

**Employee Engagement: Extension of the Job Demands Resource (JD-R) Model
with the *Ubuntu* Construct.**

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Abstract

This study contributes to our understanding of the moderation and mediation processes through which job demands, job resources and employee engagement are linked with desired organizational behavioural outcomes [intention to turnover (IT) and affective commitment (AC)]. The study extends the JD-R model with a typical culturally specific African construct, Ubuntu, in order to increase its relevance to the African context. Mediation and moderation analysis were used to test the hypothesised relationships in two cross sectional samples of 175 public sector and 263 private sector employees. Results revealed that organizational based self-esteem (OBSE) and distributive justice (DJ) were positively related to engagement (for public sector employees) and OBSE, DJ and colleague support (CS) were positively related to engagement (for private sector employees). For both sectors combined, OBSE, DJ and job autonomy (JA) were positively related to engagement. The findings supported mediation of employee engagement between DJ and intention to turnover and OBSE and affective commitment for public sector whereas for private sector, mediation of employee engagement between OBSE, DJ, CS and intention to turnover was not supported whereas engagement mediated the relationship between DJ and affective commitment for private sector. For both private and public sector, engagement mediated the relationship between JA, DJ and intention to turnover and the relationship between OBSE, JA and DJ and affective commitment. Moreover, Ubuntu construct was positively related with engagement in both private and public sector employees. Expectedly, Ubuntu mediated the relationship between supervisor support (SS) and employee engagement for all sectors. However surprisingly, mediation of Ubuntu between CS and engagement was not supported. There were no statistically significant interactions for both sectors suggesting that, contrary to the JD-R model, job demands do not moderate the relationship between resources and employee engagement. Overall, the findings suggest that specific job resources could be provided for each sector to improve engagement and employee engagement could be used as a mechanism to explain the relationship between resources (job and personal) and desired organizational behaviour outcomes (IT and AC). More importantly Ubuntu construct is positively related to employee engagement and can also be used to explain the relationship between supervisor support, colleague support and employee engagement. Implications for Human Resource Management research and practice are highlighted and directions for future research discussed.

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List of Abbreviations

AC	Affective Commitment
BOCCIM	Botswana Confederation of Commerce, Industry and Manpower
BSB	Botswana Savings Bank
CMB	Common Method Bias
CS	Colleague Support
CSR	Corporate Social Responsibility
DCM	Demand Control Model
DPSM	Directorate of Public Sector Management
DJ	Distributive Justice
EE	Employee Engagement
ERI	Effort Reward Imbalance
GSE	Generalized Self Efficacy
GWA	Gallup Workforce Audit
HR	Human Resource
HRM	Human Resource Management
ISA	Intellectual, Social and Affective
IT	Intention to Turnover
JA	Job Autonomy
JO	Job Overload
JD-R	Job Demands Resource
KMO	Kaiser Meyer Olkin
MoE	Ministry of Education
MoH	Ministry of Health
NGO	Non-Governmental Organization
OBSE	Organizational Based Self Esteem
OLS	Ordinary Least Squares
PCA	Principal Component Analysis
WHI	Work Home Interference
SS	Supervisor Support
SET	Social Exchange Theory
UWES	Utrecht Work Engagement Scale
VIF	Variance Inflation Factor

Dedication

This work is dedicated to the memory of my beloved grandmother,

Mrs. Gasewame Mmaseboko Thebenyane

Your heart will go on...

[1916 - 2014]

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Chapter 1 Introduction

The overarching aim of this thesis is to explore employee engagement among employees in private and public sector organizations in Botswana by employing the Job Demands - Resource model. This chapter presents an overview of this thesis in terms of providing a brief discussion on the following; (a) Background information (b) Problem statement (c) Research objectives and hypothesis (d) Theoretical perspective adopted (e) Methodology (f) Contribution to knowledge and (g) Context of the study. The chapter concludes by depicting how the rest of the thesis is structured.

1.1 Background Information

Employee engagement research has gained popularity in academia as well as among practitioners after the redirection of traditional psychological research trends which focused on dysfunctional aspects of the individual to the positive aspects which can contribute to individual growth and organizational success (Macey & Schneider, 2008). Negatively oriented research such as burnout research is limited in its ability to yield a better understanding of strengths, optimal functioning and actualizing human potential because “positivity and negativity usually represent distinct continuums rather than opposite ends of the same continuum” (Youssef-Morgan, & Bockorny, 2014, p.36). Seligman and Csikszentmihalyi (2000) advise that a strengths based approach would enable a better understanding of how to lead a flourishing life and achieve high levels of work performance or a focus on the positive features that make life worth living. Following this line of reasoning, Maslach, and Leiter (1997) put forward a switch from the study of burnout to its opposite - engagement. Organizations

which focus towards developing engaged employees reap significant benefits from their efforts (Roberts & Davenport, 2002; Robinson, Hayday & Perryman, 2004). Employee engagement has significantly declined worldwide in both developed and emerging economies (Shuck, Reio, & Rocco, 2011). Estimates put the cost of disengaged employees in the United States at between \$250 and \$300 billion a year (Shuck et al., 2011). Globally, studies report that disengaged employees cost economies. For example, disengaged employees costs in Germany, Australia, and Asia are reported to be \$263, \$4.9 and \$2.9 billion respectively (Shuck et al., 2011). Baumruk' s (2006) study linking employee engagement to the bottom line financial success, reported that companies in which 60% of the workforce is engaged have average five year total returns to shareholders of more than 20% as compared to companies where 40% of employees are engaged with an average total returns to shareholders of about 6%. Research by Gallup suggests that employee disengagement is equally problematic in other countries (Avery, McKay & Wilson, 2007). Taipale, Selander, Anttila and Natti (2011) examined the levels and predictors of work engagement in eight European countries and the results revealed that the level of engagement varies not only between countries but also between sectors within each country. Evidence has shown that employee engagement predicts productivity, job satisfaction, motivation, commitment, low turnover intention (Rothmann, 2014) and that employee engagement affects the mind-set of employees (Sonnentag, 2003). A number of different frameworks have been used in employee engagement research in various countries. For example, the frameworks of Kahn (1990) and Schaufeli, Gonzalez-Roma and Bakker (2002). It is for this reason that employee engagement would be regarded as an important construct for different countries and cultures. The literature on employee engagement advocates the need for a cross cultural perspective

on employee engagement (Rothmann 2014). This is necessitated by factors such as globalisation, immigration, diversity and multiculturalism characterising today's organizations. As is the case with research on motivational constructs, most studies regarding employee engagement research have been conducted in the United States and Europe. With the exception of South Africa, very little research on employee engagement has been conducted in African samples. This arises a question of whether the dynamics promoted by employee engagement research are applicable to other cultures with different cultural values from those in the United States and Europe. Without empirical support of how cultural concepts can affect employee engagement, it is doubtful that the concept can move beyond pure speculations in terms of how it can be understood in different cultural settings, and this in turn will hamper the theoretical maturity and development of the concept. Addressing this deficiency of research in an area that is increasingly becoming popular in academia and practice would seem an important requirement. Based on this premise, this study focuses on assessing how a cultural concept, Ubuntu, can be used to explain how certain psychological factors can directly affect the relationships between employee engagement, job characteristics and desired organizational behavioural outcomes. In an African context, Ubuntu is considered as a product of African values that is inherent in the day to day lives of the African people. It is often roughly translated to mean "human kindness" and often used in a more philosophical sense to mean *a bond of sharing that connects humanity* (West 2014). Ubuntu is seen as a framework that is part of the humanistic traditions of broader African belief systems, although this specific term originates in Southern Africa. It is thought to locate identity and meaning within a collective approach as opposed to an individualistic one (Oviawe, 2016). As a result the individual is not independent of the collective and the relationship between

the individual and the community is reciprocal, interdependent and mutually benefit (Oviawe, 2016). There are other cultural belief systems such as the Chinese Confucianism which offer a similar perspective (Hu, Schaufeli & Taris 2014). In the current employee engagement literature, cross cultural research on employee engagement is an issue that has been raised (Rothmann, 2014) but has not been pursued in significant detail therefore the merit of providing empirical evidence on employee engagement in a different cultural environment would be beneficial to employee engagement research. Integrating specific cultural constructs to employee engagement framework would be useful in that it could fit the specific needs of the respective societies and utilising a framework that could be more local and complementary to the indigenous African beliefs.

