this chapter.

3.2 Research Paradigms

Crucial in social science research is the research paradigm to which the researcher ascribes to. The research paradigm refers to the researcher's conceptualisation of what constitutes a phenomena/social reality, possible associations between an identified reality and its sub-components along with the researcher's position within such a reality (Creswell and Plano, 2007). Research paradigms therefore entail the ontological, epistemological and the methodological presumptions of the knowledge building component of a given piece of research enquiry (Morgan, 2007; Kirkwood and Campbell-Hunt, 2007). Currently, reality is discerned as individualised thoughts and/or beliefs on how the world may be conceptualised (Guba, 1990).

With regards to the ontological viewpoint of a body of research, researchers seek to understand and arrive at conclusions regarding what could be thought as constituting a reality, in addition to how such reality can be operationalised (Crotty, 1998). Building from this, the ontological stance necessitates the need to address several philosophical questions incorporating enquires relating to questions on what the nature of reality is and what

conclusions can be derived from the presumed reality (Creswell, 2007). Subsequently, the researcher's ontological stance is inferred as conceptually able in impacting answers, i.e., claims on aspects of reality to which the researcher aims to discover, for instance answers to the research questions.

Preceding the ontological stance is that of systematic mediums through which understanding/knowledge regarding the conceptualisation of a given reality can be derived. These mediums are generally regarded as the epistemological framework of a piece of research (Guba and Lincoln, 1994; Morgan, 2007). In the epistemological phrase, researchers are required to address several research issues, such as to decide on the nature of the relationship between possible generalisations of the research outcome, i.e., the research results and their role in the research process (Fink, 2000). In addressing these issues, Johnson et al. (2004), explains that in the course of conducting the research, the researcher is constrained by the ontological stance adopted. Upon deciding the epistemological stance, the subsequent phase of the research process requires that the researcher decides on the methodological position that the research will follow (Crotty, 1998). Similar to the dependent nature of epistemological positions, in that these positions are dependent on the researcher's ontological stance, methodological assumptions are similarly framed on the basis of the outcomes arrived at during both the ontological and epistemological phrase of the research process (Creswell and Plano, 2007).

A further core philosophical issue which the researcher needs to address is the research's methodological approach. The methodological position seeks to address questions which are centred at the process in addition to data collection and analysis technique(s). Philosophical issues at this stage assert that the researcher decides how claims embracing what is perceived to constitute a reality may be discovered (Guba and Lincoln, 1994; Teddlie and Tashakkori, 2009). Similar to contentions inferred from Johnson and colleagues, Guba and Lincoln (2011), maintain that the researcher does not have autonomy to adopt any given methods. This is because methods which are to be utilised in validating phenomena, in addition to claims on what exist are to be determined according to the researcher's ontological and epistemological stance.

Within the philosophical issues highlighted above lies several philosophical approaches that social science researchers could utilise for the purpose of validating claims relating to what they may perceive as constituting a reality. The earliest of these approaches can also be assumed to be associated with the interpretive, i.e., constructivism and positivist

philosophical approaches (Popper, 1959; Smith 1983; Guba and Lincoln, 1989). Over the decades, several philosophical approaches have emerged, most of which tend to be derived from key considerations posited within the positivist and interpretive philosophical approaches (Feilzer, 2010; Maes and Onghena, 2013).

From an ontological perspective, the positivist approach to research analysis assumes that there is only a single aspect to reality and that the research objective can only be actualised by means of the examination of cause-and-effect relationships (Guba and Lincoln, 2005; Merriam et al., 2007). In contrast to the interpretive perspective, reality is considered as one which is relatively constructed, and as such, there is no single reality. Relativism has further been understood as comprising shared episodes, for instance co-constructed mental constructions of reality (Guba and Lincoln, 1990, 2005). While positivist researchers aim to control and predict phenomenon, the overall aim of an interpretive research paradigm is that of describing phenomenon. Moreover, it should be noted that claims with regards to what signifies reality are dominantly grounded within lived individualised experiences (ibid).

3.2.1 Epistemological Approach

Epistemologically, the assertion within the positivist paradigm is that there is only a single interpretation of reality, an assertion which is similar with the theories associated with knowledge realism (Schwandt, 2001). The core premise within discourses, is that claims to reality are objectively induced and are therefore independent of the researcher (Guba and Lincoln, 2005; Merriam et al., 2007). Preceding this is the stance that the knowledge which is to be discovered is to be unravelled via the application of naturalistic laws (Bernal, 2002). This is contrary to the interpretive approach to knowledge creation which holds that the process of validating claims regarding the nature of reality is one which is subjectively inferred (Guba, 1990).

Subjectivity axiom on the conceptualisation of claims within research interpretive are framed on the assumption that absolute disaffiliation on what we feel may constitute a reality that is not possible and as such, our understanding of what reality may entail cannot be understood if we disengage ourselves completely from the research process (Flax, 1990). Elaborating further on the epistemological stance which is common to positivist paradigm; Cohen et al. (2007), explain that laws governing the process of thought within a positivist perspective are associated with several judgmental or objective characteristics. Relating to

these are features resulting from the outcomes of rigorous test of statements or research hypotheses (ibid; Lynham and Webb-Johnson, 2008; Pring, 2002).

Another key contrasting feature concerning the positivist and interpretive approaches involves the methodological processes associated with the two research perspectives. The interpretive adopts a less rigid methods mechanism, examples of these include the use of methods such as grounded theory, ethnography and narrative inquiry in gathering and analysing interpretive data. Data analysis and interpretation within the interpretive approach is determined on the basis of the researcher's hermeneutical and dialectical contrasting of an individual's construction of lived realities/experiences (Guba and Lincoln, 1985).

In interpretive research, a dominant analytical approach employed in constructing lived realities is the use of thematic analysis (Boyatzis 1998; Guest et al, 2012). Thematic analysis is a qualitative data analytical method that facilitates the identification and exploration of meaningful patterns from a dataset (Boyatzis, 1998; Braun and Clarke, 2006). It is a data analytical tool that is characterised by a series of systematic procedures through which codes are identified and are further explored profoundly (Campbell et al, 2021). Codes are the most minute outcome of data analysis describing a core feature regarding the dataset that is paramount to the research question (Joffe and Yardley, 2004; Braun and Clarke, 2021). These codes thereafter serve as the building block for the subsequent data exploration and classification inferred to as themes (Prevett et al, 2021). By categorising codes into themes, the researcher is able to identify meaningful patterns and conclusions pertaining to participants' lived realities. Upon categorising codes into various themes, axial coding can be employed to further explore and establish the nature of the relationship that exists among the various themes identified. Braun and Clark (2006), developed six core phases for conducting thematic analysis, namely: (i) data familiarisation, (ii) generate initial codes, (iii) search for themes, (iv) review themes, (v) define and name themes, and (vi) report writing.

Data familiarisation. In the data familiarisation phase, researchers aim to familiarise themselves with the data. This is accomplished by reading participants' responses to the interview questions. Whilst reading the data, notes are taken to highlight important observations relating to the data. In addition, the dataset is organised on the basis of its origin, such as if the data was generated by way of observation, interviews or documentary evidence. A core feature of data familiarisation incorporates actively reading through the dataset, as well as critically thinking about the story which the data informs and what this means (Braun and Clarke, 2012).

Generate initial codes. Upon data familiarisation, a series of recurring themes are identified and serve as the building block for codification of the data. In such a situation, the researcher uses key words to describe some of the participant's responses that are of immense relevance or interest to the research questions and the research objectives (Basil, 2003). Illustrating further, the following response to an interview question concerning work and family life since the pandemic asserts: "since the COVID-19 pandemic, I have been working long hours at work and I feel that this have undermined the quality of my relationship with my family" can be conceptualised by the researcher under the code "work-to-family conflict". In addition, a response such as "Since the pandemic, my duties have changed so much that I no longer have a clear idea of what the main responsibilities are at this organisation" can be conceptualised under the code "role ambiguity"

Search for themes. Upon completion of data analysis and coding, the next phase requires that the researcher refines the codes identified and to generate themes from the codes. Themes are generated via a process that involves clustering codes on the basis of their unifying features (Braun and Clarke, 2014). For example, work-to-family conflict and role ambiguity may be categorised by the researcher under the theme "hindrance job demands" because the two experiences share a common feature in that it undermines the participant's ability to work towards their work goals.

Review themes. In this case, the researcher meticulously examines the themes with the aim of evaluating the extent to which themes adequately describe the coded dataset.

Defining and naming themes. This phase involves defining the themes. When defining themes, Braun and Clark (2012), recommends that themes should be descriptive. At this stage, themes are to be further broken into subthemes.

While thematic analysis is appropriate for analysing both small and large qualitative dataset (Tuckett, 2005; Braun and Clarke, 2021), its reliance on coding frame implies that researchers from different theoretical backgrounds may code the same data differently. This will ultimately result in different findings and conclusions from the same dataset thereby undermining the credibility of the research findings (Armstrong et al., 1997). Despite this setback, it is understood that in as much that researchers are transparent as regards their coding procedures and conceptual justifications for the coding frame generated, if the same procedures are adhered to by different coders, then similar coding categorisation and themes will be generated and thus result in similar findings (Campbell et al, 2013). To substantiate the credibility of the coding process, researchers rely on the coding reliability measure

(Yardley, 2008). Coding reliability is an analytical procedure in thematic analysis that measures the extent to which two different researchers code the same dataset similarly. Coding reliability can be computed as a percentage agreement, in particular, the attainment of 80% agreement on 95% of the coded data (Miles and Huberman, 1994). Similarly, coding reliability can be measured on a scale measure ranging from -1, indicating a low coding agreement between coders, to +1, indicating a high coding agreement. To compute the coding reliability, the two coders experience the same procedures. The two coders first familiarise themselves with the data and thereafter generate initial codes from the same dataset. To improve external objectivity, Kolbe and Burnett (1991), recommends that coders should be external to the research team and should have no role in the design of the coding frame.

Conversely, data collection and interpretation in positivist paradigm are embedded within the falsification principle (Merriam, 1991), wherein data collection are sourced via a number of rigid processes such as experiments and surveys. At present, research findings are expected to be replicable and void of time and contexts (ibid). Paradigmatic research positioned within work design and work engagement research studies have significantly inclined towards the positivist paradigm (Zheng et al., 2015), although recent studies which have some significance began recommending that future studies engage in more inductive enquires. Inductive methods of enquiries are discerned as able to extend and refine the theoretical understanding that is specific to the subject matter of work engagement, particularly those that seek to enquire how contemporary changes in the way employees work affect the overall experiences of employee life experiences (Parker et al., 2017).

In this case, it is believed that the interpretive approach will serve as a practical framework for the realisation of the need to advance our theoretical understanding of the antecedents of employee attitudinal and well-being tendencies within an organisation. Irrespective of the emerging interest in interpretive methodology, this thesis adopts a positivist research paradigm. The choice of the positivist paradigm is due to the nature of the research questions and objectives of this thesis. The primary research questions in this thesis aim to examine the relationships among a series of variables which are of research interest. It involves an examination of causal links, such as the causal relationship between an independent variable and a dependent variable. In primary research questions one and two, it is instrumental to address and determine why and how economic life experiences at a particular period in time generates a change in employees' experiences of work engagement at another period in time in the near future.

Moreover, the overall model of the current study acknowledged that the subject matter pertaining to the antecedents of work engagement are embedded within psychological metrics characterised by cause-and-effect relational outcomes. With the outcomes being work engagement, this study therefore adopted a deductive positivist paradigm given that this paradigm enables this particular researcher to empirically test for the proposed research hypotheses regarding the study. Validation of research hypotheses will enable me to logically provide answers to research questions two to six of the first part of this study, in addition to questions one to three of the second part of the current study.

3.2.2 Research Methods

Having illustrated the philosophical underpinnings of the current research study, another vital dimension that requires further deliberation are the data collection methods. Research design can be thought of as processes through which researchers engage with a predefined list of research questions by logically linking research questions with data collection, in addition to strategies and data interpretation techniques (Yin, 2011; Saunders et al., 2012).

As explained above, the choice of research methods is influenced by the overall purpose and objectives of the research. Several research methods have been identified, these include methods framed on the basis of exploratory, descriptive and explanatory research methods (Christensen et al., 2011). Within each of these groundings, the quantitative and qualitative research methods have been discerned as prominent methods within the social sciences (Rossman and Wilson, 1985; Berg, 2004). These methods are such that they are further associated with specific research objectives, which are linked with the adoption of specific research paradigms (Ritchie et al., 2012; Berg, 2004; Creswell and Clark, 2007).

While qualitative research methods are common within the interpretive research paradigms, quantitative are more suited to the positivist research paradigm (Sale et al., 2000; Guba and Lincoln, 2005). In the qualitative research approach, researchers are interested in understanding patterns and characteristics across themes emerging from data collected (Creswell and Plano, 2007; Spiggle, 1994). Data are interpreted on the basis of the presumption of negotiated reality between the researcher and the research process (Minichiello, 1990). Researchers adopting the qualitative orientated approach typically seek to examine a given phenomenon more extensively, with the ultimate aim being that of the induction of knowledge, wherein the generation of theory is integrated as a core aspect of the

research process (Priest et al., 2002; Yeh and Inman, 2007). A further key feature associated with the qualitative approach entails the nature of the role of a researcher, together with the results and associated systematic methods.

With regards to the role of a researcher, it is generally assumed that researcher's biases can be detected by research participants and that this may be partly due to the fact that the vital features of the participant may be observable by me (ibid). Results emerging from this method are generally specific to the context in which the study was conducted. Additionally, because qualitative methods adopt the use of fewer sample sizes, results emerging from data interpretation have been recognised as having barely any potential to be generalised (Silverman, 2011). In the qualitative research approach, the aim of the research is to consider and explore a specific phenomenon of interest (Cooper and Schindler, 2011). It is a bottom-up research process wherein the overall research process causes the generation of a relatively new theory that can then be explained by way of testing the research hypotheses.

In contrast to quantitative approaches, emphasis here is typically directed towards the identification of statistically significant relationships amongst a few study variables. This is so because these relationships assist in conceptualising facts about reality, which is presumed as single and fixed (Morgan, 2007). Subsequently, the adoption of deductive theoretical reasoning is thereby significant, in which the emphasis is directed toward the connection between theory and practice, typically via the systematic testing of the reliability and validity of theories (Bryman, 2012).

Unlike the qualitative approach, the role of the researcher within a quantitative method is one of double blinded studies, wherein vital features concerning the researcher and those of the research participants are anonymous to both parties (Teddlie and Tashakkori, 2010; Madill and Gough, 2008). Due to the embedded feature of quantitative approaches, in that this method assumes a context free nature of reality, researchers are thus able to obtain data from a large sample of the target population. On account of the feasibility in utilising large sample sizes, results emerging from quantitative methods have thus been contended as enabling generalisation across populations (Creswell and Clark, 2007). While the exploratory method is associated with qualitative research methods, the scientific method associated with quantitative methods is that of confirmatory analysis, seeing as this enables verification of the research hypothesis (Silverman, 2011).

Several shortcomings have been associated with the adoption of quantitative and qualitative methods, with arguments that both methods should be combined (Creswell and

Plano, 2007; Onwuegbuzie and Leech, 2005). On the basis of the research objectives of the current study which aims to empirically examine how economic life experiences relate to other work-related constructs, the adoption of quantitative methods is therefore the most appropriate and feasible for this thesis. Quantitative data collection methods make it possible to address all the stated research objectives of the thesis given that these objectives require description, prediction and verification of the proposed factors identified by the current study as collectively generating employee work engagement.

3.3 Data Collection

3.3.1 Surveys

Amongst the various data collection methods which have been associated with the majority of disciplines within the social sciences includes the use of experiments, survey, archival research, case study, ethnography, action research, as well as grounded theory. In this thesis, I have utilised the use of the positivist and quantitative research approach in addressing the thesis research questions. This is because the objective of this thesis is to examine whether organisation and employees' economic life experiences that relate with employee work engagement and if yes, to explain why this relation occurs. Such research focus can only be accomplished via the use of quantitative research methods that are designed to facilitate cause and effect relationships (Saunders et al., 2012).

In relation to the match between research philosophies and the associated data collection approaches, the use of interviews, observation, document reviews and analysis of visual data have been attributed to qualitative methods, hence the interpretive paradigm (Mackenzie and Knipe, 2006), with the use of interviews dominating data collection methods within the qualitative research approaches (Cohen et al., 2000). In reality, the use of interviews within qualitative research methods is regarded as an essential and more reliable means of gathering exploratory data that examines the specific phenomena of interest. Compared to other established approaches, the systematic use of interviews allows for in-depth examination of respondents' attitudes, interest and motives (Barriball, 1994). The use of interviews also enables me to engage in follow-up questions thereby enabling researchers to identify symbolic meanings of respondents' attributes to core life experiences (Coleman, 2012; Gordon, 1975). While interviews can be structured, semi-structured and unstructured, a considerable number of studies employed the semi-structured interview approach. This is

because unlike semi-structured interviews, structured interviews tend to limit the researcher's ability to explore a phenomenon in depth. Unstructured interviews generally require an extensive research resource to critically engage with the data emerging from the research process (Johnson and Turner, 2003; Burton and Bartlett, 2009; Sharp, 2009). However, while the collection of exploratory data via the use of interviews appears advantageous, it is not without some faults. The faults associated with the use of interviews comprises the cost of time required by a researcher in organising and overseeing all aspect of the data collection process (Rabionet, 2011). Depending on the context of the research, the use of interviews poses ethical considerations, with the potential to constrain access to research respondents (Burton and Bartlett, 2009).

Due to the researcher's considerable involvement in the research process, data collection methods via the use of interviews are likewise prone to bias emerging from the interviewer. Research bias of this type could manifest in various forms; most prevalent is the tendency to frame misleading interview questionnaires, i.e., leading questions that may consequentially result in sub-optimal responses by respondents (Chenail, 2011). To address and overcome these flaws, a pilot study of the expected interview questions is encouraged. By piloting scheduled interview questions, a researcher is subsequently able to logically contend that the interview questions are relevant in relation to adequately exploring the chosen research phenomenon (Cohn et al., 2011).

In addressing the research questions found in this thesis, I have utilised questionnaires for the purpose of gathering explanatory data. Addressing the research questions requires data collection methods that enable the process of information classification via the extraction of relevant data patterns amongst the various responses to the questions (Cohen et al., 2011). Unlike the use of interviews which limit the examination of cause and effect relationships, the use of questionnaires is an ideal approach to addressing this research questions in this thesis. This is because the use of this method enables the gathering of descriptive and explanatory data (Ghauri and Gronhaug, 2010; Maylor and Black, 2005).

In gathering data via the use of survey questionnaires, a researcher may utilise various strategies. For instance, the researcher may choose the drop-off approach, in which the questionnaires are by dropping the questionnaire at a designated region that is accessible to the participant. Alternatively, the researcher may gather responses online by sending a link to the questionnaire to the participant. Here, the contents of the questionnaire are directly sent via electronic means to respondents whom either reply via the same means or by way of

several other possible mediums. Moreover, researchers could likewise adopt a web-based survey strategy in which links to the questionnaires are uploaded on several websites (Zikmund et al., 2012).

Due to the need in enhance the response rate, the quantitative section of the current study adopted the use of both an email and web-based platforms (Grives et al., 2011; Trochim and Donnelly, 2008). This is because data collection using emails and web-based platforms offers some degree of convenience for both the respondents and the researcher. In this case, the respondent can easily participate and fill in their responses anywhere and at any time of their choosing. It also offers a high degree of confidentiality in that respondents can safely submit their responses without the worry of responses being accessed by non-members of the research teams. In the preceding section, the study highlights several issues known to be associated with the use of questionnaires. These include issues relating to the design of the instrument, contrast measurement, sample characteristics, as well as the reliability of constructs adopted in the research study.

3.3.2 Questionnaire design

To help provide a descriptive and explanatory analysis of the overall validity of the thesis' proposed model, I adopted the use of primary source data collection. The nature of the study's research questions and given that there is no available published or secondary data that can support this study in addressing the research questions in this thesis, the use of primary data collection was thereafter adopted for the purpose of this study. The use of closed-ended questions was likewise adopted in this study. As an alternative to the use of closed-ended questions, is the adoption of open-ended questions. Though there appears to be a lack of consensus as to which of the two methods is superior to the other, it is generally thought that the choice of which method to adopt will ultimately be determined by the researcher (Bernard, 2012). While the use of open-ended questions does not restrict respondents' responses to questions, closed-ended questionnaires/questions restrict respondents' responses. The use of this approach in relation to data collection requires respondents to select from several specific responses to the survey questions (McColl et al., 2011; Hinkin, 1998).

A significant reason for adopting the use of closed-ended **questions** is that this approach makes it possible for the study to examine for construct validity and the reliability of variables contained within the study's conceptual model. Another reason for adopting a

closed-ended questionnaire is that unlike the use of an open-ended strategy, closed-ended **questionnaires** are easier to interpret making it convenient for explanatory analyses (O’Cathain and Thomas, 2004). In addition to this, it has also been illustrated that response rates are much higher for closed-ended questions as questions tend to be precise (Cook et al., 2000; Heberlein and Baumgartner, 1978). Furthermore, the use of closed-ended questions is prevalent with empirical studies within the field of organisational behaviour.

While administering the questionnaire, a concise introductory section was provided in the cover letter provided with the survey. The introductory section included vital information concerning the nature of the research and the impact the research is expected to generate. The inclusion of an introductory section in the administering of questionnaires has been explained to help boost the response rate, given that the respondents are able to relate and conceptualise the overall intended purpose of the study (Bradburn et al., 1979; Brace, 2018). In acquiring and analysing data using survey questionnaires, researchers normally adopt the use of scales. These scales are specifically designed in ways that support quantitatively capturing the values of a construct and how these values relate with other values on the basis of the key features common to these constructs. Specifically, scales make it possible for a study to examine how a construct corresponds to several other constructs within the research study (Hair et al., 2011). Depending on the nature of what is intended to be measured, scales can be adopted in several dimensions, either ordinal, nominal, ratio and interval (Zikmund et al., 2012; Hair et al., 2011).

In addressing the research questions, the thesis adopted the use of nominal scales. Scales tend to consist of various items wherein each item represents a measure which can be aggregated in producing an overall single measure (Rattray et al., 2007; McPeake et al., 2014). Items are typically framed in the form of a question. In other cases, it can be framed in the form of a statement requiring a definite response from the respondent (Brace, 2018). This thesis prioritised the use of established scales in capturing and addressing the thesis’ research questions (see Table 3.2). Excluding items which measured demographical variables, this study utilised 10 core constructs.

Table 3.1 Measurements: Demographic Variables

Variables	Options
Empirical Study one (ES 1) and Empirical Study two (ES 2)	
<ul style="list-style-type: none"> • Gender Respondents 	
Empirical Study 1 and 2	i) 18-22
<ul style="list-style-type: none"> • Age: respondents were requested to indicate their age range. 	ii) 23-28
	iii) 29-34
	iv) 35-40
	v) 41-45
	vi) 46+
Empirical Study 1 and 2	i) Secondary/high school qualification
<ul style="list-style-type: none"> • Educational Qualification: Respondents were requested to indicate their highest educational qualification. 	ii) National diploma
	iii) Bachelors
	iv) Masters
	v) PhD/Doctorate
Empirical Study 1 and 2	i) Less than 1 year
<ul style="list-style-type: none"> • Tenure Respondents were requested to indicate how long they have been working at their current organisation. 	ii) 1-2 years
	iii) 3-5 years
	iv) 5+ years

Table 3.2 Measurements: Core Variables

Constructs/Variables	Sample Items	Options	Cronbach's α
ES1 and ES2 <ul style="list-style-type: none"> Work engagement Source: UWES; Schaufeli et al., 2006a. 	<ul style="list-style-type: none"> At my work I am bursting with energy I find the work that I do is full of meaning and purpose. 	Options ranged from (1) = Never to (6) = Always	$\alpha = .91$
ES1 <ul style="list-style-type: none"> Economic life demands. 	<ul style="list-style-type: none"> I have to spend in order to meet expectations. 	Options ranged from (1) = strongly disagree to (5) = strongly agree	$\alpha = .77$
ES1 <ul style="list-style-type: none"> Emotional Distress Source: Goldberg, 1992's General Health Questionnaire, GHQ scale. 	<ul style="list-style-type: none"> Been getting a feeling of pressure in your head? Had difficulty in staying asleep once you are off to sleep? Been getting edgy and bad-tempered? Been getting scared or panicky for no good reason? 	Options ranged from (1) = strongly disagree to (5) = strongly agree	$\alpha = .77$
ES1 and ES2 <ul style="list-style-type: none"> Detachment Source: Sonnentage and Fritz (2007), recovery experiences instrument. 	<ul style="list-style-type: none"> At home, I don't think about work at all. 	Options ranged from (1) = strongly disagree to (5) = strongly agree	$\alpha = .89$
ES1 <ul style="list-style-type: none"> Financial insecurity Source: McCubbin and Comeau (1991) 	<ul style="list-style-type: none"> I have little or no trouble paying my bills on time. 	Options ranged from (1) = strongly disagree to (5) = strongly agree	$\alpha = .80$
ES2 <ul style="list-style-type: none"> Organisational experiences of economic adversity Source: Participants were requested to indicate the extent to which their organisation was able to meet core operational expenses effectively. 	<ul style="list-style-type: none"> I will not be surprised if this organisation delays the payment of my salary. 	Options ranged from (1) = Never to (5) = Very often	$\alpha = .79$
ES2 <ul style="list-style-type: none"> Role Ambiguity 	<ul style="list-style-type: none"> I am not sure what is expected of me at work. 	Options ranged from (1) = strongly disagree to (5) =	$\alpha = .80$

	<ul style="list-style-type: none"> Source: Nathan et al., (2017). 	strongly agree	
ES2	<ul style="list-style-type: none"> Role Conflict Source: Nathan et al., (2017) 	<ul style="list-style-type: none"> In my job, I often feel like different people are “pulling me in different directions”. 	Options ranged from (1) = strongly disagree to (5) = strongly agree $\alpha = .79$
ES2	<ul style="list-style-type: none"> Organisational Support for Strength use Source: Keenan and Mostert (2013) 	<ul style="list-style-type: none"> This organisation allows me to do my job in a way that best suits my strong points. 	Options ranged from (1) = strongly disagree to (5) = strongly agree. $\alpha = .93$

3.3.3 Sample technique and characteristics

In explanatory research, the aim is to describe the nature of inferential associations between a series of observed constructs (Crossan, 2003). These observations manifest as samples. These samples in turn are obtained from a given set of all possible observations referred to as an observable population. Sample technique refers to numerous methods from which a researcher can adopt in order to screen and eliminate redundant data sets that are not required in the study (Levy and Lemeshow, 2013). Some of the methods available for researchers in screening data are the non-probability sampling techniques, snowball sampling and convenience sampling. In non-probability sampling, samples are chosen judgmentally (Pesek, 2016). Here, I aim to obtain samples that effectively match several core observational criteria. These criteria are typically selected on the notion that samples that possess these criteria will enable the research questions to be answered (Lyon et al., 2015). Samples which have the least number of these criteria are either evaluated using a new criterion or they are removed and do not form part of the study's observations (Matthews and Ross, 2010).

In the non-probability sampling technique, the probability of any member of the population being selected as part of the study's sample is unknown, given that this decision is determined by the researcher (Zikmund et al., 2012). In contrast, snowball sampling is used particularly when the overall population from which samples are to be drawn are less or difficult to find (Biernacki and Waldorf, 1981). This population can be hard to come by because of factors specific to the population, such as stigmatisation or because the population consists of elite members such as celebrities and politicians wherein access to these individuals is extremely limited (Bernard, 2012). Unlike snowball sampling, convenience sampling is a sampling method adopted by researchers based on simplicity, given that there is unrestricted access to the study population (Maylor and Blackmon, 2005).

Unlike non-probability sampling, probability sampling is a data reduction method that is adopted particularly when the purpose is to conduct inductive generalisations. Inductive generalisation will require that samples in the study are highly representative of the available population. In this technique, samples are developed using statistical theories (Matthews and Ross, 2010). Several sampling techniques are associated with the use of probability sampling, examples of these include simple random sampling and systematic random sampling. In the case of the former, every member of the population has an equal chance of being selected as part of the study sample (Hair et al., 2012), while in the case of the latter, the target

population is categorised into sample frames wherein samples are thereafter chosen at regular intervals from the sampling frame (Saunders et al., 2012).

In stratified random sampling, the target population are categorised into several homogenous sub-groups. These groups are referred to as strata. Consequently, a simple random sampling technique is used in choosing samples from each of the strata (Trochim and Donnelly, 2008). In cluster random sampling, the target population is divided into groups of clusters. Like the stratified sampling technique, upon dividing the target population into clusters, I thereafter draw on a sample of these clusters (Blair et al., 2013). As this thesis sought to examine how and when economic related variables pertain to employee work engagement and given that the study intends to make inductive generalisations, for instance, employees with a minimum of six months' work tenure with their current organisation, random sampling was adopted in deciding the final samples to be included in the study.

3.4 Data analysis

The analysis of data is conducted using statistical measures. These measures involve the use of mathematical means in organising, outlining and explaining information (Gravetter and Wallnau, 2011). Techniques used in statistical analysis are categorised into two distinct groups, namely: descriptive statistics and inferential statistical techniques. Unlike descriptive statistics wherein the use of this method is limited to organising and summarising sample observations, the inferential statistical method involves drawing conclusions regarding the nature of associations or conditions prevalent within a target population on the basis of findings emerging from observing the study sample (King and Minimum, 2003). In addition, statistical analysis may be univariate, bivariate or multivariate statistical analysis. In univariate statistical analysis, the study only examines a single variable. Bivariate statistical analysis, conversely, explores the nature of the association between two variables, such that one of the variables is positioned as a dependent variable and the other an independent variable. In multivariable statistical analysis, the study examines the nature of the associations among a number of variables simultaneously (Bernard, 2012; Tabachnick et al., 2007; Stevens, 2012; Khattree and Naik, 2018).

The aim of this thesis is to investigate how several variables in the study relate to each other simultaneously. The thesis subsequently adopted both a descriptive and an inferential statistical method. In illustrating further, the study first delivers a descriptive overview of the

sample description. In this case, descriptive information such as mean, standard deviation and Z scores are computed using descriptive univariate statistics. Furthermore, this thesis employs both bivariate and multivariate statistics to examine the correlational and causal relations among the study variables. When conducting statistical analysis, several statistical software packages are available for researchers. This thesis utilised the SPSS IBM version 25 and SPSSAMOS version 25 in conducting statistical analysis. The choice of SPSS is because this software enables both descriptive and inferential statistical analysis. In addition, the software, particularly version 25, allows for the use of external plug-ins. This enabled this thesis to benefit from the use of external software that allows specific statistical analysis to be performed, such as moderation and mediational analysis.

3.4.1 Validity, Reliability and Total Scores

In fact, prior to conducting the inferential analysis, it is necessary that the measures used in the study are valid and consistent as regards inductive generalisation. Subsequently, validity and reliability is regarded as an essential test that must to be integrated into any inferential statistical analysis (Chandler and Lyon, 2001). The main reason as to why this test is carried out, is in order to ascertain whether the findings can be interpreted in a consistent way under various conditions (Field, 2009). Cronbach's alpha α , has become a test that is commonly applied to ensure reliability. The Cronbach's alpha α test gives the mean possible split-half for a given construct (Zikmund et al., 2012). Subsequently, this thesis adopted Cronbach's alpha α in measuring the internal consistency of items contained within a given construct measurement (Cronbach, 1951).

In relation to what level qualifies as an acceptable measure of reliability, Nunnally and Bernstein (1994), contend that an average of .70 and above serves as the threshold for newly developed constructs. In addition, .60 to .69 is argued to be an acceptable measure of reliability for already established constructs. While constructs will normally consist of more than two items, for constructs which consist of only two items, the inter-item correlation between the two items is to be reported (Cozby, 2001). In addition to construct reliability, this thesis similarly sought to ensure that the measurements adopted are adequately extremely valid. Construct validity refers to the degree to which the study's findings are accurate (Maylor and Blackmon, 2005). Construct validity is likewise thought to be a measure describing how truthful the hypothesis and conclusions of a study is (Trochim and

Donnelly,2008). The assessment of construct validity is ordinarily measured by means of convergent validity. Convergent validity denotes that the degree in the construct significantly correlates with similar or different constructs (Hair et al., 2011).

When measuring construct validity, common method bias has been established to be a core limitation (Noble and Smith, 2015; Drost, 2011). In actual fact, common method bias is generally related to the construct's common method variance (Podsakoff et al., 2003). Common method variance is conceptualised as a measurement error allocated among variables measured with and integrated as a function of a similar source (Richardson et al., 2009). As this thesis examines how several constructs related to other constructs using self-reported questionnaires, it is therefore crucial that this thesis tests for construct validity (Podsakoff et al., 2010). This thesis examines for common method bias using the Confirmatory Factor Analysis (CFA).

CFA measures if observed variables load significantly on each of the several variables within the study (Lance et al., 2010). This thesis used the dimension reduction technique in measuring the value of the CFA. Here, Principal Axis Factoring (PAF) was utilised as opposed to Principal Component Factoring (PCF). The choice of PAF over PCF is because the former describes measures of covariance while the former depicts measures of total variance (Kim and Mueller, 1978). In ensuring that factor analysis was adequately well suited for the study data, this thesis computed an additional validity test, the Kaiser-Meyer-Olkin (KMO) test. To effectively conclude that the data set used in the study is appropriate, the KMO should fall within the range ($0.8 < \text{KMO} < .09$). Once this condition is attained, it is expected that the factor analysis should provide the number of unique factors in the study.

3.4.2 Measures of Association Between Two or More Variables

This thesis computed bivariate correlational analysis prior to examining the relational impact among variables (Gravetter and Wallnau, 2011). The correlation coefficient is an index that represents the degree of association between two distinct variables (King and Minimum, 2003). This thesis used the Pearson's product moment correlation coefficient (r) in computing the correlational analysis index. The study's choice of Pearson's product moment coefficient (r) is because this measure of correlational analysis is well suited for observations which are continuously scaled. Higher values of the correlation coefficient indicate that strong associations exist between these two variables, thereby implying increased prediction

strength. Irrespective of the fact that study variables might illustrate higher correlation coefficient measures, the existence of prediction error will necessitate carrying out subsequent statistical analysis (King and Minimum, 2003). Following this, regression analysis was used in examining and testing the research hypothesis (Martin and Bridgmon, 2012).

As this thesis examined how several explanatory variables accounted for some of the observed variations in the explained variable, multiple regression analysis was utilised in this thesis (Zikmund et al., 2012). While various types of regression analysis are available, this thesis made use of the linear hierarchical regression least square methods. When conducting hierarchical regression analysis, a standardised regression coefficient value (β) is obtained. The regression co-efficient gives the slope of the predicted regression estimate. It is a measure of the degree of change the explanatory variable impacts upon the explained variable (Argyrous, 2011).

Upon computation of the regression estimate, it is vital that the study meets certain core criterion to ensure that the study's regressors are valid. Here, it is important that the predicted regression estimates give a statistically significant estimate (Matthews and Ross, 2010). In regression analysis, the statistical significance of the regression estimate is determined by the p-values. The p-values ranges from between zero to 100% ($0 \leq p \leq 1$). In interpreting the p-values, a p value greater than 0.05 indicates that the estimated regression co-efficient is not statistically significant. In contrast, a p-value of 0.05 and 0.01 denotes that the relationship between the endogenous variable and the exogenous variable is significant at the 95 and 100% level of confidence interval respectively (Cohen et al., 2002; Burns, 2008).

Another feature associated with the estimated regression coefficient is the direction of the causal relationship between the dependent and independent variable. The direction of the relationship is determined by the sign associated with the regression coefficient. This can be either a positive or a negative load. A positive regression coefficient indicates that the dependent and independent variable move in a similar direction. A negative coefficient implies that the relationship between the explained and explanatory variable move in the opposite direction (Argyrous, 2011). With respect to the nature of the strength of the regression coefficient, this is categorised into four core categories, namely a very strong relationship ($\beta = \pm 1$), strong relationship ($\beta = \pm 0.7$ to ± 0.9), moderate relationship ($\beta = \pm 0.4$ to ± 0.6) and a weak relationship ($\beta = \pm 0.1$ to ± 0.3). A zero-regression coefficient value implies that there is no relationship between the focal and the predictor variable (Martin and Bridgmon, 2012; Gravetter and Wallnau, 2011).

Table 3.3 Data Analysis Approaches

Research Analysis Approaches	
Empirical Study 1	Hierarchical regression analysis Mediation analysis (process V3.3 by Andrew F. Hayes) 2-way moderation (process V3.3 by Andrew F. Hayes)
Empirical Study 2	Hierarchical regression analysis Mediation analysis (process V3.3 by Andrew F. Hayes) 2-way moderation (process V3.3 by Andrew F. Hayes)

3.4.3 Parallel and Serial Mediation

Mediators are intermediary variables linking two variables together. Mediators work as an explanation as to why and how the regressor variable relates to the regressed variable. In other words, the mediator attempts to clarify the process mechanism through which the exogenous variable has a unique impact on the endogenous variable (James and Brett, 1984; Mackinnon et al., 2007; Tingley et al., 2014). Mediators are particularly relevant when a core aspect of a research study is aimed at providing a theoretical account of an observed phenomenon, given that mediational analysis reveals the indirect relationship between the two observed variables (Shrout and Bolger, 2002). This thesis examined the mediation effect because it seeks to explain empirically the process mechanism through which economic characteristics, such as employees' economic life demands and the organisational experiences of financial distress impact work engagement.

In their paper, Baron and Kenny (1986), explained some of the principles associated with conducting mediation analysis. Three core prepositions were regarded as meeting the requirements for mediation relationship. The first principle holds that the predictor variable should be significantly related to the proposed mediator variable. Additionally, the proposed mediator variable should be significantly related to the dependent variable. Moreover, with the inclusion of the proposed mediator variable, the relationship between the predictor variable and the dependent variable should become insignificant or weaker. When conducting mediation analysis, the Sobel test can be utilised to examine the significance of a mediational relationship (Preacher and Hayes, 2004). Mediation analysis is either fully or partially

demonstrated. Unlike in the case of partial mediation, full mediation reveals that the process mechanism giving rise to the relationship between the predictor and the dependent variable is completely explained by the proposed mediating variable (Rucker et al., 2011).

3.4.4 Two-way interaction

A core objective of this thesis is to examine the necessary conditions under which the thesis's predictor variables, i.e., economic life demands and organisational experiences of financial distress have their intended impact on the outcome variable (work engagement). A moderator analysis makes it possible to examine for conditional relationships, thereby addressing the "when" aspect of a predictor-outcome relationship. In essence, a moderator variable forecasts how the relationship between the endogenous and exogenous variables is different with respect to the direction and/or strength of their relationship (Hayes, 2012). In the case of strength, the proposed moderating variable will have two core effects, a boosting or a buffer effect. A moderator variable is said to have a boosting effect if the inclusion of the moderator enhances the strength of the relationship between the predictor and outcome variable (Montoya, 2019). On the other hand, a moderator provides a buffering effect if the inclusion of the moderating variable weakens the relationship between the predictor and outcome variable. Moreover, a moderating variable can likewise have the same effect with the predictor variable, however, the interaction effect is in an opposing direction (Edwards and Lambert, 2007).

In addressing the research questions involving a moderation effect, two-way moderation analysis is conducted. In two-way moderation analysis, the study's endogenous variable Y was regressed on the outcome variable X, the moderator variable Z and the combined product (interaction) of Z(XY). A p-value of ($P < 0.5$) in the regression co-efficient of the interaction term (moderator) indicates that the effect of X on Y contrasts across the values of the moderator variable z. Moderation analysis can likewise manifest in a three-way interaction. Here, the endogenous variable Y is regressed against the X, Z and W variables. Subsequently Y is then regressed (computed within a separate step) against the interaction term of each of the pairs of variables within the study, namely XZ, XW and WZ). Following this, an additional entry is made in a separate step wherein the outcome variable Y, is then finally regressed against the product term of all three predictor variables (XWZ). This thesis

only examined the two-way interaction effect because the thesis is examining the conditioning effect at a single level of analysis.

3.5 Ethical Consideration

To test for the hypotheses, a self-administered survey was employed. This implies that there was a need for me to initiate interaction with other individuals who are not directly involved in the study. When initiating human interaction within the context of conducting a research study, it is of utmost importance that data is obtained from research participants in an ethical manner (Munhall, 1988). With respect to ethical considerations there are three philosophical positions specifically, i) teleology, ii) deontology and iii) scepticism. While teleology emphasises that ethical rules are to be determined on the basis of the equilibrium between the gains and cost attributed to a given action, deontology focuses more on adherence to several rigid rules which are perceived to be rational and universal across all circumstances (Fox et al., 2003). Scepticism on the other hand places more importance on individual moral codes rather than the application of universal rules because these rules are believed to be impossible to implement effectively (Schlenker and Forsyth, 1977).

This thesis follows the teleological stance regarding ethical consideration. The choice of this position is because I strongly believe that there can be no meaningful gain if an action requires that others will have to bear some burden of cost even if the gains outweigh the cost (Durrant and Skinner, 2006). Subsequently, the ethical consideration considered how best to strike a balance between the cost and gains associated with data collection. Data collection, interpretation and the presentation of practical implications were presented in ways that ensured that the research participants experienced no harm (Beauchamp and Bowie, 2004). In gathering data for this thesis, I adopted the anonymity, confidentiality and autonomy framework suggested by the British Psychological Society (BPS, 2010). The adoption of this framework is because the variables are concerned with the collection of data relating to experiences of a psychological nature.

Anonymity in data collection implies that the identity of the research participants is not disclosed at any time (Polonsky, 1998; Walford, 2005). Confidentiality in data collection necessitates that I treat as private and do not reveal any identifying information that may have been disclosed by the research participants during the collection of data (Polonsky, 1998; Wiles et al., 2008). Autonomy in data collection implies that research participants should give

their consent to participate in the research. This consent remains their exclusive right during the entire data collection period (Punch, 2013). This implies that even though a participant has given their consent to participate, participants can choose to withdraw from participating in the research at any time.

While gathering data for this thesis, I ensured that participants were well informed of data privacy as contained in the Data Protection Acts and Freedom of Information Act. These acts require that I predict in advance any threat to the confidentiality and anonymity of research data. In addition, I adopted standards that help to preserve anonymity (BSA, 2004). To ensure full compliance with the ethical rules during data collection, I included a brief introduction section in the cover letter sent to participants requiring them to voluntarily participate in the study. Prior to gathering data, I ensured that consent was given. Furthermore, an explanation of participants rights to autonomy together with information regarding anonymity and confidentiality was likewise explained in the cover letter.

**CHAPTER 4. EMPIRICAL STUDY ONE:
THE ECONOMIC RESOURCE SPIRAL MODEL OF WORK
ENGAGEMENT**

4.1 Introduction

This chapter presents the hypothesis development for addressing research question one of the PhD thesis. The chapter is structured into the following sub-sections, specialised introductory literature review for research question one, theoretical grounding and hypothesis development, methods and procedures, results and discussions, theoretical implications, and practical implications.

4.1.2 Specialised Literature Review Addressing Primary Research Question Ones

Undoubtedly, the salience of the adverse economic impacts of the outbreak of the COVID-19 pandemic have led to immense interest by practitioners and organisational theorist in descending how employee's economic life experiences, may be an experience that have several implications for the employees' work outcomes. For instance, in a recent study, it is discovered that economic stressors, in focus, job and financial insecurity relates negatively with employees' compliance with COVID-19 health and safety guidelines (Probst et al., 2020). Similarly, some have likewise established a positive link of employees' perceived economic resources during the outbreak of the COVID-19 pandemic to life satisfaction, and that these economic resources relate negatively to depressive symptoms (Wanberg et al., 2020). On the other hand, depressive symptoms and an undermined state of life satisfaction constitute a state of resource exhaustion – an experience inferred as inauspicious for the cultivation of work engagement. In a nutshell, these findings point to an anecdotal link between economic life experiences, resource exhaustion and the extent to which employees may choose to invest their mental and emotional resources into work.