1.2 Statement of the Problem

Both academic (Kahn, 1990; Macey & Schneider, 2008; Schaufeli, 2014) and practitioner (Harter, Schmidt & Hayes 2002; Robinson et al. 2004) literature supports the importance of employee engagement. For example, engaged employees perform better (Halbesleben, 2010; Rich, Lepine, & Crawford, 2010). The literature provides a number of employee engagement definitions offering different perspectives (Kahn, 1990; Schaufeli, Salanova, Gonzalez-Roma & Bakker, 2002; Alfes, Truss, Soane, Rees, & Gatenby, 2010), which have unanimously demonstrated that employee engagement is a multi-dimensional construct. There is agreement in the literature that employee engagement is distinct from similar constructs such as organizational commitment (Christian et al., 2011; Robinson et al., 2008; Saks, 2006), Workaholism (Bakker, Schaufeli, Leiter, & Taris, 2008; Schaufeli, Taris & Van Rhenen, 2008) and

job satisfaction (Christian et al., 2011; Wefald & Downey, 2009). With regards to its antecedents, previous studies have consistently shown that job and personal resources are positively related to employee engagement (Christian et al., 2011). Researchers collectively agree that organizations may increase employee engagement by particular HRM strategies such as training, (Salanova, Schaufeli, Xanthopoulou, & Bakker, 2010), transformational leadership (Bakker, Van Emmerik, & Euwema, 2006) and modifying job designs (Bakker, 2011). In terms of whether employee engagement is a trait, state or behaviour, Macey and Schneider (2008) proposed that employee engagement is a term that should be used at different times to refer to psychological *traits*, *states* and *behaviours* which are separate but related constructs. They suggest that the concept still suffers from lack of precision and it will be more useful if it is framed as a model that simultaneously embraces the psychological *trait*, *state* and *behaviour* it implies. However, there is agreement in the literature that it is a state (Christian et al., 2011; Dalal, Brummel, Wees, & Thomas, 2008; Schaufeli et al., 2002; Wallard, 2010), that may fluctuate within persons from day to day (Sonnentag, Dormann, & Demerouti, 2010).

Despite all academic research around employee engagement, researchers still point out that our knowledge is not increasing likewise and academic work seems to be producing more of the same without covering the most important issues (Schaufeli, 2012). For example, there are still occasional disagreements on its meaning, conceptualization and measurement (Schaufeli, 2014). Added to this, valid comparisons across countries cannot be made because of the lack of empirical work on representative national samples (Schaufeli, 2012). Perhaps more important than comparisons across countries is to investigate employee engagement with typical, local psychological constructs that are specific to national samples such as the Ubuntu

construct in Africa and the Confucianism construct in China. Examination of culture specific constructs and how they are related to engagement may unearth the mechanisms through which employee engagement impacts upon desired organizational outcomes and increase cross cultural validity of the construct. This study extends the JD-R model by proposing Ubuntu as a variable that explains the relationship between social resources and employee engagement. When used in connection with HRM, the concept of Ubuntu means that a person is seen not as an individual but as a part of a collective society (Mbigi & Maree, 1995). This concept is often contrasted with Western individualism (West, 2014). Its emphasis is on group solidarity and relationship building. It encourages a spirit of caring and community, harmony and hospitality, respect and responsiveness that individuals and groups at work display for each other (Newenham-Kahindi, 2009). Mangaliso (2001) states “it is a foundation for the basic values that manifest themselves in the way African people think and behave towards each other and everyone else they encounter.” (p.24). (The Ubuntu concept is fully discussed in section 3.9). Although a positive relationship between social resources and employee engagement has been observed (Hu, Schaufeli, & Taris, 2014), specific cultural psychological constructs such as Ubuntu are likely to influence the extent to which employees choose to engage themselves in their work roles. Contemporary researchers are urging researchers to explore some of these key areas in order to increase our academic knowledge and support practitioners who struggle to increase engagement in organizations.

1.3 Research Questions

Two overarching research questions guided this study.

- 1) What is the relationship between job demands, job resources, organizational outcomes and employee engagement?
- 2) To what extent does the presence of Ubuntu influence the relationship between job resources and employee engagement?

To explore these research questions the following objectives were proposed.

- a) To determine the relationship between resources (job, personal, social) and employee engagement.
- b) To evaluate whether the process through which resources (job, personal and social) influence employee engagement is dependent on job demands.
- c) To determine whether employee engagement is the mechanism through which resources (job, personal, social) influence desired organizational outcomes.
- d) To determine and examine whether Ubuntu is the mechanism through which social resources influence employee engagement.
- e) To examine comparatively employee engagement and its predictors between public and private sector organizations.

1.4 Theoretical Perspective

A number of theoretical frameworks to studying employee engagement have been identified in the literature. (a) Kahn (1990) Needs satisfying approach, (b) Maslach and Leiter (1997) Burnout antithesis approach (c) Bledlow, Schmitt, Frese and Kuhnel (2011) Affective shift model. (d) Saks (2006) Social exchange approach (e) Bakker and Demerouti (2008) Job Demands Resource model. Taken together, these frameworks each emphasize a different aspect of engagement. A detailed discussion of these frameworks is provided in chapter 2. Bakker and Demerouti (2008) Job Demands Resource model emphasis on categorizing job characteristics into resources

and demands is especially useful to this study as it allows the researcher to think through ways in which job resources and demands interact to influence employee engagement. To this end, their conceptualization of engagement is a useful framework for classifying job demands and resources and finding out how they interact to foster employee engagement. It is here also that the model's attention to the mediation effect of employee engagement on the relationship between resources and desired organizational behaviour outcomes is of value in informing the mechanisms through which the construct manifests itself among employees for organizational benefit. In order to increase relevance of this model to an African context, the Ubuntu construct which is likely to manifest itself among African people is being applied as a separate variable to extend the model.

1.5 Methodology

Chapter four details the study's methodology and justifies all methodological decisions taken during the research. This study employed a survey design to provide quantitative description of attitudes or opinions of a population by studying the sample of that population (Creswell, 2009). The study uses deductive approach logic for examining employee engagement in the workplace. A quantitative data collection method was used. At the outset of the study, the researcher proposed a theoretical framework based on employee engagement theories in the academic literature. This framework guided the initial stage of the research and served as a framework to examine employee engagement and its antecedents.

1.6 Contribution to Knowledge

The current state of research in employee engagement has made progress on the following: (a) Definition, meaning and whether employee engagement is a trait, state or behaviour and its distinction with other similar constructs (Christian et al., 2011; Kahn, 1990; Harter et al., 2002; Hallberg & Schaufeli, 2006; Macey & Schneider, 2008; Schaufeli et al., 2002) (b). Theory building, (Bakker & Demerouti, 2008; Harter et al., 2002; Kahn, 1990; Maslach & Leiter, 1997; Saks, 2006). (c) Its antecedents and outcomes (Bailey, Madden, Alfes and Fletcher, 2015; Saks, 2006, Shuck et al., 2011). (d) Its importance in organizations and how it can be measured and increased (Schaufeli & Salanova, 2008; Schaufeli et al., 2006; Soane, Truss, Alfes, Shantz, Reese & Gatenby 2012). Theoretical and empirical studies have examined employee engagement from several perspectives. Although substantial progress has been made, there have been very little empirical attempt to examine the concept in an African sample and more importantly to systematically measure what effects a cultural concept such as the Ubuntu construct may have on employee engagement. This gap in the literature has been pointed out by Rothmann (2014) who showed why a cross cultural approach to employee engagement is necessary. As already stated the JD-R model has mainly been applied in Western countries and if applied to non-Western countries it was used in its original form. Hu, Schaufeli and Taris (2014) extended the JD-R model with *guanxi*, a typical Chinese form of social exchange to increase the model's applicability to the Chinese context and there has been no empirical attempt to systematically examine how the presence of Ubuntu construct among the African people may influence employee engagement. The key contribution of this study is therefore to extend the JD-R model with the Ubuntu construct by systematically measuring what effects it has on the relationship between the two social constructs,

colleague support (CS) Supervisor Support (SS) and employee engagement. This is an important omission given that it is established in the organizational behaviour literature that studies have not shown how culture might be taken into account in the managerial practice (Gbadamosi, 2003). Given these questions and the fact that so much employee engagement research has restricted itself to organizations in Western countries makes it imperative to carry out research that can lead to conclusions about employee engagement in samples different from the West. Mediation of cultural concepts remain unexplored in employee engagement research and this study contributes to the literature by introducing the Ubuntu construct as a mechanism which can be used to explain the relationship between social support and employee engagement. Added to this, this study complements the work of Alfes et al. (2010) by comparatively investigating employee engagement and its antecedents between private and public sector employees. Further, by positioning engagement within a number of antecedents and outcome variables, this study responds to Parker and Griffin (2011) call for stronger link between engagement and other psychological states.