While economic characteristics such as job and financial insecurity have received much attention in the employee well-being literature (Vander Elst et al., 2013; Sverke et al., 2002; Odle-Dusseau et al., 2018; Sinclair and Cheung, 2016; Ennis et al., 2000), less clear is

how unique dimensions of economic life experiences, particularly those that are characterised by perceived loss of volition over the use of economic resources, may be a core life experience that exert an influence on availability of emotional resources, and the likely implications of this for their work engagement. The work engagement construct is theorised as a positive, fulfilling, work related state of mind that is characterised by feelings of vigour, dedication, and absorption (Bakker and Demerouti, 2008; Schaufeli et al., 2006). Indeed, work engagement have been found to be positively associated with varying dimensions of performance outcomes (Xanthopoulou et al., 2009; Gruman and Saks, 2011; Matthews et al., 2014) and as grown over the years, to be a core phenomenon that have gained the interest of practitioners and researchers (Christian et al., 2011; Demerouti et al., 2010).

The literature in work engagement contends that characteristics of the work environment, individual predispositions, and its underlying impact on resource exhaustion, provides the dominant theoretical approach in discerning the antecedents of work engagement (Crawford et al., 2010; Petrou et al., 2017; Bakker and van Wingerden 2021). A reoccurring theme in previous studies on work engagement entails unravelling questions relating to why and when employee exposure to resource inducing work characteristics interact with job demands in influencing employees' subjective resources, and how this in turn impacts the direction of work engagement (Bakker and Sanz-Vergel., 2013; Breevaart, and Bakker, 2018; Wang et al., 2020; Zeijen et al., 2020). Despite the abundance of literature on the antecedents of work engagement: whether the loss of volition feature of economic life demands is an experience that may adversely undermine employee work engagement is conceptually unknown. I thus seek to contribute to this topic by drawing on the theoretical underpinnings of the conservation of resources (COR) theory in discerning a likely link link between employees' economic life demands and their work engagement.

Assuredly, a core dimension of employees' economic life experiences entails series of self-imposed economic related obligatory demands for which employees may feel compelled to address. These obligatory demands are such that it requires employees to spend from their limited economic resources (i.e., income), wherein a prime determinant of spending motives is contingent upon factors which are external to the employee. Building on this, economic life demands constitute a controlled form of life demand. Despite the prevalence of economic life demands in employee everyday life, how these demands may likely impact employees' emotional resources that in turn result in consequences for work engagement is unknown. Yet, micro level economic crisis due to the recent economic adversities of the outbreak of the COVID-19 pandemic, have had series of short and long term consequences on employees'

economic life experiences and their well-being (Tran et al., 2020; Probst et al., 2020; Mahmud and Riley, 2021). Such consequences of economic life experiences may ultimately have implications for employee's emotional functioning and the extent to which these employees may choose to invest from their emotional resources into work. Such a connection of economic life experiences to employee's emotional functioning and attitude to work highlights both a conceptual and a practitioner relevance for further studies to explore (i) whether employees' economic life demands adversely impact their work engagement, (ii) if yes, why this adverse relation occurs, and (iii) what can organisations do to minimise the salience of the adverse impact.

To address these questions, I draw on the COR theory to hypothesise a model (i.e., figure 4.1) linking economic life demands to work engagement. Central to the COR theory is the tenet that individuals have an inherent desire to acquire resources and to defend against threats to resource availability (Hobfoll and Shirom, 2001). Precisely, I postulate that economic life demands adversely impacts work engagement. I hypothesised this to be so partly because economic life demands induce for feelings of emotional distress. Moreover, when emotionally distressed, employees are unable to invest from emotional resources into work engagement. Following this, I subsequently positioned economic life demands to relate positively with emotional distress, and that this in turn make it difficult for employees to invest from their emotional resources into work engagement.

By addressing my research questions, my research makes core contributions to the literature in work engagement and the COR theory. First, by examining the impact of employees' economic life demands on work engagement through emotional distress, my study presents a new theoretical insight in conceptualising and validating the desperation tenet of the COR theory in relation to work engagement. Furthermore, by examining boundary conditions through which economic life demands impact work engagement through emotional distress, I address the question of when employees' economic life demands will result in adverse consequences for work engagement. In this study, I position detachment to be relevant situational characteristic that help to mitigate the impacts of economic life demands on work engagement through emotional distress. By so doing, my hypothesised theoretical model contributes to the COR theory by authenticating the role of situational factors in the research into the resource passageways tenet of the COR theory (Halbesleben et al., 2014).

4.2 Theoretical Grounding and Hypothesis Development

Economic Life Demands and Its Relationship with Emotional Distress

In addressing my research questions, I draw upon the COR theory (Hobfoll and Shirom, 2001), a theoretical lens that have consistently been utilised in explaining how employees react when exposed to stressors (Rich et al., 2010; Binnewies et al., 2009). At the core of the COR theory is the tenet that individuals' behaviors are predominantly influenced by the availability of resources (Hobfoll and Shirom 2001). Resources are inferred as objects that are valued by individuals because these objects are instrumental for goal achievement.

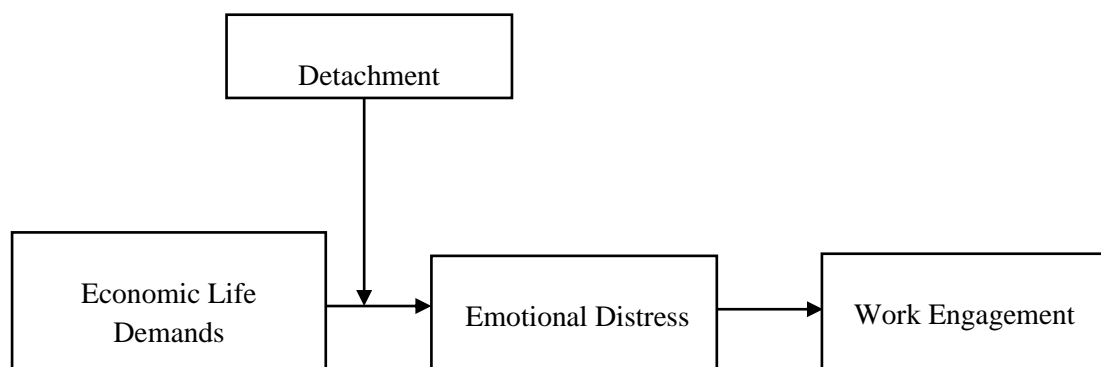


Figure 4.1 Hypothesized Model of the Influence of Economic Life Demands on Work Engagement

The COR theory asserts that stress is the manifestation of an implied or the actual loss in resources and that the loss of resources undermines optimal functioning (Halbesleben et al., 2014; Debus and Unger., 2017). As a reaction to the loss of resources, employees will seek to conserve available resources by disengaging in activities that demand the investment of resources. The behavior of defending against the further loss of resource is theorised as the desperation principle of the COR theory (Hobfoll and Shirom., 2001). In a nutshell, the desperation tenet postulate that experiences which deplete the availability of resources will in turn undermine emotional functioning and that this can discourage employees from investing the self into work.

Based on the COR theory, I position economic life demands to be an experience that may forestall the availability of emotional resources that subsequently lead to feelings of

emotional distress. I postulate this to be so because economic life demands tend to be regulated by the need to present the self to others in positive light. Hence, these demands reflect a loss of volition in that the motives for these demands are externally regulated – given that one’s self-esteem and worth tend to be projected towards socially prescribed perfection and as such, not meeting up with one’s economic life demands can lead to feelings of insecurity, shame, and guilt. On the other hand, the loss of volition has consistently been positioned to be an experience that exert demand on emotional resources that in turn render individuals to be susceptible to loss in emotional resources. Illustrating further, findings have consistently demonstrated that loss of volition over aspect of job tends to hinder goal achievement and growth, and that this in turn can result in feelings of exhaustion (Meyer and Allen., 1993; Meyer et al., 2012; Bond and Bunce, 2003; Häusser et al., 2010). This assumption is in congruence with several studies that have linked loss of control to dysfunctional state of emotional well-being (Van der Doef and Maes, 1999; Gagné and Deci, 2005; Deci and Ryan, 2014).

Because economic resources facilitate the acquisition of additional resources, in focus, material well-being and healthy physical functioning (Ode-Dusseau et al., 2018), the loss of volition due to economic life demands can deprive employees from investing their economic resources in experiences that facilitate the acquisition of core life resources. Deprivation from acquiring core life resources can exert demand on one’s emotional resources given that emotional resources will be utilised in mitigating against the distressing feelings associated with resources deprivation (Chi and Liang., 2013). However, the utilization of emotional resources to mitigate against the unpleasant feelings of resource deprivation on account of economic life demands is an experience that does not relate with goal pursuit and as such, no new emotional resources will be acquired (Dormann and Zaqf, 2004; Crwaford et al., 2010). This can ultimately render the employee to be susceptible to loss in emotional resources that manifest in the form of feelings of emotional distress. My postulation that the loss of volition attribute ascribe to economic life demands will cultivate for feelings of emotional distress is in congruence with the COR assertion that conceptualises stress to manifest when resource investment outweighs resource gains (Halbesleben et al., 2014). Following this, I expect that employees who report high in economic life demands will equally report high in feelings of emotional distress.

Hypothesis 1: Economic life demands is positively related with emotional distress.

Emotional Distress and its Relationship with Work Engagement

Work engagement is inferred to involve the physical, mental, and cognitive immersion of oneself in work roles (Kahn., 1990). The action of immersing the self in work entails the prior possession of resources given that immersion is a form of resource investment that is enacted by drawing on one's available resources (ten Brummelhuis and Bakker., 2012). The depletion of emotional resources caused by economic life demands in the form of emotional distress is an experience that is characterised by feelings of anxiety, loss of interest and general purpose, and difficulty in engaging in goal pursuit. In short, emotional distress implies that employees are in possession of fewer emotional resources and as such, have less of emotional resources to invest into work engagement (Wirtz et al., 2017). This assertion is in congruence with the COR theory that asserts that a core medium through which individuals react to resource depletion is to disengage in participating in subsequent events that exert further demands on depleted resources (Halbesleben et al., 2014; Rich et al., 2010). Because work engagement exerts on emotional resources, I expect that emotionally distressed employees will perceive engagement in work to be a threat to available resources and as such they will seek to defend against this by engaging less in their work. Indeed, several studies depicts loss in emotional resources to be negatively associated with work engagement (Wayne et al., 2017; Xanthopoulou, et al., 2013). I build on this and position emotional distress to be an experience that will undermine the extent to which employees invest emotionally into work thereby undermining work engagement.

***Hypothesis 2:** Emotional distress is negatively related with work engagement.*

The Mediating Role of Emotional Distress

I argued that economic life demands are positively related with emotional distress. I further hypothesized that emotional distress is negatively related to work engagement. Concurrently, hypotheses one and two guides towards the premise that emotional distress mediates the relationship between economic life demands and work engagement. The mediating role of emotional distress in the relation between economic life demands and work engagement is in congruence with the spillover effect of strain (Westman, et al., 2013; Deng et al., 2017). Following this, I position emotional distress to be a mediator of the relation between economic life demands and work engagement.

Hypothesis 3: Economic life demands is negatively and indirectly related to work engagement through emotional distress.

The Moderating Role of Detachment

Thus far, my theoretical account positions emotional distress as the explanatory mechanism through which economic life demands tend to have consequential impact on work engagement. Nonetheless, there is reason to believe that this mechanism may fluctuate in its strength. Justification for this thought is grounded within the resource caravan passageways principle of the COR theory (Hobfoll., 2011). The resource caravan passageways principle holds that resources are dependent on internal and external conditions that either augment or constraint resource generation and sustenance. Here, situational characteristics that mitigate against the prevalence of subsequent loss in resources can lessen the strength of the impact of stressors on employees' experiences of resource loss (Halbesleben et al., 2014).

In hypothesis 1, I argued that economic life demands cultivate for emotional distress. I compliment this argument further by postulating that a core situational factor that may lessen the strength of the positive effect of economic life demands on emotional resources is off-job detachment. Explicated as the physical and mental distancing of the self from work-related activities, detachment during off-job period have been linked with the restoration of subjective resources (Sonnentag et al., 2010; Sonnentag and Fritz, 2007). When detached, employees do not ruminate about stress induced job-related activities, which in turn can facilitate gains in emotional resources. This process of switching off from work during off-work periods have been found to reduce feelings of strain and boost recovery (Sonnentag et al., 2010; Sanz-Vergel et al., 2011). Following this, several studies contend detachment to impair the positive relation between stressors and feelings of strain (Van Hooff and Baas, 2013; Sonnentag and Kuhnel, 2016; Smit and Barber, 2016). I build on this and argue that the adverse impact of economic life demands on emotional resources through the medium of emotional distress would be less particularly among employees who detach from work during off-job period. This reasoning is substantiated from findings which have linked detachment to be positively associated with employees' feelings of control (Sonnentag et al., 2010).

Inarguable, the feelings of control due to detachment can in turn foster a general sense of increased volition over the disposal of one's economic resources which in turn may lessen the strength of the positive impacts of loss of volition on account of economic life demands

on the employee's experiences of emotional distress. This argument is in congruence with findings which have found detachment to relate negatively with feelings of exhaustion (Chawla et al., 2020; Clinton et al., 2017). My supposition that the physical and mental detachment from job during off-job periods will lessen the strength of the adverse impacts of economic life demands on emotional functioning is in line with the resource passageways tenets of the COR theory. Here, the gain in resources due to the experience of detaching from job acts as a channel offsetting the salience of the adverse impacts of economic life demands on emotional resourcefulness. Hence, I suspect that the strength of the positive impacts of economic life demands on emotional distress will be less salient among employees who report high in detachment.

***Hypothesis 4:** Detachment moderates the positive relation between economic life demands and emotional distress, such that the positive relation becomes weak among employees who report high rather than lower in detachment.*

Drawing on the COR theory, I hypothesized that emotional distress mediates the in-direct negative relation between economic life demands and work engagement. I further argued that detachment moderates the effect of economic life demands on emotional distress. Consequentially, my hypothesized model suggests a first stage moderated-mediation relational account wherein the strength of the in-direct negative relation between economic life demands and work engagement through emotional distress is contingent upon employee experiences of off-job detachment.

***Hypothesis 5:** Detachment moderates the negative relation between economic life demands and work engagement through emotional distress such that the strength of the indirect relation is weaker when detachment is higher rather than low.*

4.3 Sample and procedures

In addressing my research questions, I recruited participants by advertising the purpose of my research and requested for their participation via LinkedIn – a professional networking platform. To minimise the prevalence of common method bias (Podsakoff et al., 2012), data for this study was collected at three time periods, with a gap of one week apart at each batch

of data collection. To effectively address my research questions, it was crucial that participants possessed core characteristics and as such, I included custom validation questions in order to screen out potential participants who did not possess minimum characteristics for survey participation. To qualify to participate, only individuals who had been in employment within the UK for a minimum of six months at their current job role within the same organisation could participate. In addition, to full-time employment, only individuals who worked a minimum of 20 hours a week as a part-time employee were allowed to participate in the survey. I ensured that only those who gave consent could participate. At the end of the first phase of the survey section, I requested participants to indicate if they wish to participate in the second and third phase, by registering their email address. This information was obtained whilst assuring participants that their data would be treated confidentially.

In the first phase of the data collection, a total of 232 valid responses were gathered. Participants were asked to respond to questions that reflected their economic life demands, financial insecurity, and detachment. I also asked participants questions about their experiences of role conflict. This was in order to account and control for the likely effects of role conflict on employee experiences of emotional distress. One week after the completion Time 1 data collection, I thereafter sent the second survey questions which measured Time 1 participants' reflections of their experiences of emotional distress. At the end of Time 2 data collection, a total of 189 valid responses were obtained. A week later, the third survey questionnaire was sent to those who participated at Time 2 data collection, of which a total of 145 valid responses were obtained. Of the final 145 responses across Times 1, 2, and 3, female participants accounted for 51%. In addition, 36.6%, 20.7% and 3.4% had bachelors, masters, and doctorate degrees, respectively. 29.7% and 9.7% had a high school certificate and national diploma as their highest educational qualification, respectively. Participants consisted of only white-collar employees from multiple industries and organisations in the UK. In addition, participants worked in various capacities, including administrative, sales, customer services, and top management.

Measures

Economic Life Demands. This was measured at Time 1 using a 3-items scale. Participants were asked to rate the extent to which they involve in economic activities requiring the forgoing of material resources in order to (i) avoid interpersonal conflicts with others (ii)

meeting social expectations set by others, and (iii) cater for the financial burdens of others. This was collated using a 5-point response scale ranging from (1) strongly disagree, to (5) strongly agree. Specifically, I asked participants to respond to questions about their motives for economic spending behaviours. The 3-items are “I find myself spending money to communicate my worthiness within the society.” “I have to spend money in order to meet people’s expectations.” and “I find myself spending money to avoid embarrassment.” Cronbach’s alpha was 0.82.

Emotional Distress. This was measured at Time 2 using items from the General Health Questionnaire, GHQ scale (Goldberg, 1972). To avoid survey fatigue, I measured emotional distress by utilising a single item from the somatic subscale of the GHQ scale (i.e. have you recently been getting a feeling of pressure in my head?), 4 items from the anxiety and insomnia subscale and a single item from the despondency subscale of the GHQ scale. I did not include items from the psychiatrist severity subscale of the GHQ because this dimension of the health questionnaire captures a severe form of health impairment of a suicidal nature that lies beyond the scope of my research question. Further information on the GHQ items utilised in measuring emotional distress is presented in table 4.6. Responses were collated using a 5-point scale ranging from (1) strongly disagree to (5) strongly agree. Cronbach’s alpha was 0.88. I further conducted a model fit analysis to examine the overall goodness of fit of the shorten GHQ scale utilised in measuring emotional distress. Results of CFA revealed that the 6-items utilised in capturing employees’ experiences of emotional distress loaded on a single factor and had good fit with with data ($\chi^2 = 16.20$, $P = .06$, $df = 9$, $CFI = .98$, $RMSEA = .07$, $SRMR = .07$).

Financial Insecurity. I measured financial insecurity at Time 1 using three items developed by McCubbin and Comeau (1991). Responses were collected using a 5-point scale ranging from (1) strongly disagree to (5) strongly agree. Sample of items include, “I have little or no trouble paying my bills on time” and “I have money to cover unexpected expenses.” All responses were reverse coded to reflect financial insecurity. Cronbach’s alpha was 0.72

Work Engagement. I measured work engagement at Time 2 using items from the Utrecht work engagement scale, UWES-S (Schaufeli et al., 2006). I adapted three items measuring vigor (i.e. ‘when at work, I am busting with energy’), a single item measuring dedication (i.e. ‘I am enthusiastic about my work’), and three items measuring absorption (i.e. ‘time flies when I am working’). Previous studies have likewise adapted a shorten version of

Utrecht work engagement scale (for discussion, see Wang et al., 2020). Participants were required to indicate their state work engagement on a 5-point scale ranging from (1) strongly disagree to (5) strongly agree. Cronbach's alpha was 0.91. In addition, I conducted CFA analysis to examine the overall goodness of fit with the data set, as expected, the 6-items from the Utrecht work engagement scale showed that all items loaded on a single factor and had good fit with the data ($\chi^2 = 49.32$, $P = .00$, $df = 14$, $CFI = .95$, $RMSEA = .12$, $SRMR = .04$).

Detachment. This was measured at Time 1 using Sonnentag and Fritz (2007) 4-items detachment scale from the recovery experiences instrument. This was collated using a 5-point response scale ranging from (1) strongly disagree to (5) strongly agree. Sample items included “when I am at home, I forget about work” and “at home, I get a break from the demands of job.” Cronbach's alpha was 0.89.

Control Variables. Because hindrance job demands in particular, role conflict have been associated with the loss of emotional resources, I therefore expect that other than economic life demands, role conflict at Time 1 may likely impact employees' experiences of emotional distress. Following this, I measured and controlled for the likely effects of role conflict in my hypothesised model. I measured role conflict using 4-items developed by Bowling et al (2017). Sample items include, “In my job, I often feel like different people are pulling me in different directions” and “I have to deal with competing demands at work.” Cronbach's alpha was 0.76.

4.4 Results and Discussion

Descriptive statistics and confirmatory factor analyses. Prior to conducting inferential analyses in validating my research hypotheses, I examined the validity of all constructs in my hypothesized model by conducting confirmatory factor analysis (CFA). CFAs were carried out using MLM estimation. I compared a 6-factor model (i.e., economic life demands, emotional distress, financial insecurity, detachment, work engagement and role conflict as a control variable) with alternative models. As depicted in table 4.1, the expected 6-factor model ($\chi^2 = 515.40$; $df = 309$; $CFI = .95$; $RMSEA = .06$ and $SRMR = .05$) showed significant model fit than an alternative five, four, and three, factor-models. In addition, results of descriptive statistics and correlation analysis are presented in table 4.2. The exploratory factor model for the 6-factor model is depicted in table 4.6.