1.7 Research context

Botswana is a country in Southern Africa with a population of approximately 2.1 million. It has two official languages, Setswana and English, with business in both private and public sectors conducted mainly in English. Economically, Botswana is classified as a middle income country with Gross Domestic Product (in real terms) estimated at \$15.81 billion in 2013. In terms of formal sector employment in 2013 the

public sector had the largest share at 52.5% with the private sector accounting for 47.5% (Statistics Botswana, 2013).

This section presents an assessment of the context facing the Botswana workforce. It discusses the development of policy priorities and the public service reform. Through the analysis of public information provided online at www.gov.bw, it aims to identify aspects of the public sector management which may have implications in the willingness and ability of the workforce to engage more fully with their job tasks. In understanding the context facing the Botswana workforce, this section will describe the development of policies formulated which the employer and the employee are expected to take into account in their attitudes and behaviour towards their work. The Botswana public sector is managed by a department known as the Directorate of Public Service Management (DPSM) that is within the Office of the President. This department is tasked with ensuring that public officers maintain the highest standards of behaviour, commitment and efficiency and that they serve the public well. Its mission is to provide efficient and effective HR management policies in partnership with government ministries and other stakeholders through policy formulation, monitoring and evaluation. Information on these policies is public information and it is made available through government reports both online and in print (www.gov.bw). On the other hand, the private sector is managed by an association known as the Botswana Confederation of Commerce Industry and Manpower (BOCCIM) representing all private sector employers in all sectors of the economy. This association's objective is to protect economic interests of the business community and it is the main voice of the private sector businesses in Botswana. Worthy of note is that, unlike the public sector, this association is not in any way responsible for developing HR policies for the private sector organizations, but facilitates partnership

between the private sector and Government. Due to the competitive nature of private sector organizations, information on HR policies and interventions is confidential information (www.boccim.co.bw).

The Government of Botswana has always taken the initiative to introduce necessary changes in its public service to keep it abreast of changing times. Recently, the Government has made a number of reforms in the public sector as a way of increasing productivity. Some of the reforms undertaken in the last few years include the following: personnel training, a performance appraisal system, an appropriate incentive and reward system, an introduction to work improvement teams and an introduction to the performance management system (Ayeni, 2001). However, there have been significant indications and evidence suggesting public sector failure and misplaced priorities. For example in 2011, there was an industrial action undertaken by public sector workers (Moore, 2011). Although the strike action was about increase in pay, the overall effect resulted in an unmotivated and disengaged public sector. Moreover, for many highly skilled individuals, a career in the public sector is a last resort with preference for the private sector suggesting that its workforce might be more motivated and engaged in their jobs. An engaged workforce is seen as critical to delivering the vision as per one of the national vision 2016 pillars which proposes that Botswana will be a society distinguished by the pursuit of excellence through a new culture of hard work and discipline.

1.8 Structure of the thesis

Chapter two discusses the definition, and theory building of employee engagement, its antecedents, consequences and its distinctness from other related constructs. Chapter three provides a detailed discussion of study variables, hypothesis building and

development of the research model and how the model was extended to include additional variables as the study progressed. Chapter four describes the methodology used in carrying out this research together with the philosophical underpinning guiding this study. Chapter five presents results and analysis. Chapter six discusses the findings. Chapter seven presents the conclusions, recommendations and suggestions for future research.

Chapter 2 Definition and Theory Development

This chapter begins with a review of a number of issues emerging from the literature in terms of how employee engagement is defined and understood and its distinction from similar and related constructs. This will be followed by a critical discussion of the employee engagement theories suggested in the academic literature together with an examination of empirical studies around each of the theories. The chapter will conclude with a discussion on the antecedents and consequences of employee engagement suggested in the academic literature.

2.1 Definition

Ideally the first step in the development of a construct is its definition and the common language that helps situate it across relevant disciplines. Numerous definitions of employee engagement can be derived from both academic and practitioner based literatures. However, there appears to be a lack of a universal definition of the construct resulting in chaotic approaches to its understanding and its development within organizations. A number of definitions in the academic literature have been suggested providing unique perspectives. The academic and practitioner approaches are very different in both purpose and outcome (Macey & Schneider, 2008). Whereas the practitioners are concerned with desirable outcomes resulting from the construct such as employee retention and levels of productivity, the academic perspective is concerned with a clear and unambiguous definition and operationalization of the concept. It is more focused on the individual level to better understand the antecedent

variables causing its development together with the associated outcome variables (Saks, 2006; Schaufeli, 2014). Since this research is academic in nature, it will focus only on academic work to provide a review of the definition of the construct.

From an academic perspective, until recently most of the research on employee engagement has been exclusively done by psychologists (Maslach, Schaufeli, & Leiter, 2001; May, Gilson, & Harter, 2004; Rothbard, 2001; Schaufeli et al., 2002) and now it is receiving attention from HR management (Albretch, 2010; Harter et al, 2002; Saks, 2006; Shuck & Wallard, 2010). This resulted in a variety of terms being used to explain the construct (*work engagement, personal engagement, job engagement, employee engagement, organizational engagement, staff engagement* and *just engagement*). Kahn (1990), arguably the first scholar who examined the construct defined engagement as “the harnessing of organization members' selves to their work roles; in engagement, people employ and express themselves physically, cognitively, and emotionally during role performances” (p. 694). The cognitive aspect of employee engagement is concerned with employees’ beliefs about the organization, its leaders and working conditions. The emotional aspect is concerned with how employees feel about each of those three factors and whether they have positive or negative attitudes toward the organization and its leaders. The physical aspect of employee engagement is concerned about the physical energies exerted by individuals to accomplish their roles. Thus, according to Kahn engagement means to be psychologically as well as physically present when occupying and performing an organizational role. Kahn (1990) argued that employees can be engaged on one dimension and not on the other. The two critical components for role engagement suggested by Kahn (1990) are attention and absorption. Rothbard (2001) inspired by Kahn defined engagement as a two dimensional motivational construct that includes attention and absorption. As

components of role engagement, she noted that attention and absorption are distinct yet related constructs. Attention and absorption differ in that attention devoted to a role may be thought of as an invisible, material resource that a person can allocate in multiple ways, whereas absorption implies intrinsic motivation in a role (Rothbard, 2001). May et al., (2004) tested Kahn's conceptualization but never clearly defined the construct. They refer to Kahn's (1990) definition by saying "in engagement people employ and express themselves physically cognitively and emotionally during role performances" (p.12). Saks (2006) defines it as "a distinct and unique construct that consists of cognitive, emotional and behavioural components that is associated with individual role performance" (p.602). Christian et al. (2011) defines work engagement as "a relatively enduring state of mind referring to the simultaneous investment of personal energies in the experience or performance of work" (p.95). In defining engagement, the burnout researchers similarly focus on the work role suggesting what started as a meaningful and challenging job becomes unpleasant, unfulfilling and meaningless. They suggest engagement is characterized by energy, involvement and efficacy, the direct opposite of the three burnout dimensions of exhaustion, cynicism and inefficacy (Maslach et al., 2001). Emerging from these definitions is an agreement that engagement is a behavioural outcome which manifests itself attitudinally involving the cognitive and emotional aspects of employees. Engaged employees are characterized by having energy and being involved in their work roles. They express their positive thoughts and feelings and are psychologically present in their work roles. The burnout researchers propose that engagement becomes eroded when burnout manifests itself which conceptually places burnout as an opposite of engagement (Maslach & Leiter 1997). Schaufeli et al. (2002) took a different approach to the burnout researchers. They suggested engagement should be defined and

operationalized in its own right and that burnout and engagement should be seen as two independent constructs. They define work engagement as “a positive, fulfilling, work related state of mind that is characterized by vigour, dedication and absorption” (p.74). As implied in its definition it has three primary components. Vigour is characterized by high levels of energy and mental resilience while working. Dedication refers to being strongly involved in one’s work and experiencing a sense of significance and enthusiasm. Absorption is characterized by being fully concentrated and happily engrossed in one’s work. As stated by Schaufeli et al. (2002) engagement is not a momentary and specific state, but rather “a more persistent and pervasive affective-cognitive state that is not focused on any particular object, event, individual or behaviour” (p. 74). What can be understood from this definition is that not being engaged in one’s work does not mean employees are experiencing burnout. Freney and Tiernan (2006) state that an engaged employee will not be experiencing burnout, but an employee who is not burnt out is not necessarily engaged.