Table 4.1 Model Fit Indices for the Measurement Models

Models	χ^2	df	CFI	RMSEA	SRMR
6 Factors	515.40	309	.90	.07	.10
5 Factors combining Economic life demands (ELD) and Emotional Distress (ED)	613.86	314	.85	.08	.12
4 Factors combining ELD, ED, and Financial Insecurity (FI)	700.12	318	.80	.09	.13
3 Factors	790.62	321	.76	.10	.14

I hypothesized a direct positive relationship between economic life demands and emotional distress. To substantiate Hypotheses 1, I utilised the hierarchical regression analyses. I entered role conflict in Model 1 and controlled for its effect on economic distress in Models 2 and 3. Thereafter, I entered economic life demands in Models 2 and 3. Results are shown in table 4.3. In both entries 2 and 3, findings reveal that economic life demands relate positively with emotional distress ($\beta = .35$, $SE = .08$, $p < .00$). My findings showed that the positive relation held even after controlling for the effects of role conflict in both Models 3 ($\beta = .33$, $SE = .08$, $p < .00$), thus Hypothesis 1 was supported. Moreover, I found support for my postulation that emotional distress will relate negatively with work engagement (i.e., Hypothesis 2). My findings validated this postulation as results showed that emotional distress had a negative impact on work engagement ($\beta = -.29$, $SE = .08$, $p < .00$). Results of this relation is depicted in Model 5 of table 4.3. Following results of regression analyses, support was thus found for hypothesis 2.

Following the validation of Hypotheses 1 and 2, I thereafter sought to validate my argument that economic life demands will have a negative impact on work engagement through employee's experiences of emotional distress. This assumption was examined using the PROCESS macro plugin written by Hayes (2018). Results of mediation analysis showed

that economic life demands related negatively with work engagement through its positive effect on emotional distress ($\beta = -.14$, $SE = .04$, $CI = [-.24, -.07]$). Results showed that the indirect effect point was significant at the 0.00 significant level, thus my data showed support for Hypothesis 3. The Results of mediation analysis is shown in table 4.4.4. Thereafter, I examined for the relation between economic life demands on emotional distress at values of employee experiences of detachment (i.e., Hypothesis 4). Findings of regression analysis showed that detachment did not significantly moderate the direct relation between economic life demands and employee reports of emotional distress at the .05 level of significance ($\beta = -.11$, $SE = .06$, $p < .09$). The result of the moderation relation is presented in Model 3 of table 4.3.

Subsequently, I examined whether the strength of the indirect negative relation between economic life demands and work engagement through emotional distress was contingent upon employee experiences of detachment. Results revealed a positive conditional indirect relationship between economic life demands and work engagement through emotional distress at values of detachment ($\beta = .24$, $SE = .06$, $p < .00$). The result of moderation-mediation analysis is presented in Model 5 in table 4.3. Similarly, my findings showed that the moderating effect of detachment was significant at both the higher (+1 SD) and lower (-1 SD) values of detachment. The indirect relation at different levels of detachment is presented in table 4.5, accordingly hypotheses 5 was supported. Result of the two-way moderation-mediation relation is depicted in figure 4.2.

The validation of my hypothesized model of the relation between economic life demands and work engagement advance current conceptual understandings of the antecedents of work engagement. There is a research consensus that the loss of volition over the execution of job can lead to loss of employee subjective resources (Parker et al., 2016), my findings demonstrate that volition over the use of one's economic resources is instrumental for employee's emotional functioning, and that economic life experiences, in focus, employee's economic life demand is a core life experience that undermines work engagement. My findings demonstrate that the adverse effect of economic life demands on work engagement is explained by the fact that hen employees experience high economic life demands, they are unable to invest their economic resources in experience which lead to the acquisition of new experiences. Inability to acquire new resources in turn exert demand on employee's emotional resources. The exertion on emotional resource renders employees vulnerable to the erosion of emotional resources, an experience which manifest through the medium of feelings of emotional distress. My findings that emotional distress on account of economic life demands -

relates negatively to work engagement demonstrate that economic life demands are a conduit through which employees lose emotional resources that thereafter prevent these employees from investing emotionally into work engagement. Another theme in the work engagement literature has focused on identifying contextual factors that buffers the resource threatening potentials of stressors that subsequently impacts the work engagement. My findings substantiate the idea that mental and physical detachment from work during off-job period is a significant contextual factor that is beneficial for mitigating against the resource threatening potentials of economic life demands.

Table 4.2 Means, Standard Deviations, and Correlations

Variables	M	SD	1	2	3	4	5	6	7	8	9	10
1. Gender ^a (T1)	1.49	.50	—									
2. Age ^b (T1)	4.05	1.65	.29**	—								
3. Education (T1)	2.59	1.21	.16*	.16*	—							
4. Tenure (T1)	3.02	1.20	.06	.55**	-.06	—						
5. Economic Life Demands (T1)	2.20	.89	-.02	-.19*	-.04	-.01	—					
6. Detachment (T1)	3.11	1.08	-.26**	-.26**	-.04	-.25**	.02	—				
7. Financial Insecurity (T1)	2.61	1.04	-.02	-.10	-.30**	-.03	.21*	.06	—			
8. Role Conflict (T1)	2.98	.83	.15	-.02	-.09	.13	.32**	-.15	.08	—		
9. Emotional Distress (T2)	2.71	.93	.02	-.27**	-.22**	-.16	.46**	-.12	.35**	.33**	—	
10. Work Engagement (T3)	3.40	.83	.00	.09	-.00	-.04	.06	-.12	-.18*	-.23**	-.17*	—

a 1 = female and 2 = male, b 1 = 18-24 years, 2 = 25-34 years, 3 = 35-44 years, 4 = 45-54 years, 5 = 55-64 years, 6 = 65-74 years, 7 = 75 year and above;

* $p < .05$. ** $p < .01$; $N = 145$. T1 = wave 1 data collection, T2 = wave 2 data collection, T3 = wave 3 data collection.

Table 4.3 Results of Parametric Coefficients Predicting Emotional Distress and Work Engagement

Predictors	Emotional Distress								
	Model 1			Model 2			Model 3		
	β	SE	t	β	SE	t	β	SE	t
Role Conflict	.33***	.09	4.18	.18***	.08	2.42	.16*	.08	2.20
Economic Life Demands				.35***	.08	4.74	.33***	.08	4.34
Financial Insecurity				.27***	.06	3.82	.27***	.06	3.90
Detachment				-.11	.06	-1.6	-.11	.06	-1.60
Economic Life Demands x Detachment							.12†	.60	1.70
R ²		.11***			.33***			.35†	

Predictors	Work Engagement					
	Model 4			Model 5		
	β	SE	t	β	SE	t
Role Conflict	-.17*	.25	-2.10	-.22**	.08	-2.74
Economic Life Demands				-.54**	.21	-2.53
Financial Insecurity				-.08	.06	-1.19
Detachment				-.68***	.15	-4.63
Emotional Distress				-.29***	.08	-3.56
Economic Life Demands x Detachment				.24***	.06	4.03
R ²		.03			.24***	

The standardized regression coefficients are reported. † $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .00$, $N = 145$

Table 4.4 Regression Results for the Relationship of Economic Life Demands on Work Engagement Through Emotional Distress

Emotional Distress				
Predictors	β	SE	LLCI	ULCI
Economic Life Demands	.48***	.08	.33	.63
R2				
Work Engagement				
Predictors	β	SE	LLCI	ULCI
Economic Life Demands	.20**	.08	.03	.36
Emotional Distress	-.29***	.08	-.45	-.13
R2				
Indirect Effect Relationship	Indirect effect Point	SE	LLCI	ULCI
Economic Life Demands → Emotional Distress → Work Engagement	-.14**	.04	-.24	-.07

The standardized regression coefficients are reported. ** $p < .01$, *** $p < .00$, $N = 145$

Table 4.5 Conditional Indirect Effect of Economic Life Demands on Work Engagement at Through Emotional Distress Values of Detachment

	β	SE	95% CI
-1 SD values of Detachment	-.09	.05	[-.20, -.01]
0 SD values of Detachment	-.13	.04	[-.22, -.06]
-1 SD values of Detachment	-.16	.05	[-.28, -.08]

Figure 4.2 Interaction Effect of Economic Life Demands and Detachment on Work Engagement Through Emotional Distress at -1SD and +1SD levels of Detachment

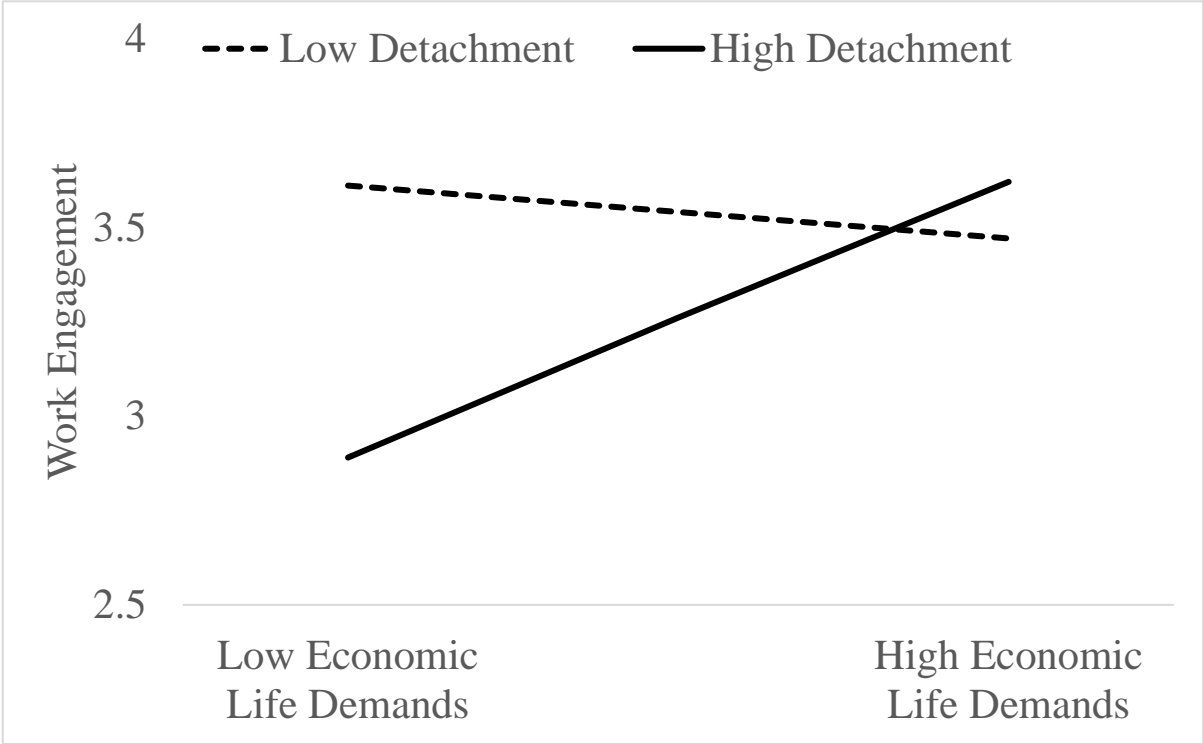


Table 4.6 Exploratory Factor Analysis

Items	Factor	Factor	Factor	Factor	Factor	Factor
	1	2	3	4	5	6
1. I find myself spending money to avoid embarrassment	.90					
2. I have to spend money in order to meet people's expectations	.77					
3. I find myself spending money to communicate my worthiness within the society	.75					
4. I have little or no trouble paying my bills on time (R)		.80				
5. I do not have financial debts. (R)		.78				
6. I have money to cover unexpected expenses (R)		.77				
7. After the official close of job for the day, I forget about work.			.88			
8. After the official close of job for the day, I distance myself from my work.			.87			
9. After the official close of job for the day, I do not think about work at all.			.86			
10. After the official close of job for the day, I get to take a break from the demands of work.			.83			
11. In my job, I often feel like different people are pulling me in different directions				.81		
12. I have to deal with competing demands at work				.74		
13. The task I am assigned at work rarely come in conflict with each other (R)				.73		

14. My supervisors often tell me two different things that can't both be done.	.66	
15. In the last week, have you had difficulty in staying asleep once you are off to sleep?		.85
16. In the last week have you recently lost much sleep due to worry?		.81
17. In the last week have you recently been getting a feeling of pressure in my head?		.72
18. In the last week have you been getting edgy and bad-tempered?		.65
19. In the last week have you been getting scared or panicky for no good reason?		.60
20. In the last week have you been taking longer over the things you do?		.50
21. My job inspires me.		.90
22. I am enthusiastic about my job.		.89
23. I find the work that I do full of meaning and purpose.		.87
24. At my job, I feel strong and vigorous.		.82
25. At my work, I am bursting with energy.		.78
26. When I get up in the morning, I feel like going to work.		.73
27. When working, I forget everything else around me.		.62

N = 145; R: reversed coded; Extraction Method: Principal component analysis. Rotation method: Promax with Kaiser Normalization. Factor 1 = Economic Life Demands; Factor 2 = Financial Insecurity; Factor 3 = Off-job Detachment; Factor 4 = Role Conflict; Factor 5 = Emotional Distress; Factor 6 = Work Engagement

4.5 Theoretical Implications

The current study makes key theoretical contributions to the COR theory and the work engagement literature. Firstly, by demonstrating the direct positive impact of economic life demands on emotional distress, in addition to the direct negative impact of emotional distress on work engagement, my study further adds to the abundance of support for the desperation and the resource corollary the COR theory (Hobfoll and Shirom, 2001; Halbesleben et al., 2014). Support found for the undermining role of economic life demands on work engagement through emotional distress indicates that economic life demands should be given sufficient attention, particularly during the current pandemic where employees' economic life experiences have been drastically affected by the outbreak of the pandemic.

Though previous studies have highlighted the role of none-work related characteristics in impacting work outcomes (for reviews, see Sonnentag., 2003; Lanaj et al., 2014), the idea that economic life experiences, in focus, economic life demands may adversely impact work engagement have largely been overlooked. This can partly be attributed to presumptions inferred from the cognitive evaluation theory CET. The CET advocates that intrinsic work-related experiences rather than economic contingent characteristics are the most relevant factor that are associated with work motivation (Gagné and Deci, 2005). By drawing on the COR theory, I was able to position emotional distress as the explanatory mechanism through which economic life demands work engagement.

Specifically, by illustrating economic life demands as an experience of loss in resources that aversively impact work engagement, my study provides support for the desperation tenets of the COR theory (Hobfoll, 2011). The examination of interaction effect further advances current knowledge regarding when economic life demands is likely to undermine work engagement. From my findings, I found that though economic life demands hinder the generation of emotional resources that in turn adversely impacted work engagement, I however observed detachment to mitigate the adverse impact of economic life demands on work engagement. The fact that when detachment is high, detachment mitigated the resource threatening potentials of high economic life demands on work engagement through emotional distress contributes to the COR theory by authenticating the resource caravan passageways tenet of the COR theory (Hobfoll et al., 2018).

Another implication to the COR theory, is that my findings assets the postulation of loss spiral. Resource loss spiral is inferred as the mechanism through which an initial

experience of resource loss triggers for additional loss in resources thereby creating a web of cycles of resource loss (Demerouti et al., 2004). The tenet that resource loss begets additional loss in resources is prevalent within the work domain. This is thought to operationalise via the process of self-undermining – “behaviors that creates obstacles that may undermine performance” (Bakker and Costa, 2014). Findings of my study leads towards the motion of a “triple loss spiral” wherein economic life demands operationalise as the initial loss in the resource of volition over the use of economic resources material resources. The loss in volition on the other hand activates for the second phase of resource loss; the deterioration of emotional energy, subsequently inducing for the third phase of resource loss being the erosion of performance in the form of low work engagement. My findings therefore substantiate the COR corollary that individuals who experience adversity in the form of resource loss have a higher likelihood of losing additional resource rather than the development of new resources.

4.6 Practical Implications

This study highlights the core role of emotional distress and detachment as core mediums through which employees’ economic life demands may exert demand on the employees’ emotional resources that in turn alters the direction of work engagement. Considering the relevance of work engagement for organisational performance, particularly during the pandemic, findings from this study can help guide HR practitioners on how organisations can design interventions that help protect the emotional well-being of employees and their engagement with work. For instance, my findings with respect to the buffering effect of detachment indicates that organisations can sustain the work engagement of their employees by designing work structures that makes it easy for employees to detach from work related activities during off-job periods. In response to the health challenges of the COVID-19 pandemic, many organisations in the West have had to implement series of social distancing measures. Of these, is the transition of work into virtual working.

Moreover, the emergence of the COVID-19 pandemic has resulted in multiple use of technologies that facilitate virtual working. Despite the benefits of integrating technologies into work, some studies have demonstrated how digitalization of work through technology use blurs the boundaries between work and non-work life given that employees are now able to engage in work during off-work periods (Derks and Bakker, 2014; Rubery et al., 2018; Balliester and Elsheikhi, 2018). This have been found adverse impact on employee’s ability to detach from work during off-job periods and undermine employee’s recovery (Barber and

Santuzzi, 2015). This coupled with the prevalence of job loss associated with the pandemic, can lead to difficulty for employees to effectively detach from work. In such circumstances, employees with high economic life demands may benefit less from detachment and based on my findings, this could negatively impact their work engagement. This is because low detachment under conditions of high economic life demands will result stagnated recovery process and adversely impact employees' perceptions of control thereby leading to employee loss of emotional resources. The feeling of exhaustion in turn suggest that these employees are unable to invest depleting resources into work engagement thereby undermining employee and organisational performance. To avoid the adverse impact on work engagement, my study advise that organisations should design complementary work and technology systems that can help to discourage employees from engaging in work during off-job periods. Through this, employees are able to benefit from the gains associated with detachment and as such aid in minimising the detrimental impact of economic life demands on work engagement.

4.7 Conclusion

The aim of this research was to explore the impacts of employees' economic life demands on employees' work engagement. I illustrated that economic life demands cultivates for feelings of emotional distress and that this prevents employees from investing emotionally into work thereby adversely impacting their work engagement. The detrimental effects were nonetheless buffered by detachment. My findings of the connection between economic life demands and work engagement can serve as a framework for HR practitioners in promoting work engagement particularly during the COVID-19 pandemic where the salience of economic pressures is high. For instance, in attempts to mitigate the adverse impacts of economic life demands on work engagement, HR practitioners can design workplace interventions that help to promote employee detachment.

CHAPTER 5. EMPIRICAL STUDY TWO:
FIRM ECONOMIC DISTRESS AS PROXIMAL PROCESS DEFINING
WORK CHARACTERISTICS AND WORK ENGAGEMENT

5.1 Introduction

Assuredly the enforcement of national lockdown measures in attempt at preventing a surge in COVID-19 infection and death cases have adversely impacted organisations' ability to generate economic revenue (Pedersen and Favero, 2020). When revenues are down, this can greatly impact organisations' ability to invest resources towards designing jobs that are enriching and facilitative of employee work engagement. Amid the adverse impact of the pandemic on organisations' economic productivity, a core medium through which organisations can compete and secure sales is through the engagement of their workforce.

Undoubtedly, research have consistently demonstrated that work engagement is positively associated with healthy employee attitudinal, behavioral, and well-being work-related experiences, and that this in turn is positively associated with the financial well-being of organisations (Hakanen et al., 2008; Xanthopoulou et al., 2009; Naruse et al., 2015; Christian et al., 2011; Cole et al., 2012). Based on the connection of work engagement to organisations' economic well-being, this leads to the assumption that amid the outbreak of the COVID-19 pandemic, the magnitude of the adverse impact of the pandemic on organisations' economic performance will be less particularly among organisations whose employees report scoring high on work engagement since the outbreak of the pandemic.

Work engagement is conceptualised as an affective state characterised by feelings of vigor, dedication, and absorption towards work (Schaufeli et al., 2002). Previous studies on the antecedents of work engagement have sought to adopt several theoretical mechanisms in explaining why and under what conditions do specific job resources rather than others trigger for work engagement (Nahrgang et al., 2011; Bakker et al., 2006; Schaufeli and Salanova, 2004; Tremmel et al., 2019; Crawford et al., 2010; Knight et al., 2017). Despite the wealth of knowledge on the antecedents of work engagement, little is known regarding (i) whether economic adversities at the organisational level adversely influence employee experiences of work engagement, and if yes, (ii) why is the adverse impact so, and (iii) what can organisations do in order to promote employee work engagement in times of economic crises at the organisational level. Given the salience of the adverse impact of the COVID-19

pandemic on organisations' economic performance (Song et al., 2021; Gu et al., 2020; Cowling et al., 2020; Mazur et al., 2021; Qin et al., 2020), the central aim of this study is to contribute to current theoretical awareness on the antecedents of work engagement in times of economic adversities. I aim to achieve this by drawing on theory in addressing my research questions.

Findings of empirical evidence leads to the idea that employees report high on acute load reactions particularly when their organisation is experiencing financial difficulty (Miron-Spektor et al., 2018). In addition, significant fraction of the variance in employee experiences of work engagement are in part understood to be explained by employees' experiences of varying dimensions of work characteristics (Naruse et al., 2015; Rigotti et al., 2014). Following this, I therefore suspect an anecdotal link between economic adversities at the organisation with employee work engagement through their experiences of work characteristics. Having a theoretical account that explains why and when economic adversities at the organisation adversely influence employee work engagement will be instrumental in the design of jobs that help to promote employee work engagement in times of economic crisis. Thus my study advance both a conceptual and practical relevance.

In addressing my research questions, I draw on the conservation of resources (COR) theory (Hobfoll and Shirom, 2001), to posit that organisations' experiences of economic adversities relates negatively with work engagement, and that this is so because economic adversities at the organisation level renders organisations vulnerable to resource loss and less capable to generate resources (Hobfoll et al., 2016). In order to protect against further loss in resources, organisations will seek to conserve on their available resources (Hobfoll and Shirom, 2001). I posit that organisations initiate resource conservation by investing less of their available resources into resource generation. Indeed, the behavior of withdrawing from resource investment following resource loss is a core tenet of the COR theory inferred to as the desperation principle (Hobfoll and Shirom, 2001). I illustrate that organisations' behavior to invest less of their available resources into employee work will nurture for work features characterised by increase in the prevalence of hindrance job demands and organisational unwillingness to support employee strength use. The manifestation of hindrance job demand and decreased organisational support for strength use thwart's goal achievement and will thereby have consequences on work engagement (Dawson et al., 2016; Tadic et al., 2015). Subsequently, I posit that economic adversities at the organisation will undermine work engagement through (i) the positive influence of economic adversities on employee exposure

to hindrance job demand and (ii) the negative influence of economic adversities on organisation's support for strength use.

By addressing whether and why economic adversities undermine work engagement, my study extends the theoretical underpinnings of the COR theory. The use of the COR theory in understanding the direction of work engagement have majorly focused on the implication of resource availability for work engagement (Sanz-Vergel et al., 2011; Halbesleben and Dowler., 2007). My study extends this understanding by illustrating that work engagement is partly influenced by organisations' experiences of economic adversities. My study therefore extends theory by elucidating how the manifestation of the desperation principle of the COR at the macro level descends downwards to have its detrimental impact on work engagement at the micro-level.

In addition, by addressing boundary condition through which economic adversities undermine work engagement, my study advance theory by authenticating the resource passageways tenet of the COR theory (Hobfoll., 2011; Halbesleben et al., 2014). Specifically, I argue that off-job detachment is an experience that may foster the generation of mental resources that was lost as a result of employees' exposure to hindrance job demand. Because detachment facilitate resource gains (Sonnetag et al., 2010), I subsequently position that detachment will act as a resource passageway that buffers the detrimental impact of economic adversities on work engagement through hindrance job demand and organisational support for strength use. Empirical support for my hypothesized model reveals that the manifestation of the resource passageways tenet of the COR theory is not limited to a single reference point of organisational analysis - but rather this tenet can manifest at the interlink between organisational-wide and between persons level of analysis.

5.2 Theoretical Grounding and Hypothesis Development

The COR theory postulate that stress is the manifestation of an imbalance between resources investment and gains in resources, wherein investment outweighs gains in resources (Hobfoll and Shirom., 2001; Halbesleben et al., 2014). Following this, the COR theory posits that in the event of resource loss, individuals and organisations will seek to defend against further loss in resources by investing less from their available resource. The action of withdrawing from resource investment in the face of goal hindrances is inferred as the desperation principle of the COR. Though resources are conceptualised to be objects that are of value to

organisations, resources are generally thought to include those objects that explicitly help in accomplishing goals (Halbesleben et al., 2014).

According to the COR theory, negative events such as firm financial distress, is an event that constraint organisational goals. This is because financial distress is an experience of loss in organisational resources, such that resources become overstretched (Neveu., 2007; Hobfoll et al., 2018). Accordingly, as an attempt to protect against further loss in organisational resources, organisations will react by investing less of depleting resources into the design of resourceful work characteristics. Indeed, work characteristics such as the provision of instrumental support, constructive feedback, decision, and work scheduling autonomy - are job resources that tend to be designed at the organisational-wide level. This suggest that the manifestation of job resources is dependent upon events that unfold at the wider macro-level. When firms withdraw from resource investment, this will ultimately undermine the availability of Job resources. This is because for job resources to manifest, there must be the prior investment of organisational resources into the generation of job resources. This reasoning is in line with the resource investment principle of the COR theory (Hobfoll., 2001; Sanz-Vergel et al., 2011). Job resources are valued by employees because these resources are concordant with goal pursuit.

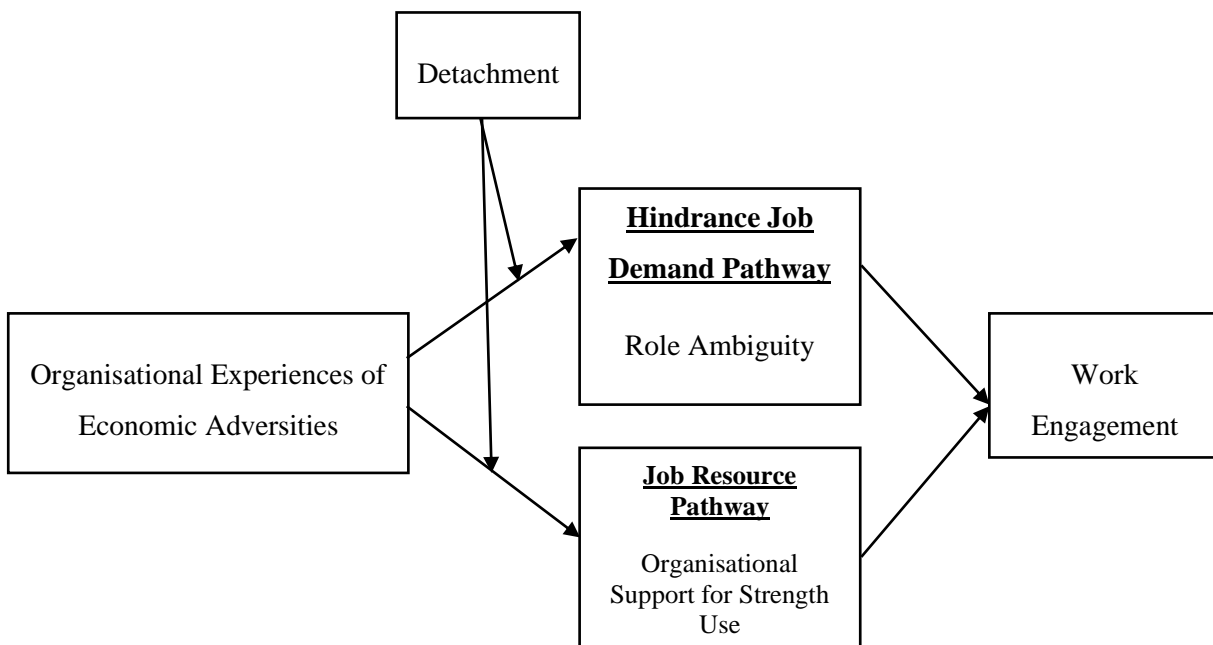


Figure 5.1 Hypothesized Model of the Influence of Organisational Experiences of Economic Adversities on Work Engagement.

Though the literature enlightens my understanding that employees may generate their own job resources by crafting their jobs, particularly with respect to the enactment of resource seeking behaviors, (Tims et al., 2013; Crawford et al., 2010). Irrespective of this, lack of a conducive work climate that facilitate job crafting behaviors, may ultimately frustrate employees' ability to enact resource seeking and demand contracting behaviors (Mäkikangas et al., 2017). When firms withdraw from resource investment, job resources are not only threatened, this will equally induce for job demands that frustrate goal pursuit and employee growth. This is because job resources aid in dealing with job demands (Bakker et al., 2007; Wayne et al., 2017; ten Brummelhuis and Bakker., 2012). If these resources become constrained due to low investment in the generation of job resources, this will result in the accumulation of job demands that hinders employee goals (Van Woerkom et al., 2016). I identify role ambiguity (i.e., a hindrance job demand) and organisational support for strength use (i.e., job resources) to be two core work characteristics that are likely associated with organisational experiences of economic adversities.

Specifically, I argue that because job resources are depended upon firms' decisions to invest in the generation of these resources, the experience of financial distress at the organisational level will limit organisations' ability and motivation to support employee's strength use. This is because the loss of economic resources renders organisations vulnerable (Hobfoll, 2011). Vulnerability in turn makes it difficult for firms to provide quality support to their employees thereby constraining organisational support for strength use. Similarly, I expect that vulnerability at the border macro-level will trigger for role ambiguity because outstared organisations are unable to invest resources in employing the required number of staffs to engage in serval task responsibilities. This reasoning is in line with findings that have linked firm financial loss to be positively associated with downsizing (De Meuse et al., 2004). Following this, organisations will seek to protect against further resource loss by delegating more job roles to existing employees. Because these roles are generally not part of an employee's job description, this may result in employees having little clarity with regards their overall job expectations.

***Hypothesis 1:** Organisational experiences of economic adversities will relate negatively with organisational support for strength.*

***Hypothesis 2:** Organisational experiences of economic adversities will relate positively with role ambiguity.*

Organisational Support for Strength Use and Its Relationship with Work Engagement

The literature in employee work behavior can be categorized into two core themes. On one part, studies have sought to correct deficiency in employee performance through the development of task competencies and on the other, studies which seek to strike a balance between correction and supporting employees in using their unique strengths (Bakker and van Woerkom., 2018; van Woerkom et al., 2016). Strengths are conceptualised as trait-like individual characteristics, such that these characteristics are thought to facilitate employees to perform at their most optimal level (Wood et al., 2011). Strengths are explicitly linked with individuals' core skills which in turn trigger for specific job performance (Biswas et al., 2011). When organisations encourage employees to use their strength at work, this implies that less energy will be required by employees for them to fulfill job responsibilities associated with the given task. This is because support for strength use involves organisations assisting to identify employees' core strengths and weakness, thereafter, assigning jobs that specifically fit into employees' unique strengths rather than their weakness (Bakker and Nishii., 2016).

I expect that when employees are required to use only less energy in fulfilling task responsibilities, involving in these responsibilities will not exert much demand on employees' mental and physical resources. Moreover, because these jobs are designed according to one's skills, involvement in task will be accompanied with feelings of excitement implying that employees are not only required to invest less energy, but they also gain additional energy – given that employees find their involvement in these tasks exciting. This will ultimately result in abundance of mental and physical energy from which employees can invest into work engagement.

Hypothesis 3: Organisational support for strength use will relate positively with work engagement.

Role Ambiguity and Its Relationship with Work Engagement

Role ambiguity is a hindrance job demand that refers to a lack of clarity with respect to employees' job responsibilities and performance expectations (Keenan and McBain, 1979). Though job descriptions usually clarify the job responsibilities associated to a given job, upon employment, employees may have to engage in several task which were not initially included in their job description. There are numerous factors that may lead employees to take on

additional task roles that are not part of ones' official job responsibilities, in part this might be due to the employees' perception of implied obligations that exist between them and the organisation. These obligations may manifest through psychological contract - wherein there is an implied expectation for employees to engage in actions that benefit the organisation - even though if these actions are not part of an employee's job responsibilities (Robinson, 1996; Guest, 1998; Solinger et al., 2016).

Taking extra job roles can lead to ambiguity in job responsibilities, given that employees' job performance may be appraised using several performance expectations unknown to employees. Because role ambiguity makes it difficult for employees to set task goals thereby hindering employee goal pursuit, personal growth and reward, role ambiguity is subsequently understood to induce for negative emotions that result in depletion of mental resources (Keenan and McBain, 1979; Bowling et al., 2017). The undermining impact of role ambiguity on mental resources implies that employees have less resources available to invest into work engagement thereby resulting in lower levels of work engagement. Similar studies have likewise postulated that role ambiguity exert employees' mental energy that subsequently result in low levels of work engagement (Albrecht., 2015). I follow this line of thought and position role ambiguity to relate negatively with work engagement.

***Hypothesis 4:** Role ambiguity is negatively related with work engagement.*

The Mediating Role of Organisational Support for Strength Use and Role Ambiguity

I positioned organisational experiences of economic adversities to relate negatively with organisational support for strength use and positively with role ambiguity. In addition, I argue that organisational support for strength use relates positively with work engagement and that role ambiguity relates negatively with work engagement. Conceptually, these premises suggest that organisational experiences of economic adversities is negatively related to work engagement through organisational support for strength and role ambiguity. The mediating role of organisational support for strength and role ambiguity in the relation between organisational experiences of economic adversities and work engagement are concordant with the crossover of resource tenet of the COR theory. This principle illustrate how loss in resources may be transferred through crossover from organisations to employees (Hobfoll., 2011; Halbesleben et al., 2014). Because of the effect of organisational support for strength use and role ambiguity on resource generation and resource depletion respectively, and

because work engagement is dependent on resources availability, I therefore believe that organisational support for strength use and role ambiguity will mediate the relation between organisational experiences of economic adversities and work engagement.

***Hypothesis 5:** Organisational experiences of economic adversities is negatively and indirectly related to work engagement through organisational support for strength use.*

***Hypothesis 6:** Organisational experiences of economic adversities is negatively and indirectly related to work engagement through role ambiguity.*

The Moderating Influence of Detachment

My hypotheses linking organisational support for strength use and role ambiguity to work engagement is positioned based on the consequences of organisational support for strength use and role ambiguity on resources conservation. Nonetheless, the COR theory propounds that employees' reaction to resource loss and gains are in part depended upon environmental factors that either facilitate or undermine employee's ability to generate resources (Hobfoll, 2011). This tenet is inferred as the resource caravan passageways of the COR theory. Situational and personal characteristics are two core dimensions of resources caravan positioned as been able to alter trajectories of resources conservation (Halbesleben et al., 2014). Building on this, I identify psychological detachment to be a core situational characteristic that may impair the resource threatening effect of organisational experiences of economic adversities on work engagement, particularly when the mediating role of organisational support for strength use and role ambiguity is considered.

Psychological detachment refers to the process of switching oneself from work-related activities during non-work periods (Etzion et al., 1998; Sonnentag and Fritz., 2007). Indeed, detachment requires distancing oneself from work physically and mentally, and is contended to facilitate resources generation through recovery from acute load reactions (Sonnentag and Kühnel., 2016). Following this, I argue that the resource threatening potentials of organisational experiences of economic adversities on work engagement might be less salient, particularly for employees who engage in detachment during non-work periods. Through detachment, employees gain valuable mental and physical resources. These resources in turn can be invested into work engagement thereby buffering the resource threatening potentials of role ambiguity and reduced organisational support for strength use on work engagement.

***Hypothesis 7:** Detachment moderates the negative indirect relation between organisational experiences of economic adversities and work engagement through role ambiguity such that this indirect effect is weaker when detachment is higher.*

***Hypothesis 8:** Detachment moderates the negative indirect relation between organisational experiences of economic adversities and work engagement through organisational support for strength use such that this indirect effect is weaker when detachment is higher.*

5.3 Sample and procedures

This study was conducted using a three-wave data collection. At the first wave of data collection, participants were informed of the purpose of the study, I requested and obtained participants' consent prior to administering the first round of survey questions. Participants were recruited by advertising the purpose of my research and requested for their participation via LinkedIn – a professional networking platform. To minimise the prevalence of common method bias (Podsakoff et al., 2012), data for this study was collected at three time periods, with a gap of one week apart at each batch of data collection. To qualify to participate, only individuals who had been in employment within the UK for a minimum of six months at their current job role within the same organisation could participate. In addition, to full-time employment, only individuals who worked a minimum of 20 hours a week as a part-time employee were allowed to participate in the survey.

At the first phase of data collection, demographical data in addition, data on participants' perception of their organisation's experiences of economic adversities, and psychological detachment was gathered. At the end of the first phase of data collection (approximately 1 week after), participants were sent the second set of survey questionnaire. Here, participants were asked questions about their experiences of role ambiguity and the extent to which their organisation supported them in using their strengths within the organisation. One week after the collection of Time 2 data collection, participants were sent the third set of survey questionnaire which measured employees' reports of their work engagement. At the end of the third batch of data collection, a total of 145 valid responses across time were gathered. Of these, 51 percent of participants were females, 37, 21, and 3.4 percent had bachelor, master's and PhD degree respectively as their highest educational qualification.

Measures

Work Engagement. Data on work engagement was collected at time 2. This was measured using the reduced version of the Utrecht work engagement scale, UWES-S (Schaufeli et al., 2006). The scale comprises of three items measuring the three dimensions of work engagement. Sample of items include, vigour, ‘when at work, I am busting with energy’, dedication “I am enthusiastic about my work”, and absorption “Time flies when I am working”. Previous studies have validated the adaptation of an overall measure of work engagement (e.g., Schaufeli et al., 2006; Salmela-Aro and Upadhyaya., 2018). Participants were required to indicate their state level of work engagement on a five-scale point from 1 = strongly disagree to 5 = strongly agree. Cronbach’s alpha was .91.

Detachment. This was measured at time 2 using items from Sonnentag and Fritz (2007) recovery experiences instrument. This was collated using a 5-point response scale ranging from 1= strongly disagree to 5 = strongly agree. Sample items included, “when I am at home, I forget about work” and “At home, I get a break from the demands of work.” five-scale point from 1 = strongly disagree to 5 = strongly agree. Cronbach’s alpha = .89.

Role Ambiguity. This was measured using the 4 highest item loadings from Nathan et al., (2017) role ambiguity scale. Data on role ambiguity was collated using a 5-point response scale ranging from 1 = never to 5 very often. Sample items for this measure are, “I am not sure what is expected of me at work” and “I know what I am required to do for every aspect of my job (reverse coded).” five-scale point from 1 = strongly disagree to 5 = strongly agree. Cronbach’s alpha = .80.

Organisational Support for Strength Use. This was measured using the 5 highest item loadings from Keenan and Mstert., (2013) organisational support for strength use scale. I measured this at time 2. Participants were asked to rate the extent to which they feel their organisation supported them in using their innate strengths during work. Example of items are, “This organisation allows me to do my job in a manner that best suits my strong points” and “This organisation ensures that my strengths are aligned with my job tasks.” five-scale point from 1 = strongly disagree to 5 = strongly agree. Cronbach’s alpha = .93.

Organisational Experiences of Economic Adversities. This was measured using a 4-item measure I developed. This was measured by asking participants to rate the extent to which their organisation had difficulty in meeting its financial obligations. I understand that

inability for firms to consistently meet financial obligations that are fundamental to the organisation's continual survival will normally imply that these organisations are likely undergoing financial distress. I subsequently asked employees information about the consistency of their organisation in meeting fundamental financial obligations. This was measured at period 1 using a 5-point response scale ranging from 1 = never to 5 = very often. Items for this measure were as follows: "I will not be surprised if this organisation delays the payment of my salaries," "Worn out machineries requiring funding for a replacement hardly gets replaced," "In the event of a financial crisis, I will be concerned about this organisation's ability to retain me," "Discussions relating to delay of funding for projects is common at this organisation." . Cronbach's alpha = .79.

5.4 Results and Discussion

Descriptive statistics and confirmatory factor analyses. In order to test my hypotheses, I first examined the internal consistency of all measures within my hypothesized model. Confirmatory factor analysis (CFA) was used in examining internal consistency and the overall fit of my data to my hypothesized model. CFAs were carried out using the MLM estimation. I compared a five-factor model (organisational experiences of economic adversities, role ambiguity, organisational support for strength use, detachment, and work engagement) against possible alternative 4 and 3 factor models. Results of CFA is depicted in table 5.1. Results of CFA reveals that the expected five-factor model best fits the data model ($\chi^2 = 517.50$; $df = 242$; $CFI = .88$; $RMSEA = .07$ and $SRMR = .08$). Table 5.1 presents the means, standard deviations, and bivariate correlations.

To test hypotheses 1 and 4, I entered organisational experiences of economic adversities and detachment in model 1 and 2. Results are shown in table 5.1. Findings indicates significant positive relationship between organisational experiences of economic adversities with i) role ambiguity ($\beta = .26$, $SE = .05$, $p < .01$), and ii) negative relation with organisational support for strength use support ($\beta = -.32$, $SE = .08$, $p < .01$). Therefore, Hypothesis 1 and 2 was supported. Furthermore, findings of regression analysis showed that role ambiguity relates negatively to work engagement ($\beta = -.27$, $SE = .07$, $p < .00$), and that organisational support for strength use relates positively to work engagement ($\beta = .62$, $SE = .06$, $p < .00$), thus consequently I found support for hypotheses 3 and 4.

In Hypothesis 5 and 6, I posited that role ambiguity and organisational support for strength use will mediate the relation between organisational experiences of economic adversities and work engagement. I tested the hypothesized mediation relation using the PROCESS macro plugin by Hayes (2018). Results of mediation analysis revealed that role ambiguity effectively mediate the indirect relation between organisational experiences of economic adversities and work engagement. The mediating effect of role ambiguity in the indirect relation was negative and significant (i.e., indirect effect points of $-.07$ as shown in table 5.4). Moreover, mediation results showed that organisational support for strength use mediated (i.e., negatively) the indirect relation between organisational experiences of economic adversities and work engagement with an indirect effect point of $-.18$ as shown in table 5.5. Results of mediation analysis thus gave support for Hypothesis 5 and 6.

Following the results of mediation relationships, I thereafter examined if organisational experiences of economic adversities interact with detachment in influences work engagement through the influence of organisational experiences of economic adversities on (i) role ambiguity and (ii) organisational support for strength. I examined for the hypothesized moderation-mediation relation using the PROCESS macro plugin. Results of moderation-mediation indicated a positive conditional indirect relation between organisational experiences of economic adversities and work engagement through role ambiguity at both $+1$ SD and -1 SD levels of detachment. The result of the moderation relation is presented in Model 5 of table 5.3 ($\beta = .23$, $SE = .06$, $p < .00$). Likewise, findings show that detachment moderated the indirect relation between organisational experiences of economic adversities and work engagement through organisational support for strength use at both $+1$ SD and -1 SD levels of detachment. The result of the moderation relation is presented in Model 6 of table 5.3. Collectively, results of moderation-mediation relation were supported. The results of the interaction relation between organisational experiences of economic adversities and work engagement through role ambiguity and organisational support for strength use are presented in figure 5.2 and figure 5.3 respectively.

Table 5.1 Model fit Indices for The Measurement Models

Models	χ^2	df	CFI	RMSEA	SRMR
Expected 5 Factor Model	517.50	242	.88	.07	.08
4 Factors combining Work Engagement (WE) and Organisational Support for Strength Use (OSSU)	774.75	246	.76	.12	.10
3 Factors combining WE, OSSU into a single factor, and Organisational Experiences of Economic Adversities and Role Ambiguity into a single factor	884.56	249	.72	.13	.12

Table 5.2 Means, Standard Deviation, and Correlations

Variable	M	SD	1	2	3	4	5	6	7	8	9
1. Gender ^a	1.49	.50	—								
2. Age ^b	4.05	1.65	.29**	—							
3. Education	2.59	1.21	.16*	.16*	—						
4. Tenure	3.02	1.20	.06	.55**	-.06	—					
5. Work engagement	3.40	.83	.00	.09	-.00	-.04	—				
6. Org. Exp. Economic Ad.	2.42	.91	-.00	-.18*	-.13	-.03	-.20*	—			
7. Role Ambiguity	2.51	.89	-.02	-.12	-.26**	-.03	-.30**	.28**	—		
8. Org. Support for SS	3.54	.85	.01	.08	-.07	.04	.66**	-.29**	-.27**	—	
9. Detachment	3.11	1.08	-.26**	-.26**	-.04	-.25**	-.12	.11	.06	-.05	—

Org. Exp. Economic Ad. = Organisational Experiences of Economic Adversities, Org. Support for SS = Organisational Support for Strength Use.

a 1 = female and 2 = male, b 1 = 18-24 years, 2 = 25-34 years, 3 = 35-44 years, 4 = 45-54 years, 5 = 55-64 years, 6 = 65-74 years, 7 = 75 year and above; * $p < .05$. ** $p < .01$; $N = 145$. T1 = wave 1 data collection, T2 = wave 2 data collection, T3 = wave 3 data collection.