Although most of employee engagement researchers concur with Schaufeli et al. (2002) view that burnout and engagement are two independent constructs, there still remain some doubts on their conceptual distinctiveness. Cole, Walter, Bedian and O’Boyle (2012) Meta analytic examination showed that theoretically, the two constructs have not been conceptually differentiated. Their examination of burnout and engagement dimensions demonstrated that dimensions of the two constructs are relatively highly correlated and that dimensions of engagement share considerable variance with the dimensions of burnout. Using Confirmatory Factor Analysis, they found out that even though the dimensions of burnout and engagement are not perfectly negatively correlated their observed relations with each other are substantial. This according to them, yielded evidence of conceptual alignment or association

between the dimensions of burnout and engagement resulting in legitimate concerns about their distinctiveness. They concluded that it is not feasible to therefore to resolve the existing confusion of their distinctiveness purely on conceptual grounds. Further, analysis on their discriminant validity showed doubts about their functional distinctiveness of their dimensions and analysis of the literature showed that most researchers distinguished burnout and engagement dimensions as bipolar rather than independent constructs (Cole et al. 2012). They therefore concluded that it might be worthwhile to utilize the bipolar conceptualization for the dimensions underlying burnout and engagement. The two opposing arguments by Cole et al. (2012) are that First, engagement and Burnout can be treated as opposite ends of the same continuum and as a result the three dimensions of burnout (exhaustion, cynicism and inefficacy) can be viewed as direct opposites of the three dimensions of engagement (energy, involvement and efficacy). The significance of this perspective is that engagement represents a desired goal designed to reduce burnout. Given this logic, Maslach and Leiter (1997) suggested that the three dimensions of Maslach Burnout Inventory (MBI) can be used to measure both burnout and engagement. Second, in counter argument to the ‘opposite ends’ perspective, Schaufeli et al. (2002) argue that although engagement is an opposite of burnout they are independent states and engagement is a distinct concept whose assessment requires a stand-alone assessment. Cole et al. (2012) findings suggested that although supporters of this perspective claim to have successfully articulated a theoretical distinction between burnout and engagement, conceptual considerations still cast doubts on this perspective. This is because its proponents still maintain the assertion that engagement is a positive antipode of burnout (Schaufeli et al. 2002) therefore suggesting that construct proliferation may be a problem insofar as burnout and engagement are concerned (Cole

et al. 2012). However, researchers using this approach are encouraged not to attempt to interpret results relating to burnout and engagement as distinct concepts (Cole et al. 2012). The ideas by Cole et al. (2012) suggest that Schaufeli et al. (2002) view that the two constructs are independent should therefore be reformulated and that Kahn (1990) perspective could be a more encompassing description of engagement that could offer the theoretical basis necessary to reconceptualise engagement as an independent construct from burnout. Kahn (1990) described engagement as the harnessing of employees' preferred self in terms of physical, cognitive and emotional energy to the work role, something which is not considered by burnout theory. According to Cole et al. (2012) this description of engagement may offer the theoretical basis necessary to reconceptualise engagement as a construct that does not overlap with burnout. However this approach has not been popular in engagement research, probably because Kahn (1990) study did not provide ways in which the construct can be measured.

Kahn (1990) compared engagement with disengagement and referred to disengagement as "the uncoupling of selves from one's work role; in disengagement people withdraw and defend themselves physically, cognitively or emotionally during role performances"(p.694). He noted that when people disengage, they withdraw and become passive in their roles. Disengaged employees psychologically distance themselves and withdraw from work with little thought to the job task, but being physically present to do the job. Kahn (1990) description of disengagement appear similar to that of burnout as defined by Maslach et al. (2001). An important distinction between burnout and engagement is that burnout relates specifically to high job demands without enough job resources to meet demands whereas engagement is

indicated by adequate job resources particularly when job demands are high. Although there is concern on the conceptual differences between burnout and engagement, Schaufeli et al. (2002) conceptualisation of engagement as distinct from burnout remains the most popular approach in the literature. This could be because Kahn (1990) approach has been mostly used in qualitative studies which are less popular in engagement research.

Contrary to the psychologists who are concerned with how the attitudinal construct of employee engagement could help explain individual performance outcomes, the management researchers are concerned with how engagement can influence organizational success (Harter et al., 2002). Consistent with their view, engagement is desirable for both the individual employee and the organization. For example, Harter et al. (2002) define engagement as “the individuals’ involvement and satisfaction with, as well as enthusiasm for work” (p.269). According to this definition engaged employees thrill to the challenge of their work every day and are psychologically committed to their work roles. Their definition added a dimension of the expectation of the individual’s satisfaction level to other definitions of engagement. This was the study of business units which linked engagement to profits. Czarnowsky (2008) defines engaged employees as employees who are mentally and emotionally invested in their work and in contributing to their employer’s success. Shuck and Wallard (2010) define engagement as “an individual employee’s cognitive emotional and behavioural state directed towards desired organizational outcomes” (p.103). Albretch (2010) defines employee engagement as “a positive work related psychological state characterized by a genuine willingness to contribute to organizational success”(p.5). These definitions suggest employees are cognitively and emotionally engaged when they know what is expected of them in their work roles and when they

have necessary resources to carry out their roles. Their definition put more emphasis on inputs of the organization than on the employees' state of mind. Common to these definitions is that employee engagement is crucial for organization success.

A review by Macey and Schneider (2008) proposed that employee engagement is a term which should be used at different times to refer to psychological traits, states and behaviours which are separate but related constructs. They indicate the concept suffers from lack of precision and it will be more useful if it is framed as a model that simultaneously embraces the psychological trait, state and behaviour it implies. Trait engagement is defined as the "inclination or orientation to experience the world from a particular vantage point" (p.5), and state engagement as "an antecedent to behavioural engagement which encompass satisfaction, involvement, commitment and empowerment" (p.5). Lastly they define behavioural engagement in terms of discretionary effort. What is central in their model is that the three psychological components are dependent on each other; the trait component suggesting engagement is found in individuals with a positive view of the world, the state component suggesting that due to their positive vantage point such employees are likely to have a state of mind encompassing satisfaction, involvement, commitment and empowerment in their work roles. This state of mind will then lead to behavioural engagement which will express itself in terms of organizational citizenship behaviour or discretionary effort in the organization. Dalal et al. (2008) suggest that what they call state engagement is probably better referred to simply as *engagement* with the recognition that engagement is likely to contain both trait like and state like components. Macey and Schneider's (2008) definition of engagement is inclusive of most of the earlier researched organizational behaviour constructs.

A definition of employee engagement put forward by Alfes et al. (2010) appears to be the best suited for exploring engagement in organizational contexts. They define engagement as “being positively present during the performance of work by willingly contributing intellectual effort, experiencing positive emotions and meaningful connections to others” (p.5). First, this definition taps in to the nature of engagement as a state by considering the cognitive component in the form of intellectual effort. This means employees need to be absorbed mentally in their work which is a state of mind. Secondly, its superiority lies in the fact that it further emphasizes meaningful connection to other employees which is remarkable since team work plays a crucial role in employee wellbeing (Torrente, Salanova, Llorens, & Schaufeli, 2012). In most organizations, performance is the result of the combined effort of individual employees in groups or teams in the form of departments or units. It is therefore important that connection to other employees is critical. When those teams work badly, they can prevent even the most engaged employee from realizing their potential. Therefore the extent to which one is socially connected with the working environment and shares common values with colleagues becomes imperative.

The definitions presented above do not constitute an exhaustive list but are representative of definitions found in the academic literature. One can conclude that employee engagement is a very slippery concept with no standard definition but a variety of similar opinions about what it is and what it could mean. Different researchers use the term in different ways resulting in a non-constructive communication about its understanding.

2.2 Distinction with similar constructs

Employee engagement has been criticized for being ‘*old wine in new bottles*’ (Jeung, 2011). This is because there are constructs in the literature similar to, or overlapping with engagement. Researchers have attempted to clarify the relationship between engagement and these related constructs and to indicate how the various constructs are distinct to it. Robinson et al. (2004) states that “engagement contains many of the elements of both organizational commitment and Organizational Citizenship Behaviour but is by no means a perfect match with either” (p.8). There are a number of constructs found to be similar to or overlapping with employee engagement in the literature. The identified constructs are job involvement, organizational commitment, job embeddedness, and organizational citizenship behaviour, workaholism and job satisfaction.

It is not very clear how the definition of engagement relates to definitions of these earlier researched organizational behaviour constructs causing a concern about its potential overlap with them. Essentially it can be argued that they are the same thing. However, if engagement has to be treated as a unique construct it must be ensured that it is indeed a unique concept independent of those well-established constructs (Saks, 2008). Hallberg and Schaufeli (2006) suggest “the introduction of new concepts should be accompanied by rigorous validation procedures to avoid redundancy issues with respect to already existing concepts” (p.119). They go on to recommend that new constructs should be tested to make sure they effectively capture the construct they are supposed to tap. There has been a considerable amount of work in this area. Macey and Schneider (2008) proposed a framework for understanding the various constructs that the engagement construct might include, coincide with or is contained within. They categorized engagement into three types- trait, state and behaviour engagement,

and argued that engagement as a psychological state includes job satisfaction, job involvement, commitment and empowerment. They went on to suggest that behavioural engagement incorporates organizational citizenship behaviour, personal initiative, role expansion and adaptive behaviour.

2.2.1 Organizational Commitment and Job Involvement

Organizational commitment refers to a person's attitude and attachment towards the organization, whereas engagement is not an attitude but a degree to which an employee is attentive and absorbed in their role performance (Robinson et al., 2004). Saks (2006) argues that commitment differs from engagement in that it refers to an attitude and attachment towards the organization while engagement is the degree to which the individual is attentive to their work and absorbed in their role performances. He further argues that job involvement is distinct from engagement as job involvement involves the result of cognitive judgment about the needs satisfying abilities of the job and tied to self-image and psychological identification (May et al., 2004) whereas engagement deals with how individual employees employ themselves in their job performances. Christian et al. (2011) singles out affective commitment and argues that engagement differs from it in two ways. First, affective commitment refers to an affective attachment to one's organization that results from shared values and interests (Meyer & Allen, 1997) whereas engagement represents perceptions that are based on the work itself (Maslach et al., 2001). Second, engagement is a broader construct in that it involves a holistic investment of the entire self in terms of cognitive, emotional and physical aspects of the employee whereas affective commitment represents only the emotional attachment. He agrees with Macey and Schneider (2008) who suggested that commitment might be an aspect of engagement but not sufficient for engagement.

Hallberg and Schaufeli (2006) agree that engagement, job involvement and organizational commitment are clearly different concepts, each with a specific focus. They suggest job involvement takes a motivational approach which includes the notion that work may satisfy needs and expectations and a job involved person is someone who finds their job motivating and challenging and is committed to both the job and the organization making them less inclined to leave. However, job involvement is not affected by role perception as engagement is. Christian et al. (2011) employs the Kanungo (1982) conceptualization of job engagement and suggests job involvement differs from engagement in two ways. First, since job involvement is a cognitive construct it might be considered a facet of engagement rather than equated with it. Second, job involvement refers to the degree to which the job situation is central to the individual's identity, hence it does not refer to work tasks specifically but also to other aspects of the job including satiation. Similar to Robinson et al. (2004) and Christian et al. (2011), Hallberg and Schaufeli (2006) state that organizational commitment refers to an emotional attachment employees' form with the organization based on shared values and interest as suggested by Meyer and Allen (1997) whereas engagement is concerned with the expression of the preferred self in work roles. They summarize that what is common to these constructs is that they all refer to positive attachment to work and would share some variance but not overlap. They suggest that engagement can be described as similar to *flow* which is defined by Csikszentmihalyi (1975) cited in Webster et al. (1993), as the holistic sensation that people feel when they act with total involvement. Individuals in *flow* are explained as being carried away and experiencing a sense of harmony in their work. It is a more acute state lasting for a much shorter period. Bakker (2011) distinguishes work *flow* from engagement in that work *flow* refers to peak experiences which may only last

one hour or even less whereas engagement refers to a longer performance episode which is more chronic, persistent and stable.

2.2.2 Workaholism

Bakker et al.(2008) proposed that work engagement is not the same as workaholism since workaholics spend a great deal of time in work activities and are reluctant to disengage from their work persistently and frequently thinking about it even when they are not at work. This suggests obsession with work. Workaholics' need to work endangers their health, reduces their happiness and deteriorates their interpersonal relations. Engaged employees on the other hand, work hard, are involved and feel happily engrossed in their work and lack the compulsive drive found in workaholics. For them work is fun and not an addiction. A qualitative study among 15 engaged workers by Schaufeli, Taris, Le Blanc, Peeters, Bakker and de Jonge (2001) supported this conclusion.

2.2.3 Job Satisfaction and Job Embeddedness

According to Fritzsche and Parrish (2005) job satisfaction is a construct which has been extensively studied and differs from engagement although they are related. Locke (1976) defines job satisfaction as a pleasurable and or positive emotional state that results from an appraisal of one's job and job experiences or from the perception that a job fulfils one's needs and important job values. The engagement construct however, is more focused on cognitive and affective states in role performances for long periods. Wefald and Downey (2009) state that the main difference is that engagement emphasizes the cognitive aspect of involvement with role tasks whereas satisfaction focuses on the affective. These constructs are distinct although there is some evidence for overlap in their definitions. Christian et al. (2011) suggest the two constructs have

fundamental differences in that engagement suggests enthusiasm, as opposed to satisfaction which is more similar to contentment. Further they suggest job satisfaction is an evaluative description of job characteristics whereas engagement is a description of an individual's experience resulting from the work. Job embeddedness and work engagement have been found to have some strong similarities. For example, both have their roots in the literature on how an individual is attached to their job. However, their empirical distinctiveness has been tested by Halbesleben and Wheeler (2008). They adopt Schaufeli et al. (2002) definition of engagement - "a positive, fulfilling, work related state of mind that is characterized by vigour, dedication and absorption" (p.74), and employ Yao, Lee, Mitchell, Burton and Sablinski's (2004) definition of embeddedness who define it as "the combined forces that keep a person from leaving his or her job" (p.159). Whereas work engagement is concerned with a positive fulfilling state of mind, embeddedness captures perceptions of person environment fit and the sacrifices involved in quitting. Although their study was limited to person environment fit, the sacrifice involved in quitting is also different from employee engagement but rather shows a similarity with continuance commitment mind-set found in Meyer and Allen (1991) three component typology of organizational commitment. Continuance commitment suggest that commitment is based on the perceived costs, both social and economic, of leaving the organization. After considering the role of resources in the development of engagement and embeddedness they observed that while engagement may change when job conditions change, embeddedness may change more slowly and will likely require more radical events to decrease it. This suggests that the two constructs have different antecedents and as such are expected to be independent of each other. Since engagement put emphasis on the work role its antecedents could be more specific to the nature of work whereas

embeddedness antecedents could be restricted to the organization. Research on the antecedents of employee engagement supports this claim. Saks (2006) divided employee engagement into job engagement and organizational engagement acknowledging there are two roles in an organization: the work role and organization role. The findings indicated there is a meaningful difference between the two without necessarily giving reference to the organizational engagement association with job embeddedness. Similar to Halbesleben and Wheeler (2008), Saks (2006) found out that job characteristics are a resource base of job engagement. Previous studies have shown that job resources are associated with engagement (Bakker & Demerouti, 2007). Christian et al. (2011) suggest that engagement is closely aligned with task specific motivation whereas other similar constructs are specific to certain aspects of their work. Engaged employees consider all aspects of work to be part of their domain. Employee engagement has been distinguished from these constructs in a sense but clearly some similarities have been observed, making it difficult to completely separate it from them. Despite these similarities these constructs fall short of capturing the engagement in its entirety. However, it has been revealed that the meanings of these constructs are captured in its meaning (Macey & Schneider 2008). Researchers have tried to solve this confusion by proposing that engagement is an all-inclusive construct that contains bits and pieces of other related constructs, each of which entails a different conceptualization. For example Macey and Schneider (2008) state “we see engagement not only as a set of constructs, but also a tightly integrated set, interrelated in known ways, comprising clearly identifiable constructs with relationships to a common outcome”(p.24). This is supported by Saks (2008) who states that engagement “is a little bit of this, a little bit of that, some of this and some of that” (p.40). Highlighting a lack of consistency in definition and meaning around the

construct of employee engagement, Zircami, Nimon, Houson, Witt, and Diehl (2009) suggested a new construct which they termed “*Employee Work Passion*” and suggested that it is inclusive of all aspects suggested to define engagement. In summary, there have been attempts to differentiate employee engagement from other related constructs and there is agreement that it is distinct from related constructs.

2.3 Conceptual Evolution and Development of Theory

A number of theories have been proposed to understand employee engagement. The literature covers a wide variety of such theories (Bailey et al. 2015). Five major employee engagement theories based on the definitions discussed above emerge repeatedly throughout the academic literature; Kahn’s (1990) needs satisfying approach; Maslach and Leiter’s (1997) burnout antithesis approach; Harter et al.’s (2002) satisfaction-engagement approach; Saks’ (2006) Social Exchange Theory and Bakker and Demerouti’s (2008) Job Demands Resource model of work engagement. This section will examine these theories together with empirical studies guiding its theory development.