Table 5.3 Results of Parametric Coefficients Predicting Role Ambiguity, Organisational Support for Strength Use and Work Engagement

Predictors	Role Ambiguity			Organisational Support for Strength Use		
	Model 1			Model 2		
	β	SE	t	β	SE	t
Organisational Experiences of Economic Adversities	.26**	.08	3.15	-.32**	.08	-3.91
Detachment	.02	.07	.20	-.04	.06	-.51
Organisational Experiences of Economic Adversities x Detachment	.08	.07	1.01	.15†	.07	-1.8
R ²	.08**			.11**		
Predictors	Work Engagement					
	Model 5			Model 6		
	β	SE	t	β	SE	t
Organisational Experiences of Economic Adversities	-.86***	.22	-3.91	-.45**	.18	-2.46
Detachment	-.66***	.17	-3.81	-.41***	.14	-2.92
Role Ambiguity	-.27***	.07	-3.59			
Organisational Support for Strength Use				.62***	.06	9.66
Organisational Experiences of Economic Adversities x Detachment	.23***	.06	3.63	.13	.05	2.60
R ²	.19***			.47***		

† p < .10, ** p < .01, *** p < .00, N = 145

Table 5.4 Regression Results for The Relationship of Organisational Experiences of Economic Adversities on Work Engagement Through Role Ambiguity

				Role Ambiguity			
Predictors				β	SE	LLCI	ULCI
Organisational Experiences of Economic Adversities				.27***	.08	.12	.43
R ²							
				Work Engagement			
Predictors				β	SE	LLCI	ULCI
Organisational Experiences of Economic Adversities				-.12	.08	-.27	.03
Role Ambiguity				-.25***	.08	-.40	-.09
R ²							
Indirect Effect Relationship				Indirect effect Point	SE	LLCI	ULCI
Organisational Experiences of Economic Adversities	→	Role Ambiguity	→	Work Engagement			
				-.07	.03	-.15	-.01

*** p < .00, N = 145

Table 5.5 Regression Results for The Relationship of Organisational Experiences of Economic Adversities on Work Engagement Through Organisational Support for Strength Use

Organisational Support for Strength Use				
Predictors	β	SE	LLCI	ULCI
Organisational Experiences of Economic Adversities	-.27***	.07	-.42	-.13
R ²	.09***			
Work Engagement				
Predictors	β	SE	LLCI	ULCI
Organisational Experiences of Economic Adversities	-.01	.06	-.13	.11
Organisational Support for Strength Use	.65***	.06	.52	.77
R ²				
Indirect Effect Relationship	Indirect effect Point	SE	LLCI	ULCI
Organisational Experiences of Economic Adversities → Organisational Support for Strength Use → Work Engagement	-.18	.06	-.29	-.07

*** p < .00, N = 145

Figure 5.2 Interaction Effect of Organisational Experiences of Economic Adversities and Detachment on Work Engagement Through Role Ambiguity at -1SD and +1SD levels of Detachment

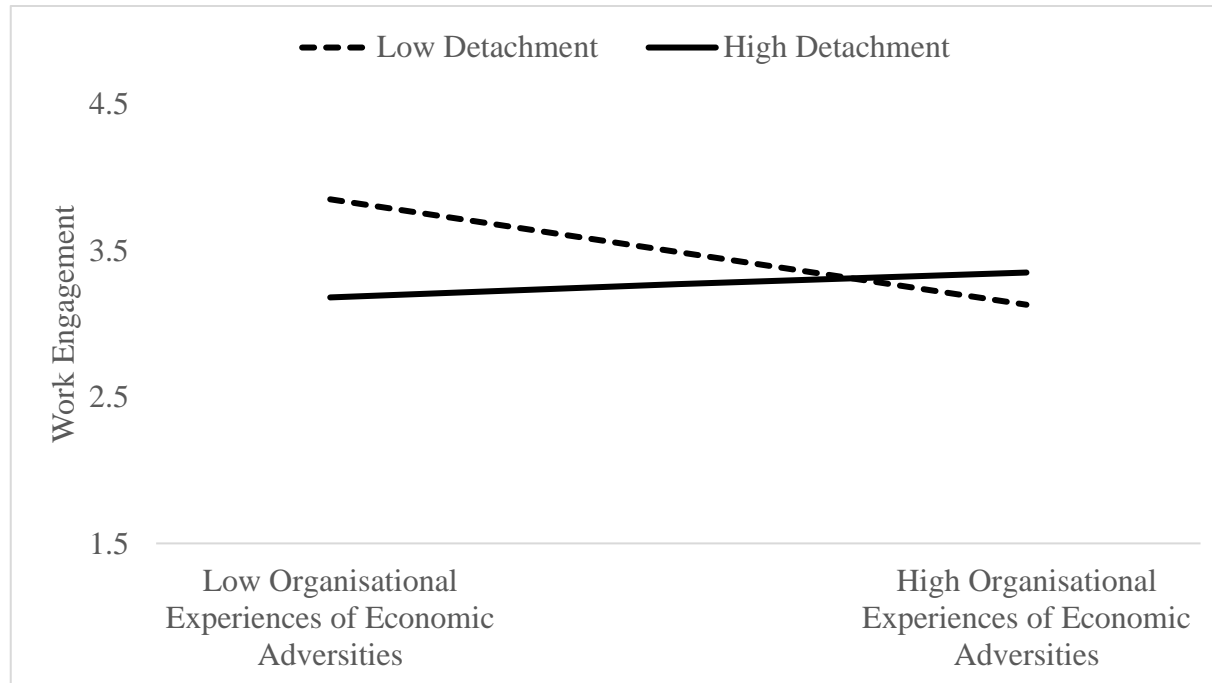
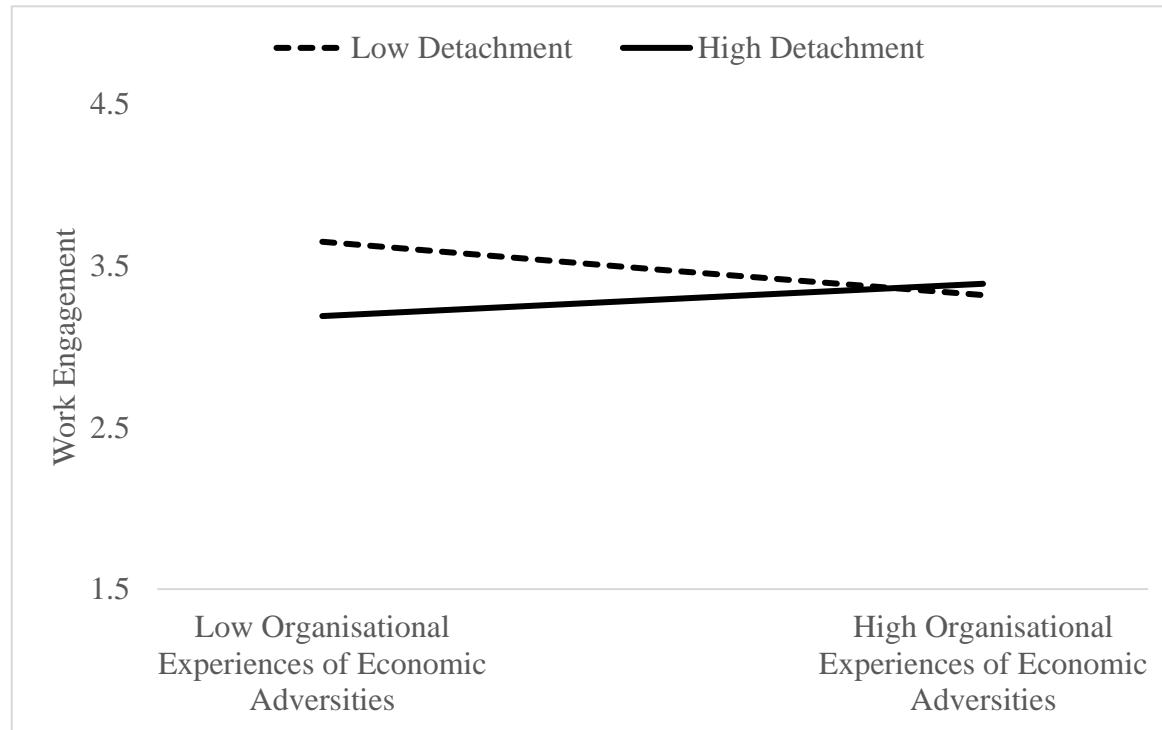


Figure 5.3 Interaction Effect of Organisational Experiences of Economic Adversities and Detachment on Work Engagement Through Organisational Support for Strength Use at -1SD and +1SD levels of Detachment



5.5 Theoretical Implications

The current study contributes to the literature by building on the conservation of resources theory in elucidating the underlying mechanisms linking organisational experiences of economic adversities with work engagement. The literature conveys that job resources relates positively with work engagement. Work engagement in turn have been suggested to positively mediate the indirect relation between job resources and firm financial performance (Xanthopoulou et al., 2009). Though study by Xanthopoulou et al., (2009), points towards the financial relevance of designing jobs that facilitate work engagement, nonetheless, the question of how and under what conditions do firm financial distress relate with work engagement has received less attention within the broader literature.

Firstly, I add to the literature by highlighting the peculiar role of role ambiguity and organisational support for strength use in the relation between organisational experiences of economic adversities and work engagement. Although studies have illustrated that firm financial distress relates with emotional distress of entrepreneurs (Shepherd et al., 2009) wherein poor firm financial performance led to increased intentions to quite the business (Xanthopoulou et al., 2009; Pollack et al., 2012). These studies however focused on the impact of firm financial distress on entrepreneurial behaviors with less practical implications on the effect of firm financial distress on work characteristics. My research therefore answers the call to examine proximal processes through which wider level economic characteristics impact the quality of work characteristics (Parker et al., 2018).

This research demonstrates role ambiguity and organisational support for strength use to be unique consequential outcomes of organisational experiences of economic adversities. Because organisational experiences of economic adversities are an experience of resource loss for organisations, and because role ambiguity is conceptualised to be a hindrance job demand related with burnout, my findings therefore provide support for the cross-over of resources loss tenet of the COR, in this case, from the organisation to employees work engagement (Neff et al., 2012; Hobfoll et al., 2018). Moreover, my findings that organisational experiences of economic adversities relate negatively with organisations' support for strength use substantiate the desperation principle of the COR theory. Here, an experience of resource loss such as the experience of financial distress, makes it difficult for organisations to pull available resources together and invest on the provision of job resources. Job resources on the other hand, are inferred as being beneficial to employees because these resources facilitate goal pursuit, goal achievement, and employee growth. The depletion of economic resources

can therefore be inferred to be a core organisational factor that induce organisations to withdrawal from investing resources into the provision of instrumental job support to employees (Hobfoll and Shirom., 2001).

By illustrating the negative mediating role of role ambiguity, and organisational support for strength use in the relation between firm financial distress and work engagement, my study positions these mediating variables to be core constructs to be considered in the research into firm and employee resilience. Furthermore, the examination of interaction effect enabled me to address the question of when organisational experiences of economic adversities may ultimately undermine work engagement. My findings that detachment buffered the detrimental impact of organisational experiences of economic adversities on work engagement proffer an invigorative perspective on how organisations can engage their organisations, particularly during periods of economic difficulty at the organisational level.

The fact that when organisational experiences of economic adversities was high, high level of detachment mitigated the resources threatening potential of organisational experiences of economic adversities, my findings thus support the resources caravan passageways principle of the COR theory (Hobfoll., 2011). Here, my findings indicate that detachment served as a situational factor that limit the impact of stressors on employees' resources conservation, thereby enabling employees to proactively deal with resources threatening work characteristics induced as a result of their organisations' experiences of economic advertises. My study thereby illustrates that detachment can serve as a beneficial means through which employees may gain additional resources that can be invested into work engagement.

5.6 Practical Implications

Practitioners are advised against the prevalence of role ambiguity – given that its prevalence have undermining impact on employees' job performance. My findings therefore have several implications for organisational policies and interventions for sustaining employee work engagement, particularly for organisations that may be experiencing financial difficulty. First, my findings indicate role ambiguity hindrance job demands that manifest as a result of financial constraints at the wider macro level. This suggest that organisational experiences of economic adversities nurture for conditions that alters an employee's understanding of their job responsibilities. This is likely to be because organisational experiences of economic

adversities trigger for work pressures that are transmitted downwards. The transmission of organisational pressures downwards leads to employees engaging in job roles other than what maybe contained within an employee's job description. This implies that firms experiencing financial challenges may want to conduct an HR audit in examining for the level of perceived role ambiguity within the organisation. By so doing, organisations can early detect for the presence of role ambiguity and arrive at plans in providing role clarity to employees. In addition, rather than a case of deteriorating level of work engagement that could ultimately undermine employees' career success (Wayne et al., 2017), detachment offers an alternative solution through which firms may sustain employees' level of work engagement. This becomes more crucial particularly during periods where firms are experiencing financial challenges.

CHAPTER 6. CONCLUSION

6.1. Introduction

This thesis examined several discourses relating to the role of employees' experiences of work characteristics and the implication of these characteristics on employee work engagement. From the literature, the thesis identified that there existed a common research pattern in previous work engagement studies. Specifically, previous studies have majorly focused on the interaction between diverse work characteristics, and how these work characteristics impact resource availability that ultimately alters the direction of work engagement (Crawford et al., 2010; Halbesleben et al., 2014; Xanthopoulou et al., 2009). A key theme within these studies is that studies have relied on the use of multiple, sometimes distinct stress theories in explaining why and under what conditions will a particular work characteristic be correlated with variables that either exert or inhibit work engagement (Ten Brummelhuis and Trougakos, 2014; Bakker et al., 2017).

With the exception of studies that have examined the role of family-to-work conflict, detachment and relaxation, previous studies have generally focused on employee work related experiences but are yet to explicitly consider the role of non-work life experiences, particularly those relating to employee and organisations' economic life experiences. The ultimate objective of this thesis was to investigate and provide an initial empirical support substantiating the premise that employee experiences of work engagement are partly influenced by prevalence of economic characteristics at the individual and wider macro-level. This thesis sought to address and advance theoretical underpinnings of work engagement, by addressing two fundamental questions relating to the link between economic life experiences and work engagement. In the first empirical part of the thesis, the question of whether employees' economic life demands relate with work engagement and, if yes, why and under what circumstances will this relation manifest was addressed. In the second empirical part of this thesis, it was examined whether organisational experiences of financial distress undermine work engagement, and if yes, under what conditions do financial distress at the wider macro-level impair work engagement.

6.1.2 Answers to Primary Research Question 1

By examining the main findings of the two empirical studies in this thesis, one can elucidate how and why economic experiences at the individual (i.e., economic life demands) and organisational al-wide level (i.e., organisational experiences of financial distress) have their unique impact on work engagement. The first objective of this thesis was to examine how economic life demands interact with situational characteristics, particularly employees' experiences of financial insecurity and detachment that may subsequently impact employees' work engagement. This objective is linked with the first primary research question. From primary research question one, emerged the following sub questions.

From PRQ 1, this study addresses the following specific questions:

- i) Do economic life demands relate negatively with work engagement?
- ii) Does detachment lessen the negative indirect influence of economic life demands on work engagement?

Table 6.1 Answers Based on Findings from Empirical Study One

PRQ1	
i)	<ul style="list-style-type: none">➤ Hypothesis 3 of empirical study 1 addresses this question. Specifically, it was hypothesised that economic life demands will relate with work engagement through the mediating role of emotional distress.➤ Empirical test for this hypothesis showed that the relation between economic life demands and work engagement through emotional distress was statistically significant at the 99 percent level of significance. In addition, findings revealed that this indirect relation was negative. Subsequently, it was concluded that yes economic life demands do relate with work engagement and that the relation is due to the positive impact of economic life demands on employees' experiences of emotional distress.
ii)	<ul style="list-style-type: none">➤ Hypothesis 5 of empirical study 1 addresses this question. It was hypothesised that detachment will moderate the indirect negative relation between economic life demands and work engagement through emotional distress.

- Results of empirical test showed that yes detachment weakened the strength of the indirect adverse influence of economic life demands on work engagement through emotional distress particularly when detachment was higher rather than lower.
-

Based on findings from empirical study one, primary research question one is conceptually addressed below.

Primary research question 1:

Do employees' economic life demands influence their work engagement? If yes, why does the influence occur and what can organisations do to promote employees' work engagement?

Findings from empirical analysis indicates that yes employees' economic life demands do relate with work engagement. The reason why economic life demands relate with work engagement is can be linked with the desperation principle of the COR theory (Hobfoll, 1989; Hobfoll and Shirom, 2002). Economic life demands entails spending behaviours such that a core motives for spending from economic resources is motivated by factors which are external to the employees, thus these demands constitute a loss in volition over one's use of economic resources. What distinguishes economic life demands from other life demand constructs is with respect motives inducing for these demands - given that economic life demands tend to be triggered as a result of expectations others may have towards the individual, indicating that these demands manifest as obligatory commitments. Because an individual's ability to generate additional resources is in part, depended on the prior investment of resources, not being able to exercise full control over one's economic resources could constraint employees' ability to invest from their economic resources in manners that lead to the generation of additional resources that are concordant with employees' intrinsic goals.

Not being able to exercise full control implies that employees will be deprived of the gains associated to resource investment. Being deprived of the opportunity to gain additional resources can be hurtful emotionally, given that one's goals and personal growth are hindered (Halbesleben et al., 2014). Employees will therefore draw from their emotional resources in order to help mitigate against the unpleasant feelings associated with resource deprivation (Rich et al., 2010; Chi and Liang, 2013). Theoretically, the investment of resources is expected to lead to gains in resources, however, employee's investment of their emotional

resources in mitigating against unpleasant feelings attributed to resource deprivation will not lead to the generation of additional resources. This is because these emotional resources are invested into demands that are hindrance and as such these demands do not result in subsequent resource generation. Subsequently, this will result in a situation characterized by resource investment without a co-responding gain in resources. This will ultimately lead to feelings of emotional distress given that employees' emotional resources become overstated. This reasoning is in line with the conservation of resources tenet that postulate that the investment of resources without a co-responding gain in resource will exert emotional burden on individuals' that nurture for dysfunctional state of mental and physical optimal functioning (Hobfoll et al., 2017).

Moreover, work engagement, is conceptualised as a positive fulfilling work-related state of mind characterised by feelings of vigour, dedication, and absorption (Schaufeli et al., 2002). Unlike job satisfaction, work engagement is a momentary experience that entails the investment of emotional, physical, and cognitive resource into work. Work engagement is a fulfilling experience that results in positive emotions, suggesting that being engaged in work generate valued resources for employees (Bakker et al., 2014). However, because work engagement entails the investment of resources, there must be the prior investment of resources for work engagement to manifest (Ten Brummelhuis and Bakker, 2012). Emotional distress due to the experience of resource deprivation on account of economic life demands, is an emotional state that is characterised by feelings of fatigue, loss of interest and ability (Ramirez et al., 1996; Khamisa et al., 2015). Subsequently, emotional distress implies a state of resource exhaustion. Employees who feel emotional distressed will be unwilling to invest from depleting resources into work engagement. This is because doing so leads to further deterioration of ones' emotional resources. Employees will therefore seek to protect the self from further loss of valued resources. This they will accomplish by investing less from depleting resources into work engagement. This process of withholding investment is inferred as the desperation principle of the conservation of resource theory (Hobfoll, 2011). Therefore, the thesis concludes that economic life demands are negatively and indirectly related with work engagement because economic life demands nurture for feelings of emotional distress that adversely impacts work engagement.

In addition, I found that detachment is a relevant condition that significantly influences the strength of the adverse influence of economic life demands on work engagement through emotional distress. Detachment is defined as "individual's sense of being away from work situation." (Etzion et al., 1998). It is conceptualised as an experience that

result in the generation of valued resources. This is because detachment facilitate goal pursuit, given that detachment enables individuals to recover emotional, physical, and cognitive resources that was lost during prior involvement in work (Sonnentag et al., 2010). This thesis found that compared with employees who scored low on detachment, those who reported high on detachment experienced low levels of emotional distress that subsequently resulted in these employees being more engaged in their work than employees who reported low on detachment. My finding nonetheless showed that high detachment buffers the detrimental impact of economic life demands on work engagement through emotional distress only when employees scored high on economic life demands. From a practical point of view, this finding indicates that organisations can promote employee work engagement by designing work measures that encourages employees to effectively detach from work during off-job periods. This is particularly more important among work amid the current COVID-19 pandemic wherein organisations are shifting work virtually and the boundaries between work and personal life becomes more blur ever than before.

6.1.3. Answers to Primary Research Question 2

The second objective of this thesis was to examine how economic pressures at the organisational al-wide level related with work characteristics and work engagement. The thesis sought to understand why organisational experiences of financial distress should relate with work engagement. In addition, to examine the role of work and situational characteristics in the likely relation between organisational experiences of financial distress and work engagement. Above research objectives are linked with the second primary research questions.

From primary research question two, emerged the following specific questions:

- i) Do organisational experiences of economic adversities relate directly with i) role ambiguity and ii) organisational support for strength use?
- ii) Is the relation between organisational experiences of economic adversities and work engagement mediated by role ambiguity and organisational support for strength use?
- iii) Does detachment buffer the moderated-mediation relation between organisational experiences of economic adversities and work engagement?