2.3.1 Kahn (1990) Needs Satisfying Approach

In his qualitative study Kahn (1990) interviewed summer camp counsellors and organization members of an architecture firm about their moments of engagement and disengagement at work. Kahn (1990) suggested three psychological conditions associated with engagement at work are psychological meaningfulness, safety and availability. Psychological *meaningfulness* is when the workers feel the job is worthwhile and stimulating, *safety* is when the workers are feeling that the job environment has trust and support and *availability* is when workers are physically

available to do the job. Kahn (1990) found out that employees will employ and express their preferred selves in their task behaviours when these conditions are offered. In contrast Kahn defines personal disengagement as “the uncoupling of selves from work roles; in disengagement people withdraw and defend themselves physically, cognitively or emotionally during role performance ” (p.700). Kahn (1992) offered an expansion on his earlier work. He suggested that various work elements, social systems and individual distractions precede the psychological conditions needed for engagement. When people are psychologically present, they are attentive, connected, integrated and focused on their role performances (Kahn, 1992). This approach has been empirically tested by May et al. (2004). Using a sample of 203 employees from a large insurance firm they found out that engagement was positively correlated to meaningfulness ($r = 0.63$), availability ($r = 0.29$) and safety ($r = 0.45$). Among the three psychological conditions, psychological meaningfulness displayed the strongest relation to engagement. Otherwise this approach has not been used much in empirical research.

Building on Kahn’s (1990) work, May et al. (2004) explored the determinants of the psychological conditions suggested by Kahn (1990) by conducting a study in a US mid-western insurance company using a sample of 213 employees. Results from their study revealed all the three psychological conditions suggested by Kahn (1990) exhibited significant positive relations with engagement.

Soane et al. (2012) developed a model of engagement consisting of three requirements; work role focus (defined work role that provides a channel for engagement), activation (response to a stimuli which triggers cognitive responses) and positive affect (the experience of consciously accessible feelings) by conducting two studies. Their objective was to develop a new measure of employee engagement based on Kahn’s

(1990) conceptualization. They argued that employee engagement is a three dimensional construct made up of intellectual, social and affective dimension facets. In their first study, they collected data from 278 employees from a manufacturing organization in the UK. Their findings revealed the scale and its sub scales have internal reliability. Their second study examined data from 683 employees in a retail organization in the UK. The internal reliability and construct validity was also demonstrated. Their scale had a positive relation with two important organizational outcomes; task performance, organizational citizenship behaviour and a negative relation with turnover intentions.

The conditions required by each of these facets are focus, activation and positive affect. From the Human Resource Development perspective, all these are relevant in creating positive outcomes related to improvements in building and thinking about employees' personal resources (Soane et al., 2012). Their approach which divides engagement into three components, *Intellectual, Social and Affective* allows for a more specific identification and analysis of where the strengths and weaknesses lie in terms of levels of employee engagement in an organizational context. Research into these individual components may show different antecedents and consequences and support the development of effective interventions which will encompass more specific areas that needs attention.

Almost all studies on work engagement credit Kahn (1990) as the father of work engagement. However, there appears to be different interpretations to his work. Saks (2006) points out that although Kahn indicates the psychological conditions, he does not fully explain why individuals will respond to these conditions with varying degrees of engagement. He argues that in terms of Kahn's definition employees feel obliged to bring themselves more deeply into their role performance as repayment for the

resources they receive from their organization and when organizations fail to provide these resources employees may withdraw and disengage themselves from their roles. Thus the amount of engagement an individual is prepared to devote in one's role is dependent on the economic and socio-emotional resources received from the organization. This inclusion of resources in Kahn's perspective of engagement is supported by Halbesleben and Wheeler (2008) who found out that change in job characteristics (demands and resources) may lead to change in engagement.

Schaufeli (2012) observed that Kahn's conceptualization of engagement made key reference to the work role. However, in business contexts reference is not only made to the work role but the organization as a whole. This observation was also made by Macey and Schneider (2008) who offered a broad description of engagement. They describe engagement as "a desirable condition that has an organizational purpose" (p.4). Rich et al. (2010) argue that although engagement involves physical, cognitive and emotional presence in one's role, it maintains these involvements simultaneously rather than in a fragmented manner. They observed that Kahn did not explicitly outline a relationship between engagement and job performance but they have strong theoretical reasons to believe such link exists as research has linked the two. Kahn's (1990) conceptualization of engagement was constructed based on qualitative study and it assessed the conditions under which employees are likely to be engaged but not engagement as a psychological construct. He however, mentioned that engagement has two critical components, attention and absorption in a role. Attention refers to being engrossed in a role whereas absorption implies intrinsic motivation in a role (Kahn, 1990, 1992). Kahn's approach mainly focused on conditions needed for the status of engagement to occur and suggested two critical components of engagement. However, his approach did not suggest how engagement can be assessed. Assessing

engagement involves assessing complex feelings and emotions which are dynamic in nature and Kahn's work did not suggest any measures. Although interpreted differently, Kahn's work has been the theoretical foundation for the conceptualization of employee engagement. However, it has occasionally been used in empirical research.

2.3.2 Maslach and Leiter (1997) Burnout Antithesis Approach

An alternative model of engagement comes from the burnout research which defines engagement as an antithesis of burnout. This approach, rooted in occupational health psychology conceptualizes people's relationship to their jobs as a continuum between negative experiences of burnout and positive experiences of engagement (Maslach & Leiter, 1997). This means employees who experience high levels of engagement are characterized by low burnout level. Maslach and Leiter (1997) put forward the idea that engagement is characterized by energy, involvement and efficacy which are considered the direct opposites of the three burnout dimensions, exhaustion, cynicism and inefficacy. Exhaustion is the central explanation to burnout because when people describe themselves as experiencing burnout they are referring to the experience of exhaustion making it the most widely reported and analysed aspect of burnout. Maslach and Leiter (2008) describe it as "feelings of being overextended and depleted of one's emotional and physical resources" (p.498). Research on burnout and engagement found out the core dimensions of burnout (exhaustion, cynicism, and inefficacy) and engagement (vigour, dedication and absorption) are opposites of each other (Gonzalez-Roma, Schaufeli, Bakker and Lloret, 2006).

According to Maslach and Leiter (2008), exhaustion prompts action to distance oneself emotionally and cognitively from work as a way of coping with work overload,

cynicism represents a detached response to various parts of one's job and inefficacy represents the self-evaluation dimension and refers to a feeling of incompetence and lack of achievement and productivity in work.

Maslach et al. (2001) noted over the years the focus on psychology has been on negative states rather than positive states. However, recently more attention is paid to the study of human strength and optimal functioning which is seen as an alternative to the predominant focus on negative states hence the study on engagement (Maslach et al., 2001). They argue that if engagement is the opposite of burnout, then engagement scores can be based on the burnout scores (MBI) and should have a good match with the six areas of work life. Schaufeli et al. (2002) challenged the burnout antithesis approach and considered engagement and burnout as two independent, interrelated constructs. They argue that engagement has to be defined and operationalized in its own right. They suggested that even though engagement is conceptualised as the opposite of burnout, it should not be assumed that it can be assessed by the opposite profile of the MBI scores. Their definition identified three dimensions of engagement: *vigour*, *dedication* and *absorption*. They shared a similar view with Kahn (1990) that engagement is a momentary state but further argued that it is "a more persistent and pervasive affective-cognitive state" (p.74). This conceptualization of engagement by Schaufeli et al. (2002) has been widely used to explore the construct in psychology and management research and a scale to measure engagement was derived from their definition.

Saks (2006) argues that this approach, like Kahn's (1990) approach does not fully explain why individuals will respond to the psychological conditions necessary for engagement with varying degrees. Schaufeli (2012) notes the key reference of engagement in this approach is the employees work activity (the work itself).

However, in business contexts the reference is not only the work role but also the organization. Shuck and Wollard (2010) notes that Maslach and Leiter (1997) was the first major work on employee engagement after Kahn (1990) and therefore one of the early developmental theories on employee engagement.

2.3.3 Harter et al. (2002) Satisfaction-Engagement Approach

Harter et al. (2002), Gallup researchers published the earliest portion of practitioner literature on engagement. Shuck and Wollard (2010) claim these researchers were the first to look at employee engagement at the business unit level. They linked higher levels of employee engagement to increased business unit performance, that is; customer satisfaction, loyalty, profitability, productivity, employee turnover and safety. Their findings suggested that engagement is “related to meaningful business outcomes at a magnitude that is important to all organizations” (p.276). Simpson (2009) observes that while there is agreement with Kahn’s (1990) definition, Harter et al.(2002) refer to engagement as occurring when individuals are emotionally connected to others and cognitively vigilant. They also brought in the organizational culture dimension to employee engagement by showing that organizational culture should be measured at the individual level by looking at separate business units, separate unit managers and separate unit employees. They claimed employee engagement develops at one micro culture at a time.