Table 6.2 Answers Based on Findings From Empirical Study Two

PRQ2

- i) ➤ Hypotheses 1 and 2 of empirical study two addressed this question. It was hypothesized that will relate with role ambiguity and organisational support for strength use.
- Findings form regression analysis showed that yes organisational experiences of economic adversities relate with role ambiguity and organisational support for strength use. Specifically, I found that organisational experiences of economic adversities relate positively with role ambiguity and negatively with organisational support for strength use. This relation was found to be statistically significant at the 99 percent level of confidence interval. Subsequently, it was concluded that yes organisational experiences of economic adversities relate with role ambiguity and organisational support for strength use.
- ii) ➤ Hypotheses 5 and 6 of empirical study two addressed this question. It was posited that role ambiguity and organisational support for strength use will effectively mediate the relation between organisational experiences of economic adversities and work engagement.
- Results of mediation analysis showed that both role ambiguity and organisational support for strength use mediated (i.e. negatively) the relation between organisational experiences of economic adversities and work engagement.

- iii)
- Hypotheses 7 and 8 of empirical study two addressed this question. It was hypothesised that resources gains associated with detachment will buffer the adverse impact of organisational experiences of economic adversities on work engagement.
 - Results of moderated-mediation analysis showed that detachment moderated the indirect negative relation between organisational experiences of economic adversities and work engagement such that the negative indirect relation was less strong when detachment was higher rather than low. Subsequently, it was concluded that yes detachment does buffer the indirect negative impact of organisational experiences of financial distress on work engagement through role ambiguity and organisational support for strength use.
-

Based on findings from empirical study two, primary research question two is conceptually addressed below.

Primary research question 2:

Do organisations' experiences of economic adversity influence employee experiences of work engagement? If yes, why does the influence occur and what can organisations do to promote employee work engagement in times of economic crises at the organisational level?

Findings from empirical study two indicates that yes organisational experiences of financial distress adversely impact work engagement.

The reason why organisational experiences of financial distress adversely impact work engagement is grounded within the investment and desperation tenet of the conservation of resources theory. Organisational experiences of financial distress describe a state wherein an organisation's economic resources have been outstretched. Consequently, organisational experiences of financial distress depict an experience of loss in organisational resources. The conservation of resources theory posits that stress is the manifestation of either the actual or

implied loss in valued resources (Halbesleben et al., 2014). Because an organisation's economic resources facilitate the achievement of organisational goals, organisations will seek to protect against the loss of further resources by withholding the investment of these resources into organisational processes. This behaviour of resource hoarding is a desperation reaction to resource threat such that the primary aim of hoarding is centred towards ensuring that additional resources are not being lost by the organisation.

Work characteristics such as role ambiguity is a hindrance job demand that represent a situation where employees do not have clear understanding of their work expectations (Keenan and McBain, 1979). Core information such as task responsibilities, criteria for performance evaluation are generally not clear. Following this, role ambiguity has been described to be a hindrance job demand because the experience of ambiguity in one's role makes it difficult for employees to set and strive for goal achievement (Albrecht, 2015). Because role ambiguity constitutes a threat to resource gains, there must be the prior investment of resources into jobs for job roles to be clear and unambiguous. Economic pressures in the form of financial distress at the organisational level renders organisations vulnerable to further resource loss because these organisations have less resources available to invest and defend against resource loss. This reasoning is in line with the conservation of resources corollary that posits organisations who lack resources are highly vulnerable to subsequent loss of valued resources compared to those in possession of greater resources (Halbesleben et al., 2014).

This implies that organisations experiencing financial distress are unable to invest from depleting organisational resources into the design of jobs characterised by clear task responsibilities. Several reasons lead to this contention. When organisations withdraw from resource investment, these can impact work in various ways. For instance, this can lead organisations to lay off some of its employees, indicating that few employees will be required to take extra job responsibilities. This will ultimately alter existing employees' job descriptions and what is expected of them in their job, thereby leading to ambiguity in one's roles. Similarly, because role ambiguity results in goal frustration, this can exert demand on employees' emotional resources that subsequently result in resource exhaustion. Resource exhaustion in turn implies that employees have less resource available from which they can invest into work, thereby leading to low levels of work engagement. Because organisational experiences of financial distress result in role ambiguity, and because role ambiguity in turn results in low work engagement, the thesis concludes that organisational experiences of financial distress adversely impact work engagement because organisational experiences of financial distress nurture for role ambiguity.

Moreover, this thesis indicates that another reason why organisational experience of financial distress has its adverse effect on work engagement, is partly because these experiences constraint organisational ability in designing jobs that typically support employees' use of their strengths at work. Strengths are inferred to be trait-like personal characteristics that facilitate employees in performing at their most optimal level (Wood et al., 2011). These characteristics trigger for enhanced job performance because these trait-like features are linked with employees' unique skills (Bakker et al., 2018). Resource loss vulnerability associated with organisational experiences of financial distress, renders organisations unable to support employees use of their strengths. This is because strength use support is a job resource that facilitate employee goal pursuit (Bakker and van Woerkom, 2018). Supporting employees in using their strengths will require that organisations invest time and other valued organisational resources in helping employees to identify what their strengths. It also entails that organisation design jobs that are concordant with employees' unique strengths.

Because jobs are allocated to employees on the basis of their strengths in relation to employee weakness, supporting an employee in using their strengths will necessitate those organisations invest further resources in identifying other employees' strengths and their weakness and then allocating jobs to employees in relation to each employees' strengths and weakness. Identifying these strengths and designing jobs in manners that facilitate employee use of their strengths can exert further demands on organisational resources. Because the experience of financial distress makes it difficult to invest from depleting organisational resources, organisations will be unwilling to invest from depleting resources in identifying and supporting employee's strength use. On the other hand, because support for strength use is experienced as a valued resource to employees, being deprived of this support may ultimately have adverse implications on work engagement, given that a source of resource gain has been hindered.

Findings from empirical study two elucidate that the adverse indirect effect of organisational experiences of financial distress on work engagement will be weakened under conditions of high detachment. Because role ambiguity and low support for strength use hinders resource gains, employees who score high on detachment can recover from resource lost and gain additional mental and physical resources during off-work periods. Resources gained can in turn be deployed by into subsequent work thus aiding to buffer the adverse effect of organisational experiences of financial distress on work engagement. Specifically, this thesis found that high detachment mitigated the resource threatening potentials of

organisational experiences of financial distress o work engagement, particularly when organisational experience of financial distress was high rather than low.

6.2. Theoretical Contribution

Conceptual and empirical findings of this thesis extend current understanding regarding the application of several tenants of the conservation of resources theory in elucidating the dynamic nature and scope of work engagement. Seven core distinct constructs were theoretically and empirically examined in relation to the construct of work engagement. Previous studies have relied on the use of several stress and coping theories to investigate why and under what conditions do varying dimensions of job resources interact with hindrance and challenge demands in triggering between and within differences in employees' experiences of work engagement (Xanthopoulou et al., 2009). Findings from these studies shows that work and personal characteristics exert significant influence on work engagement. This thesis extends this understanding by presenting and testing a model that illustrates that stress theories, in focus, the conservation of resources theory is not limited in only explaining why and when work characteristics relate positively or negatively with work engagement. This thesis contends that the conservation of resources theory can effectively explain why non-work related characteristics - particularly, employees' economic life demands, and organisational experiences of economic adversities may ultimately trigger for experiences that discourages employees in investing their mental, physical, and cognitive resources into work engagement.

In explaining further, this thesis provides initial empirical evidence substantiating that economic life experiences equally trigger for the manifestation of core principles of the conservation of resources theory. Core tenets validated in this thesis are the desperation, investment, resources caravan passageways, resources corollary, and resource loss cycles tenets of the conservation of resources theory (Hobfoll et al., 2018). By examining and validating the hypothesised mediating role of emotional distress in the relation between economic life demands and work engagement, the desperation, and resource loss cycles tents of the conservation of resources theory was subsequently attributed to the economic life demands construct. Moreover, support for the hypothesised negative moderation-mediation relation between organisational experiences of financial distress and work engagement illustrate that low work engagement due to desperation by employees to conserve depleting resources, is triggered as a result of the desperate need by organisations to conserve depleting

organisational resources. Support for hypothesis one of empirical study two validate the manifestation of the investment principle and the resources corollary principle of the conservation of resources theory at the organisational-wide level. Hypothesis 1 and 2 of empirical study two address recent calls to consider the process mechanisms through which wider economic factors at the macro level tend to impact the design of work characteristics (Parker et al., 2018).

Overall, the core contribution of this thesis to theory is that this thesis elucidates that the application of the tenets of the conservation of resources in explaining work engagement, is not limited to employees' experiences work characteristic. Rather that this theory can equally be applied in explaining why economic life experiences of employees and the organisation relate with work engagement.

6.3. Practical Implication

This thesis highlights the core role of emotional distress and work characteristics as core mediums through which employee and organisations' economic life experiences may exert demand on employees' resources that alters the direction of employees' experiences of work engagement. Considering the relevance of work engagement for organisational performance, findings from this thesis can help guide work engagement practitioners on how organisations can design the work of employees in manners that help protect the well-being of employees. By addressing the thesis's research question, it comes to light that organisation can promote employee work engagement by designing work systems that makes it easy for employees to detach from work related activities during off working periods. The widespread introduction of technologies into how work is organised and conducted has had both a beneficial and harmful impact on how employees interact with their jobs (Balliester and Elsheikhi,2018). On one part, the introduction of technologies has made it easy for employees to benefit from big data through the analyzation of complex data that would have exhaust much of employees mental and cognitive resources. This has led to increased work engagement and firm performance.

Despite the benefits of integrating technologies into work, these technologies have tended to blur the boundaries between work and non-work life given that employees are now able to involve themselves in work roles during off-work periods (Derks and Bakker,2014; Rubery et al.,2018). This will ultimately have an adverse impact on employee's ability to

detach from work during on-work periods. Such experience will result in poor sleep quality and a stagnated recovery process that can lead employees to feel emotionally and physically exhausted. The feeling of exhaustion in turn suggest that these employees are unable to invest depleting emotional resources into work engagement thereby undermining employees' work engagement.

The findings to the thesis's research questions substantiate the strategic relevance of detachment, as a medium to promote work engagement, particularly among employees who (1) experience high economic life demands and (2) employees working in organisations that are experiencing high economic adversity. Through the findings of the thesis, it comes to light that organisations can design systems that discourage employees from engaging in work during non-work periods. Through this, employees are able to benefit from the gains associated with detachment and can aid in minimising the detrimental impact of economic life demands on work engagement through employees' experiences of emotional distress.

Furthermore, findings from this thesis highlights that detachment is a key medium through which organisations can sustain the work engagement of their employees, particularly when the organisation is experiencing economic adversities. Organisations that are economically vulnerable will likely be unable to invest from economic resources into the design of effective jobs. This can result in employees experiencing high role ambiguity and low organisational support for strength use. Employees can take the initiative by ensuring that they detach from work-related activities during non-working hours. This thesis highlight that such measure will help employees in benefiting from resource gains that help suppress the detrimental impact of organisational experiences of financial distress on their work engagement.

Moreover, this thesis found that detachment is negatively correlated with tenure (table 4.2 and table 5.2). This suggest that detachment from work is less among employees who have had long employment with the organisation. This illustrate that those with long tenure are vulnerable to low detachment and as such, are most venerable to the detrimental influence of economic life demands and organisational experiences of economic adversity. From a strategic point of view, the findings of this thesis demonstrate that managers should direct more detachment enabling resources towards employees with long tenure at their organisation.

6.4. Limitations and Future Research Direction from Empirical Study 1

Drawing on the COR theory, I examined whether economic life demands adversely impact work engagement, and if yes, under what conditions is the adverse impact less salient. Irrespective of theoretical contributions highlighted in this research, this study has several limitations and opens up avenue for further studies. Firstly, my study relies on the use of self-reports. The use of self-report is known to be associated with the methodological problems of common method variance (Podsakoff et al., 2012). My study's use of a three-wave data collection approach helps to minimise the prevalence of common method bias. In addition, my study argues that economic life demands relate positively with emotional distress because economic life demands are demands which are motivated by factors that are external to the employee. Behaviours which are externally motivated tend to relate negatively with the basic psychological needs for control, competency, and relational connectedness, thus I expect that basic needs satisfaction could be an alternative explanation as to why economic life demands relates positively with emotional distress. I therefore call for further studies to consider whether basic needs satisfaction mediates the relation between economic life demands and emotional distress.

Also, data for my study was obtained using participants from the UK. My results might have reflected behavioural patterns and lifestyles common to western cultures. Western societies tend to attribute significant value to the individual rather than group collectivism. Such societal dispositions may have implications for how individuals make sense of their economic spending motives. Future studies can examine whether the indirect relation between economic life demands and work engagement through emotional distress is salience at different levels of cultural settings. Though my theoretical framework was positioned to be generalizable cross cultures, I however note that cultural norms may nonetheless shape the processes leading to conservation of resources thereby suggesting that cultural variables may act as a potential moderator of the indirect relation between economic life demands and work engagement. Furthermore, the direct negative relation between economic life demands and emotional distress suggest that economic life demands may have broader work implications. The feelings of emotional distress indicate a state of resource depletion. Resource depletion have been linked with employee enactment of harmful behaviour towards third party (Deng et al., 2017; Notelaers et al., 2010). When emotionally distressed, employees may feel reluctant to draw from emotional resources in regulating against aggression needs and subsequently rendering the employee a potential perpetrator of hostility towards others. Future studies may

examine whether emotional distress due to economic life demands relate with employee enactment of unethical workplace behaviours.

6.5. Limitations and Future Research Direction from Empirical Study 2

Despite that my study gave favorable findings with regards the reliability and validity of constructs used within my study, the study had several theoretical and methodological limitations. This offers avenue for future research that seeks to examine the consequences of economic characteristics at the wider organisational level on employee job characteristics and work engagement. Firstly, I used subjective self-reports in capturing organisations' experiences of financial distress. While this method of measuring organisational experiences of economic adversities did relate with other constructs used in this study in the expected theoretical direction, I believe that the use of an objective measure in capturing financial distress at the wider organisational level will have further strengthened my findings. This is because by relying on subjective measures, employees might adopt different frame of reference in determining their organisations' ability in meeting its financial responsibilities. I understand that in the event of financial distress, organisations might prioritize their financial responsibilities to certain groups of employees, or departmental projects over others.

The investment of resources into these prioritized groups of employees and projects might alter employee's perception of their organisation's ability in meeting financial responsibilities. This will ultimately impact response scores for my measure of organisational experiences of economic adversities. For those employees who were not prioritized by their organisation and as such the organisation reacted to financial pressures by reducing its investment of resources towards these set of employees, these employees might perceive and score their organisation high on financial distress, compared to employees who the organisation prioritized. I therefore believe that the use of objective measures, such as financial records of sales revenue and profit over different periods in time, will give a unified and standard measure of organisational experiences of economic adversities. Future studies can extend my analysis further by examining the link between an organisation's experiences of economic adversity and work characteristics using objective indicators of financial capability.

Moreover, my study of the link between organisational experiences of economic adversities on work engagement ignored several situational factors at the organisational level,

wherein these factors could potentially alter the narrative of my findings. Organisations will normally have different approaches to reacting to an experience of resource loss (Smith and Berg., 1986). Within the stress literature, responses to an experience of resource loss, such as financial distress, may be reactive or proactive. Organisations who tend to conceptualise resource scarcity as paradoxes rather than dilemmas are thought to be proactive in their approach to dealing with an initial experience of resource loss (Smith and Lewis., 2011). Having a paradox mindset have been found to be associated with behaviors that seek to promote the pursuit of integrative solutions to organisational problems (Zhang et al., 2015). Subsequently, organisational cultures that embeds a paradox mindset, may be reluctant in withdrawing from resources investment during an experience of financial distress. This will ultimately have an impact in the in buffering the undermining impact of organisational experiences of economic adversities on work characteristics that promotes employee mental and physical resources. However, because paradox mindset seems to foster organisational goal pursuit, and can therefore be regarded to be a resource, future studies can investigate why and under what conditions does having a paradox mindset restrain organisations from withdrawing the investment of resources into employee work characteristics.

Another empirical limitation of my study is that my study adopted a between person conceptual and methodological approach in addressing my research question. Though the use of a between person conceptual and methodological approach helps in understanding differences in how employees react to work characteristics, there is considerably evidence that suggest that employees differ within themselves with respect to their reactions to work characteristics (Breevaart et al., 2014). The use of diary studies from a conceptual and methodological approach is handy in understudying why employees tend to react more favorable to certain work characteristics on certain days or moments and not on others (Bakker., 2014). Further studies can examine this further within the context of organisational experiences of economic adversities, by investigating the impact of changes in work characteristics due to financial distress on employee work engagement at the time and level these work characteristics are perceptible.

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Appendix 1

SPSS OUTPUT FROM EMPIRICAL STUDY 1

CORRELATIONS

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/VARIABLES=Gen Age Edu Tenure Eco_Life Detachment Role_C Finan_Ins  
ORG_Distress Work_E  
/PRINT=TWOTAIL NOSIG  
/STATISTICS DESCRIPTIVES  
/MISSING=PAIRWISE.
```

Descriptive Statistics

	Mean	Std. Deviation	N
Gen	1.49	.502	145
Age	4.05	1.647	145
Edu	2.59	1.211	145
Tenure	3.02	1.199	145
Eco_Life	2.2023	.89434	145
Detachment	3.1086	1.07562	145
Role_C	2.9810	.83286	145
Finan_Ins	2.6092	1.03961	145

ORG_Distress	2.4155	.91345	145
Work_E	3.4030	.83379	145

Correlations

		Gen	Age	Edu	Tenure	Eco_Life	Detachment	Role_C	Finan_In	ORG_Distress	Work_E
Gen	Pearson Correlation	1	.291**	.164*	.064	-.016	-.257**	.151	-.021	-.004	.004
	Sig. (2-tailed)		.000	.048	.445	.849	.002	.069	.801	.964	.961
	N	145	145	145	145	145	145	145	145	145	145
Age	Pearson Correlation	.291**	1	.163*	.548**	-.187*	-.264**	-.023	-.102	-.177*	.089
	Sig. (2-tailed)	.000		.050	.000	.024	.001	.780	.220	.033	.287
	N	145	145	145	145	145	145	145	145	145	145
Edu	Pearson Correlation	.164*	.163*	1	-.061	-.040	-.036	-.087	-.295**	-.129	-.002
	Sig. (2-tailed)	.048	.050		.466	.635	.668	.298	.000	.122	.984
	N	145	145	145	145	145	145	145	145	145	145
Tenure	Pearson Correlation	.064	.548**	-.061	1	-.006	-.247**	.134	-.034	-.025	-.044
	Sig. (2-tailed)	.445	.000	.466		.942	.003	.107	.682	.762	.598
	N	145	145	145	145	145	145	145	145	145	145

Eco_Life	Pearson Correlation	-.016	-.187*	-.040	-.006	1	.023	.319**	.207*	.352**	.060
	Sig. (2-tailed)	.849	.024	.635	.942		.786	.000	.013	.000	.472
	N	145	145	145	145	145	145	145	145	145	145
Detachment	Pearson Correlation	-.257**	-.264**	-.036	-.247**	.023	1	-.146	.056	.116	-.119
	Sig. (2-tailed)	.002	.001	.668	.003	.786		.080	.501	.164	.153
	N	145	145	145	145	145	145	145	145	145	145
Role_C	Pearson Correlation	.151	-.023	-.087	.134	.319**	-.146	1	.080	.485**	-.170*
	Sig. (2-tailed)	.069	.780	.298	.107	.000	.080		.337	.000	.041
	N	145	145	145	145	145	145	145	145	145	145
Finan_Ins	Pearson Correlation	-.021	-.102	-.295**	-.034	.207*	.056	.080	1	.242**	-.180*
	Sig. (2-tailed)	.801	.220	.000	.682	.013	.501	.337		.003	.030
	N	145	145	145	145	145	145	145	145	145	145
ORG_Distress	Pearson Correlation	-.004	-.177*	-.129	-.025	.352**	.116	.485**	.242**	1	-.202*
	Sig. (2-tailed)	.964	.033	.122	.762	.000	.164	.000	.003		.015
	N	145	145	145	145	145	145	145	145	145	145
Work_E	Pearson Correlation	.004	.089	-.002	-.044	.060	-.119	-.170*	-.180*	-.202*	1
	Sig. (2-tailed)	.961	.287	.984	.598	.472	.153	.041	.030	.015	
	N	145	145	145	145	145	145	145	145	145	145

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

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

Run MATRIX procedure:

***** PROCESS Procedure for SPSS Version 3.3 *****

Written by Andrew F. Hayes, Ph.D. www.afhayes.com
Documentation available in Hayes (2018). www.guilford.com/p/hayes3

Model : 8
Y : Work_E
X : Eco_Life
M : Emotion_
W : Detachme

Sample
Size: 145

OUTCOME VARIABLE:
Emotion_

Model Summary

	R	R-sq	MSE	F	df1	df2
p	.50	.25	.66	15.62	3.00	141.00
.00						

Model

	coeff	se	t	p	LLCI	ULCI
constant	2.87	.55	5.25	.00	1.79	3.95
Eco_Life	.08	.23	.33	.74	-.38	.53
Detachme	-.37	.15	-2.41	.02	-.67	-.07
Int_1	.12	.06	1.86	.06	-.01	.25

Product terms key:

Int_1 : Eco_Life x Detachme

Test(s) of highest order unconditional interaction(s):

	R2-chng	F	df1	df2	p
X*W	.02	3.47	1.00	141.00	.06

Focal predict: Eco_Life (X)
Mod var: Detachme (W)

Conditional effects of the focal predictor at values of the moderator(s):

Detachme	Effect	se	t	p	LLCI
ULCI					
2.03	.32	.12	2.74	.01	.09
.55					
3.11	.45	.08	5.72	.00	.29
.60					
4.18	.58	.09	6.37	.00	.40
.76					

Data for visualizing the conditional effect of the focal predictor:
Paste text below into a SPSS syntax window and execute to produce plot.

DATA LIST FREE/

```
Eco_Life Detachme Emotion_ .  
BEGIN DATA.  
1.31 2.03 2.53  
2.20 2.03 2.82  
3.10 2.03 3.10
```

```

1.31      3.11      2.30
2.20      3.11      2.70
3.10      3.11      3.10
1.31      4.18      2.07
2.20      4.18      2.59
3.10      4.18      3.10

```

END DATA.

GRAPH/SCATTERPLOT=

Eco_Life WITH Emotion_ BY Detachme .

OUTCOME VARIABLE:

Work_E

Model Summary

	R	R-sq	MSE	F	df1	df2
p	.44	.19	.58	8.38	4.00	140.00
.00						

Model

	coeff	se	t	p	LLCI	ULCI
constant	5.96	.56	10.70	.00	4.86	7.06
Eco_Life	-.54	.22	-2.48	.01	-.97	-.11
Emotion_	-.36	.08	-4.59	.00	-.52	-.21
Detachme	-.63	.15	-4.28	.00	-.92	-.34
Int_1	.23	.06	3.72	.00	.11	.35

Product terms key:

Int_1 : Eco_Life x Detachme

Test(s) of highest order unconditional interaction(s):

	R2-chng	F	df1	df2	p
X*W	.08	13.87	1.00	140.00	.00

Focal predict: Eco_Life (X)
Mod var: Detachme (W)

Conditional effects of the focal predictor at values of the moderator(s):

Detachme	Effect	se	t	p	LLCI
ULCI					
2.03	-.08	.11	-.70	.48	-.30
.14					
3.11	.16	.08	2.03	.04	.00
.33					
4.18	.41	.10	4.25	.00	.22
.60					

Data for visualizing the conditional effect of the focal predictor:

Paste text below into a SPSS syntax window and execute to produce plot.

DATA LIST FREE/

Eco_Life Detachme Work_E .

BEGIN DATA.