In accordance with Harter et al. (2002), four antecedents elements are deemed necessary for engagement to occur; clarity of expectations, basic materials and equipment being provided, feelings of contributions to the organization, feeling a sense of belonging to something beyond oneself and lastly feelings of opportunity to grow and progress. Their conceptualization focus on these antecedents and their instrument,

popularly known as the Gallup Workforce Audit (GWA) is made of 12 items that measure employees' perceptions of work characteristics. This measurement tool has been one of the popular engagement measures, especially in the consulting industry. The reliability and validity of these 12 items have been examined in multinational contexts with large numbers of samples (Jeung, 2011). However, it has been criticized as some researchers believe it measures the pre-conditions of engagement rather than engagement itself (Shuck, 2011). There is however some agreement that the items are well reflected in Kahn's (1990) three psychological conditions of meaningfulness, safety and availability (Avery, MacKay & Wilson, 2007). Luthans and Peterson (2002) assessed the conceptual fit of Gallup's engagement measure by comparing it with Kahn's (1990) dimensions and their findings suggested a conceptual fit with Kahn's personal engagement theory establishing the need for further understanding of employee engagement and how to operationalize it with the GWA instrument. Because Harter et al.'s (2002) work was the first to suggest a link between engagement and profit, it became a catalyst for the explosion of interest in employee engagement especially in consulting literature. However, there has been empirical support for this approach in the academic literature (Arakawa & Greenberg, 2007, Heger, 2007).

2.3.4 Saks (2006) Social Exchange Theory (SET) Approach

Saks (2006) is credited as the first study to comprehensively examine the antecedents and consequences of employee engagement. He used the SET to explain the mechanism of engagement in the workplace. His conceptualization integrated both Kahn's (1990) and Maslach et al.'s (2001) perspectives. He argues one way for employees to repay their organization is through their levels of engagement. That is, employees will choose to engage themselves in response to the resources and benefits they receive from their organization. A major concern to Saks is that although the Kahn

(1990) and Maslach et al. (2001) models indicate the psychological conditions necessary for engagement they do not fully explain why employees will respond to these conditions with varying degrees of engagement. He suggested that the SET can be used to explain this deficiency.

The SET is one of the most influential conceptual theories in organizational behaviour and it argues that obligations are generated through a series of interactions between parties who are in a state of reciprocal interdependence. A basic principle of this theory is that relationships evolve over time into trusting, loyal and mutual commitments. Cropanzano and Mitchell (2005) state that “to do so, parties must abide by certain *“rules”* of exchange” (p.875). These rules of exchange usually involve reciprocity or repayment rules so that the action of one party leads to a response from by the other. For example, when individuals receive economic and socio-economical resources from their organization they feel obliged to respond in kind and repay the organization and one way is through their engagement levels (Cropanzano & Mitchell, 2005). That is, employees will engage themselves to varying degrees in response to the resources they receive from the organization (Saks, 2006). Saks suggests the SET provides a theoretical foundation to explain why employees choose to become engaged in their work and organization. He further suggests the conditions of Kahn (1990) and Maslach et al. (2001) can be considered as economic and socio emotional exchange resources, and when the organization fails to provide these resources employees are more likely to withdraw and disengage themselves from their roles. According to Saks, the amount of cognitive emotional and physical engagement an employee is prepared to devote is dependent on economic and socio-emotional resources received from the organization. Saks (2006) conducted a study to test a model of antecedents and consequences of engagement based on SET. He separated engagement into job and organizational

engagement. His findings indicated that there is a difference between job and organizational engagement and that job characteristics predict both job and organizational engagement. Saks (2006) view maps on to Kahn (1990) and Harter et al.'s (2002) conceptualization since he suggested that job characteristics fulfilled Kahn's condition of psychological meaningfulness whereas perceived organizational and supervisor support fulfilled the psychological safety condition. This stems from the amount of care and support employees' perceive to be provided by their organization as well as their direct supervisor. Procedural and distributive justice map on to Maslach et al.'s (2001) antecedents since a lack of fairness and justice can cause burnout. Saks (2006) work remains influential as it is used as a framework for emerging employee engagement models in the literature such as the framework of Bakker and Demerouti (2008), *'Towards the overall model of engagement.'* However, this approach as observed by Schaufeli (2014) has hardly been taken up by the research community.

These approaches each emphasize a different aspect of engagement. Kahn (1990) emphasizes the relationship between engagement and role performance, Maslach and Leiter's (1997) burnout antithesis approach emphasizes employee engagement positive nature in terms of employee wellbeing as opposed to burnout, Harter et al. (2002) links engagement with business unit outcomes such as customer satisfaction, profit, productivity and turnover and Saks (2006) highlights employee engagement relation with the job and organization. Kahn's (1990) and Schaufeli et al.'s (2002) approaches have been widely used in employee engagement research in various countries. Both frameworks conceptualize engagement as a three dimensional construct.

2.3.5 Bakker and Demerouti (2008) Job Demands - Resource model of work engagement.

Building on Schaufeli and Bakker (2004) and drawing from the job demands resource model, Bakker and Demerouti (2008) provided evidence regarding the antecedents and consequences of employee engagement and organized them in an overall model of work engagement. The model assumes the following: first, job resources start a motivational process which leads to work engagement and consequently higher performance; second, job resources become more salient and gain their motivational potential when employees are confronted with high job demands (Bakker & Demerouti, 2008). They further drew from Xanthopoulou et al. (2007) who expanded the JD-R model by showing that job and personal resources are mutually related. Their model assumed job and personal resources, independently or combined, predict work engagement and have a positive impact on work engagement when demands are high. Work engagement in turn will have a positive impact on job performance. They used insights from the conservation of resources (COR) theory which assumes that resources tend to generate other resources (Hobfoll, 2002) and expected engaged employees would be able to create their own personal resources which would then foster engagement.

2.3.5.1 Background of the JD-R model

Bakker and Demerouti (2007) argue that the two employee wellbeing predictive models, Demand Control Model (DCM) and Effort Reward Imbalance (ERI) model restrict themselves to a limited set of predictor variables and therefore reduce complex reality of organizations to a few variables making it too simple. As a result, they came up with the JD-R model which incorporates many possible working conditions and focuses on both negative and positive indicators of wellbeing thus acknowledging a wider range of job characteristics. The first assumption of this model is that

characteristics of work environments can be classified into two general categories, job demands and job resources. These categories incorporate different specific demands and resources depending on the context under study. A discussion of each follows.

2.3.5.2 Job Demands

Job demands are those physical, social or organizational aspects of the job that require sustained physical and/or psychological effort and are associated with certain physiological and/or psychological costs. Examples are high work pressure, an unfavourable physical environment and emotionally demanding interactions with clients. The literature suggests there are two types of job demands; hindrances and challenges (Bakker & Sanz-Vergel, 2013; Lepine, Podsakoff & Lepine, 2005). Hindrances are defined as stressful demands that can impede personal growth, learning and goal attainment such as role conflict, role ambiguity and role overload. These are expected to be negatively related to engagement. Challenges on the other hand are stressful demands that can promote mastery, personal growth or future plans such as high workload, time pressure and elevated levels of responsibility and are expected to be positively related to engagement. Exposure to both types of demands make people feel tired but not necessarily stressed (Barker & Sanz-Vergel, 2013). The classification of demands as challenges and hindrances may not always be as straight forward as suggested and may be dependent on specific job demand and occupational sector. For example work pressure may be interpreted as a challenge in journalism because of tight deadlines but a hindrance in home nursing because of lack of time to provide patients with the care they really need (Barker & Sanz-Vergel, 2013). This means there is some ambiguity regarding the categorization of job demands into challenge versus hindrance demands. Crawford, Lepine and Rich's (2010) meta-analysis suggested that the relationship between engagement and job demands depends on whether the

demand is a challenge or a hindrance. Job demands can further be grouped into quantitative and qualitative job demands with quantitative job demands including those like time pressure and qualitative including emotional demands such as WHI, and role ambiguity (De Braine & Roodt, 2011). Bailey et al. (2015) review found out that results of studies examining the relationship between engagement and job demands are inconclusive with some studies finding a positive association between engagement and demands (DeBraine & Roodt, 2011), others no association (Gan & Gan, 2013) and others observing a curve linear relationship (Sawang, 2012).