```

1.31      2.03      3.61
2.20      2.03      3.54
3.10      2.03      3.47
1.31      3.11      3.25
2.20      3.11      3.40
3.10      3.11      3.55
1.31      4.18      2.89
2.20      4.18      3.26
3.10      4.18      3.62

```

```

END DATA.
GRAPH/SCATTERPLOT=
  Eco_Life WITH      Work_E  BY      Detachme .

***** DIRECT AND INDIRECT EFFECTS OF X ON Y *****

Conditional direct effect(s) of X on Y:
  Detachme      Effect      se      t      p      LLCI
ULCI
  2.03      -.08      .11      -.70      .48      -.30
.14
  3.11      .16      .08      2.03      .04      .00
.33
  4.18      .41      .10      4.25      .00      .22
.60

Conditional indirect effects of X on Y:

INDIRECT EFFECT:
  Eco_Life  ->  Emotion_  ->  Work_E

  Detachme      Effect      BootSE      BootLLCI      BootULCI
  2.03      -.12      .05      -.24      -.03
  3.11      -.16      .05      -.27      -.08
  4.18      -.21      .05      -.33      -.12

  Index of moderated mediation:
  Detachme      Index      BootSE      BootLLCI      BootULCI
  ---
  Detachme      -.04      .02      -.09      .00
  ---

***** ANALYSIS NOTES AND ERRORS *****

Level of confidence for all confidence intervals in output:
  95.0000

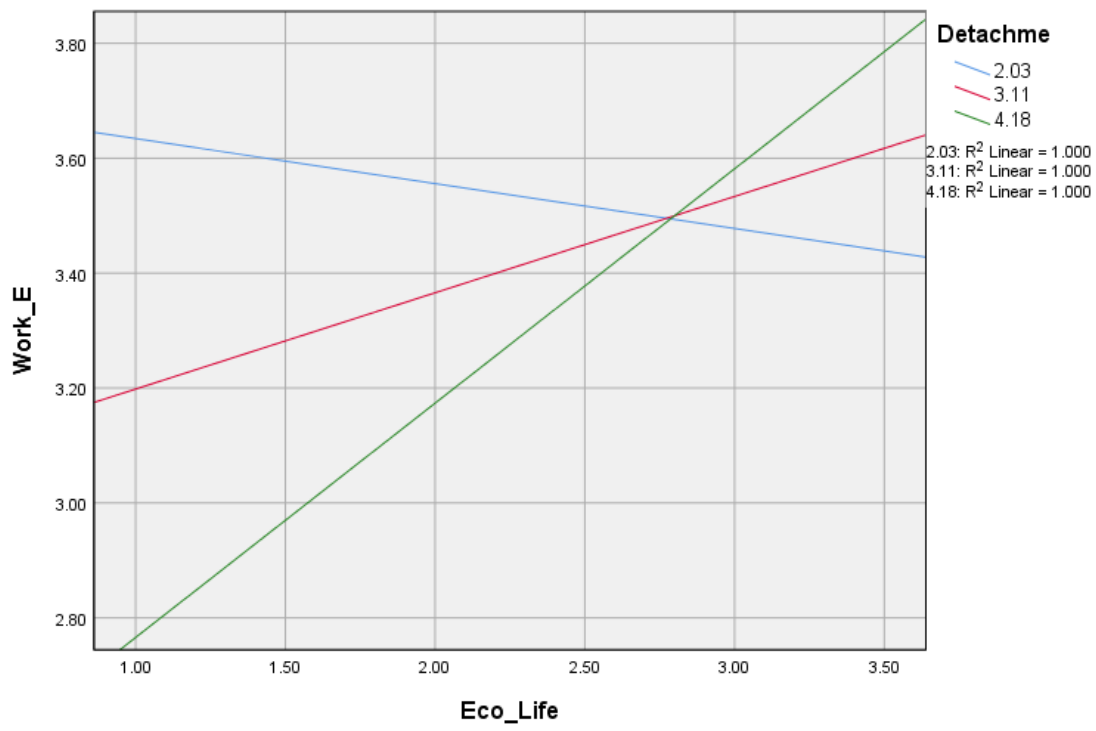
Number of bootstrap samples for percentile bootstrap confidence intervals:
  5000

W values in conditional tables are the mean and +/- SD from the mean.

NOTE: Variables names longer than eight characters can produce incorrect
output.
      Shorter variable names are recommended.

----- END MATRIX -----

```



Appendix 2

SPSS OUTPUT FROM EMPIRICAL STUDY 2

```
DATASET ACTIVATE DataSet3.  
CORRELATIONS  
  /VARIABLES=Gen Age Edu Tenure Work_E ORG_Distress Role_A ORG_Strength  
Detachment  
  /PRINT=TWOTAIL NOSIG  
  /STATISTICS DESCRIPTIVES  
  /MISSING=PAIRWISE.
```

Descriptive Statistics

	Mean	Std. Deviation	N
Gen	1.49	.502	145
Age	4.05	1.647	145
Edu	2.59	1.211	145
Tenure	3.02	1.199	145
Work_E	3.4030	.83379	145
ORG_Distress	2.4155	.91345	145
Role_A	2.4524	.84031	145
ORG_Strength	3.5352	.84849	145
Detachment	3.1086	1.07562	145

		Correlations								
		Gen	Age	Edu	Tenure	Work_E	ORG_Distress	Role_A	ORG_Strength	Detachment
Gen	Pearson Correlation	1	.291**	.164 [†]	.064	.004	-.004	-.012	.013	-.257**
	Sig. (2-tailed)		.000	.048	.445	.961	.964	.887	.876	.002
	N	145	145	145	145	145	145	145	145	145
Age	Pearson Correlation	.291**	1	.163 [†]	.548**	.089	-.177 [†]	-.113	.078	-.264**
	Sig. (2-tailed)	.000		.050	.000	.287	.033	.175	.352	.001
	N	145	145	145	145	145	145	145	145	145
Edu	Pearson Correlation	.164 [†]	.163 [†]	1	-.061	-.002	-.129	-.247**	-.068	-.036
	Sig. (2-tailed)	.048	.050		.466	.984	.122	.003	.415	.668
	N	145	145	145	145	145	145	145	145	145
Tenure	Pearson Correlation	.064	.548**	-.061	1	-.044	-.025	-.013	.041	-.247**
	Sig. (2-tailed)	.445	.000	.466		.598	.762	.872	.625	.003
	N	145	145	145	145	145	145	145	145	145
Work_E	Pearson Correlation	.004	.089	-.002	-.044	1	-.202 [†]	-.319**	.660**	-.119
	Sig. (2-tailed)	.961	.287	.984	.598		.015	.000	.000	.153
	N	145	145	145	145	145	145	145	145	145
ORG_Distress	Pearson Correlation	-.004	-.177 [†]	-.129	-.025	-.202 [†]	1	.362**	-.293**	.116
	Sig. (2-tailed)	.964	.033	.122	.762	.015		.000	.000	.164
	N	145	145	145	145	145	145	145	145	145
Role_A	Pearson Correlation	-.012	-.113	-.247**	-.013	-.319**	.362**	1	-.315**	.067
	Sig. (2-tailed)	.887	.175	.003	.872	.000	.000		.000	.426
	N	145	145	145	145	145	145	145	145	145
ORG_Strength	Pearson Correlation	.013	.078	-.068	.041	.660**	-.293**	-.315**	1	-.052
	Sig. (2-tailed)	.876	.352	.415	.625	.000	.000	.000		.538

	N	145	145	145	145	145	145	145	145	145
Detachment	Pearson Correlation	-.257**	-.264**	-.036	-.247**	-.119	.116	.067	-.052	1
	Sig. (2-tailed)	.002	.001	.668	.003	.153	.164	.426	.538	
	N	145	145	145	145	145	145	145	145	145

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

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

Run MATRIX procedure:

***** PROCESS Procedure for SPSS Version 3.3 *****

Written by Andrew F. Hayes, Ph.D. www.afhayes.com
Documentation available in Hayes (2018). www.guilford.com/p/hayes3

Model : 8
Y : Work_E
X : ORG_Dist
M : Role_A
W : Detachme

Sample
Size: 145

OUTCOME VARIABLE:
Role_A

Model Summary

	R	R-sq	MSE	F	df1	df2
p	.38	.14	.62	7.79	3.00	141.00
.00						

Model

	coeff	se	t	p	LLCI	ULCI
constant	2.31	.60	3.85	.00	1.13	3.50
ORG_Dist	.05	.23	.20	.84	-.41	.50
Detachme	-.20	.18	-1.13	.26	-.55	.15
Int_1	.09	.07	1.32	.19	-.04	.21

Product terms key:

Int_1 : ORG_Dist x Detachme

Test(s) of highest order unconditional interaction(s):

	R2-chng	F	df1	df2	p
X*W	.01	1.74	1.00	141.00	.19

Focal predict: ORG_Dist (X)
Mod var: Detachme (W)

Data for visualizing the conditional effect of the focal predictor:
Paste text below into a SPSS syntax window and execute to produce plot.

DATA LIST FREE/

ORG_Dist	Detachme	Role_A	.
1.50	2.03	2.24	
2.42	2.03	2.44	
3.33	2.03	2.64	
1.50	3.11	2.16	
2.42	3.11	2.44	
3.33	3.11	2.73	
1.50	4.18	2.08	
2.42	4.18	2.45	
3.33	4.18	2.82	

END DATA.

GRAPH/SCATTERPLOT=

ORG_Dist WITH Role_A BY Detachme .

OUTCOME VARIABLE:

Work_E

Model Summary

	R	R-sq	MSE	F	df1	df2
p	.45	.20	.57	8.71	4.00	140.00
.00						

Model

	coeff	se	t	p	LLCI	ULCI
constant	6.54	.61	10.77	.00	5.34	7.74
ORG_Dist	-.86	.22	-3.91	.00	-1.29	-.42
Role_A	-.31	.08	-3.85	.00	-.47	-.15
Detachme	-.68	.17	-3.94	.00	-1.02	-.34
Int_1	.24	.06	3.76	.00	.11	.36

Product terms key:

Int_1 : ORG_Dist x Detachme

Test(s) of highest order unconditional interaction(s):

	R2-chng	F	df1	df2	p
X*W	.08	14.15	1.00	140.00	.00

Focal predict: ORG_Dist (X)
Mod var: Detachme (W)

Conditional effects of the focal predictor at values of the moderator(s):

Detachme	Effect	se	t	p	LLCI	ULCI
2.03	-.38	.11	-3.48	.00	-.59	-.16
3.11	-.12	.08	-1.62	.11	-.27	.03
4.18	.13	.09	1.42	.16	-.05	.32

Data for visualizing the conditional effect of the focal predictor:
Paste text below into a SPSS syntax window and execute to produce plot.

DATA LIST FREE/

```

  ORG_Dist Detachme Work_E .
BEGIN DATA.
  1.50      2.03      3.83
  2.42      2.03      3.49
  3.33      2.03      3.15
  1.50      3.11      3.49
  2.42      3.11      3.38
  3.33      3.11      3.27
  1.50      4.18      3.14
  2.42      4.18      3.26
  3.33      4.18      3.38

```

END DATA.

GRAPH/SCATTERPLOT=

ORG_Dist WITH Work_E BY Detachme .

***** DIRECT AND INDIRECT EFFECTS OF X ON Y *****

Conditional direct effect(s) of X on Y:

Detachme	Effect	se	t	p	LLCI	ULCI
2.03	-.38	.11	-3.48	.00	-.59	-.16

	3.11	-.12	.08	-1.62	.11	-.27
.03	4.18	.13	.09	1.42	.16	-.05
.32						

Conditional indirect effects of X on Y:

INDIRECT EFFECT:

ORG_Dist	->	Role_A	->	Work_E		
Detachme	Effect	BootSE	BootLLCI	BootULCI		
2.03	-.07	.04	-.16	.00		
3.11	-.10	.04	-.18	-.03		
4.18	-.13	.05	-.24	-.04		

Index of moderated mediation:

Detachme	Index	BootSE	BootLLCI	BootULCI
---	-.03	.02	-.08	.02

***** ANALYSIS NOTES AND ERRORS *****

Level of confidence for all confidence intervals in output:
95.0000

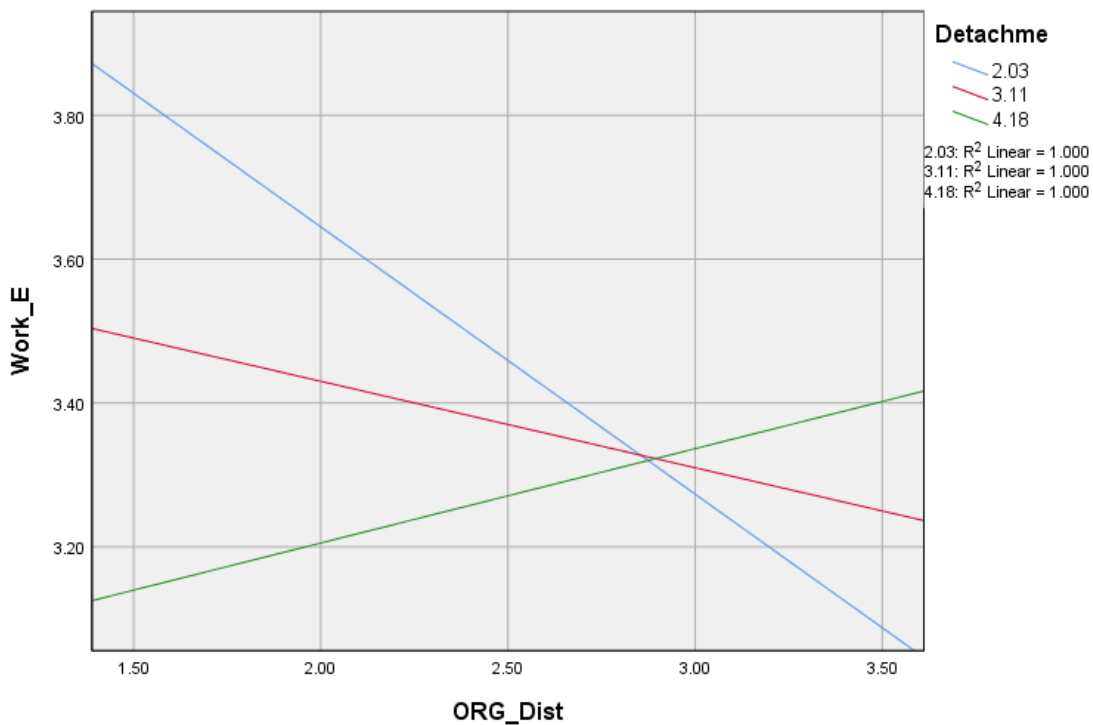
Number of bootstrap samples for percentile bootstrap confidence intervals:
5000

W values in conditional tables are the mean and +/- SD from the mean.

NOTE: Variables names longer than eight characters can produce incorrect output.

Shorter variable names are recommended.

----- END MATRIX -----



Run MATRIX procedure:

***** PROCESS Procedure for SPSS Version 3.3 *****

Written by Andrew F. Hayes, Ph.D. www.afhayes.com
Documentation available in Hayes (2018). www.guilford.com/p/hayes3

Model : 8
Y : Work_E
X : ORG_Dist
M : ORG_Stre
W : Detachme

Sample
Size: 145

OUTCOME VARIABLE:
ORG_Stre

Model Summary

	R	R-sq	MSE	F	df1	df2
p	.33	.11	.66	5.64	3.00	141.00
.00						

Model

	coeff	se	t	p	LLCI	ULCI
constant	5.26	.62	8.50	.00	4.03	6.48
ORG_Dist	-.68	.23	-2.88	.00	-1.14	-.21
Detachme	-.33	.18	-1.79	.08	-.69	.03
Int_1	.12	.07	1.82	.07	-.01	.25

Product terms key:

Int_1 : ORG_Dist x Detachme

Test(s) of highest order unconditional interaction(s):

	R2-chng	F	df1	df2	p
X*W	.02	3.33	1.00	141.00	.07

Focal predict: ORG_Dist (X)
Mod var: Detachme (W)

Conditional effects of the focal predictor at values of the moderator(s):

Detachme	Effect	se	t	p	LLCI	ULCI
2.03	-.43	.11	-3.75	.00	-.65	-
.20	-.30	.08	-3.91	.00	-.45	-
.15	-.17	.09	-1.75	.08	-.35	-
.02						

Data for visualizing the conditional effect of the focal predictor:
Paste text below into a SPSS syntax window and execute to produce plot.

DATA LIST FREE/
ORG_Dist Detachme ORG_Stre .

```

BEGIN DATA.
  1.50      2.03      3.95
  2.42      2.03      3.56
  3.33      2.03      3.17
  1.50      3.11      3.79
  2.42      3.11      3.52
  3.33      3.11      3.25
  1.50      4.18      3.64
  2.42      4.18      3.49
  3.33      4.18      3.34
END DATA.
GRAPH/SCATTERPLOT=
  ORG_Dist WITH      ORG_Stre BY      Detachme .

*****
OUTCOME VARIABLE:
  Work_E

Model Summary
      R      R-sq      MSE      F      df1      df2
p      .68      .47      .38      30.84      4.00      140.00
.00

Model
      coeff      se      t      p      LLCI      ULCI
constant      2.56      .58      4.43      .00      1.42      3.71
ORG_Dist      -.45      .18      -2.46      .01      -.82      -.09
ORG_Stre      .62      .06      9.66      .00      .49      .75
Detachme      -.41      .14      -2.92      .00      -.69      -.13
Int_1      .13      .05      2.60      .01      .03      .24

Product terms key:
  Int_1      :      ORG_Dist x      Detachme

Test(s) of highest order unconditional interaction(s):
      R2-chng      F      df1      df2      p
X*W      .03      6.78      1.00      140.00      .01
-----
      Focal predict: ORG_Dist (X)
      Mod var: Detachme (W)

Conditional effects of the focal predictor at values of the moderator(s):

      Detachme      Effect      se      t      p      LLCI
ULCI
      2.03      -.18      .09      -1.97      .05      -.36
.00
      3.11      -.04      .06      -.58      .56      -.16
.08
      4.18      .11      .07      1.51      .13      -.03
.25

Data for visualizing the conditional effect of the focal predictor:
Paste text below into a SPSS syntax window and execute to produce plot.

DATA LIST FREE/
  ORG_Dist Detachme Work_E .
BEGIN DATA.
  1.50      2.03      3.65
  2.42      2.03      3.48
  3.33      2.03      3.32
  1.50      3.11      3.42
  2.42      3.11      3.39

```


3.33	3.11	3.36
1.50	4.18	3.19
2.42	4.18	3.29
3.33	4.18	3.39

END DATA.

GRAPH/SCATTERPLOT=

ORG_Dist WITH Work_E BY Detachme .

***** DIRECT AND INDIRECT EFFECTS OF X ON Y *****

Conditional direct effect(s) of X on Y:

Detachme	Effect	se	t	p	LLCI	ULCI
2.03	-.18	.09	-1.97	.05	-.36	.00
3.11	-.04	.06	-.58	.56	-.16	.08
4.18	.11	.07	1.51	.13	-.03	.25

Conditional indirect effects of X on Y:

INDIRECT EFFECT:

ORG_Dist ->	ORG_Stre ->	Work_E	Effect	BootSE	BootLLCI	BootULCI
Detachme						
2.03			-.26	.09	-.46	-.12
3.11			-.18	.06	-.31	-.09
4.18			-.10	.07	-.25	.02

Index of moderated mediation:

Detachme	Index	BootSE	BootLLCI	BootULCI
	.08	.05	-.02	.18

***** ANALYSIS NOTES AND ERRORS *****

Level of confidence for all confidence intervals in output:
95.0000

Number of bootstrap samples for percentile bootstrap confidence intervals:
5000

W values in conditional tables are the mean and +/- SD from the mean.

NOTE: Variables names longer than eight characters can produce incorrect output.

Shorter variable names are recommended.

----- END MATRIX -----