2.3.5.3 Job Resources

Job resources constitute a general category of job characteristics which incorporate various specific resources. These resources are defined as physical, social or organizational aspects of the job that may (a) reduce job demands and the associated physiological and psychological costs; (b) be functional in achieving work goals; or (c) stimulate personal growth, learning, and development (Schaufeli & Bakker, 2004). Job resources are expected to play either an intrinsic or extrinsic motivational role because they are instrumental in achieving work goals. Examples of job resources that play an intrinsic motivation role are resources that fulfil basic human needs such as the need for autonomy (Deci & Ryan, 1985). With regards to extrinsic motivation, resourceful work environments where there is support from supervisors and colleagues will be instrumental in increasing success in achievements of work goals. Consistent with the motivational role of job resources, evidence has shown a positive relationship between job resources and employee engagement. Job resources have been mentioned as possible antecedents to engagement and focusing on them could enhance the development of an engaged workforce (Saks 2006). Wollard and Shuck's (2011)

structured review identified 42 employee engagement antecedents, and grouped them in two categorical domains, individual and organizational. The JD-R framework has been extensively used in examining the association between job resources and employee engagement. Studies using this framework usually combine heterogeneous job resources into one category resulting in a broad conceptualization of resources (Hu et al., 2014). This combination of resources raises questions about independent effects and several scholars have discussed the importance of distinguishing between the different resource bases in organizations. For example it has been argued that organizational and social resources are theoretically and conceptually distinct (Weighl Hornung, Parker, Petru, Glasser & Angerer, 2010).

The second assumption of the model is the (un)availability of resources evokes two psychological processes: health impairment and motivational process. Job characteristics associated with health impairment process include among others, poorly designed job and chronic job demands. It is expected that resources (intrinsic and extrinsic) will cause the motivational process. This model proposes the interaction between job demands and job resources is important for the development of job strain and motivation. Burnout and engagement have been identified as the two psychological states that play a key role in the health impairment process and motivation process respectively (Llorens, Bakker, Schaufeli & Salanova, 2006).

The JD-R model gained popularity in organizational studies since its emergence and has dominated employee engagement research in complex organizational set up. Schaufeli (2014) noted it has so far received most empirical support explaining the psychological mechanisms involved in engagement. Bailey et al. (2015) discovered that 38% of studies explained engagement in the context of the JD-R model and a majority of the studies used the UWES measure. In general, studies using this model

examine links between job characteristics and work outcomes via employee engagement. Although extensively used the JD-R model is not without limitations. Saks and Guruman (2014) argue that although job demands and job resources are important for employees to engage themselves in their work roles, they are relatively narrow and limited to understanding engagement. The JD-R model therefore fails to include all relevant predictors of engagement (Crawford et al., 2010). Bargagliotti (2012) points out that the JD-R is a transactional model that cannot be used to explain behaviour and motivation in complex situations such as medical services because it relegates the dedication of nurses to being a transactional commodity that is as a result of someone dispensing resources. Therefore its operation as a linear model fails to account for other contextual factors such as emotional responses. It also fails to address issues of power and politics in the work place (Fineman, 2006). Despite these limitations the JD-R model strength lies in its ability to interpret processes that enable us to understand employee engagement and could lead to desired organizational behaviours.

or consequences of employee engagement. (Bakker, 2011; Kahn 1990; Koyuncu, Burke & Fiksenbaum, 2006; Maslach et al., 2001; Macey & Schneider, 2008; May et al., 2004; Rich et al., 2010; Saks, 2006). A majority of these studies are cross sectional in nature therefore no causal inferences can be made. Kahn (1990) suggests three psychological conditions associated with engagement and disengagement at work: meaningfulness, safety and availability. He purports that workers will be more engaged in work situations which offer them these conditions. May et al. (2004) revealed these conditions were significantly related to work engagement. Their study indicated that job enrichment and job fit positively predicted psychological meaningfulness, supportive supervisor predicted psychological safety and that availability of resources predicted psychological availability. Maslach et al. (2001) identified the six areas of work life as possible antecedents to work engagement. The six areas of work life are workload, control, rewards and recognition, community and social support, perceived fairness, and values. In line with their reasoning, work engagement is expected to influence the link between these areas of work life and desirable work outcomes. Saks (2006) argued that although Kahn (1990) and Maslach et al. (2001) identify possible antecedent variables to work engagement they do not fully explain why individuals will respond to these conditions in varying degrees. He suggested that the Social Exchange Theory provides a theoretical foundation to explain this. Drawing from Kahn (1990) and Maslach et al. (2001) Saks suggested a model of the antecedents and consequences of engagement with six antecedents of employee engagement. Saks (2006) identified skill variety, task identity, task significance, autonomy and feedback as job characteristics which will have a bearing on the psychological meaningfulness condition of engagement suggested by Kahn (1990). Saks' (2006) findings indicated there is a meaningful difference between job and

organizational engagement that perceived organizational support predicted both job and that organization engagement and procedural justice predicted organizational engagement whereas job characteristics predicted job engagement. In his review, Bakker (2011) found out that job and personal resources are the main predictors of work engagement and that resources gain their salience (importance) in the context of high job demands. Using the Job Demands Resource model Mauno et al. (2007) conducted a two-year longitudinal survey to investigate job demands and job resources as potential antecedents of work engagement among Finnish health personnel. Their findings revealed that job resources, in particular job control and self-esteem predicted work engagement more than job demands. They observed demographic and work related factors showed significant effects which varied according to the work engagement dimensions. For example, women felt more absorption and vigour than men, whereas the presence of dependents at home increased both vigour and dedication at work. Their findings suggested that temporary employees showed higher dedication at work than their permanent counterparts. Macey and Schneider (2008) suggested both state and behavioural engagement are dependent on personal attributes and the conditions under which the employees work. They identified four personal attributes: positive affect, proactive personality, conscientiousness and autotelic personality as antecedents of trait engagement. They suggested that antecedents of state engagement are satisfaction, involvement, commitment and empowerment and the ones for behavioural engagement are organizational citizenship behaviour, proactive initiative, role expansion and adaptive behaviour. Macey and Schneider (2008) argued that central to the network of these antecedents is trust as employees will invest their energy trusting that they will be rewarded in a meaningful way. They further went on to suggest organizational conditions that might enhance engagement

as job design and leadership style. Rich et al. (2010) suggested value congruence, perceived organizational support and core self-evaluation as the antecedents of job engagement. Wollard and Shuck (2011) review grouped the antecedents by application in two categorical domains, the individual and organizational level. Individual antecedents were defined as constructs, strategies, and conditions that were applied directly to or by individual employees and that were believed to be foundational to the development of employee engagement. Organizational-level antecedents were defined as constructs, strategies, and conditions that were applied across an organization as foundational to the development of employee engagement. They further developed a conceptual model of relationships between antecedents and employee engagement as identified in the literature, showing those with empirical evidence and those who are conceptually driven and those that have not been empirically tested. Their findings suggested that antecedents are not dependent on processes, but rather functions that help the conditions for the state of engagement to develop. Different organizations will come to create an employee engagement culture in different ways, using different strategies and methods that are unique to their organization.

Alongside antecedents, the outcomes or consequences of employee engagement have also been explored, although not much research has been done in this area (Harter et al., 2002; Mauno et al. 2007; Saks, 2006). Harter et al. (2002) found out that employee engagement was associated with a range of business outcomes, such as higher levels of performance, customer satisfaction, loyalty and low levels of staff turnover. Saks (2006) suggested that although Kahn (1990) and Maslach (2001) did not include consequences of engagement in their studies, there are a number of reasons to expect engagement to be related to work outcomes since there is empirical evidence linking the two. Saks (2006) findings indicated that employee engagement mediated the

relationship between the antecedent variables and organizational outcomes such as job satisfaction, organizational commitment, intention to quit and organizational citizenship behaviour. Employee engagement has also been linked to initiative and motivation (Sonnentag, 2003) and to organizational citizenship behaviour (Salanova, Agut, & Peiro, 2005). Schaufeli et al. (2002) revealed engagement is associated with positive attitudes towards work and towards the organisation, job satisfaction, organisational commitment and low turnover intention. Salanova et al. (2005) found engagement was related to performance and another study found out engagement was positively related to academic achievement for university students across three countries (Schaufeli et al., 2002). Since these studies were not longitudinal, no causal inferences could be made.

2.5 Engagement as a Mediator Variable.

Evidence suggests that employee engagement mediates the relationship between antecedent variables and outcome variables (Saks, 2006; Bakker & Demerouti, 2008; Shuck et al., 2011). Saks (2006) revealed job and organizational engagement mediated the relationship between the antecedents and consequences of employee engagement. Bakker and Demerouti's (2008) model of engagement further suggests that work engagement mediates the relationship between job resources and organizational performance. Resources gain their salience in the context of high job demands. However, resources are not only necessary to deal with high job demands but they are also important in their own right. In a study investigating the role of engagement in work related outcomes, Ram and Prabhakar (2011) found out that employee engagement mediates the relationship between job characteristics, rewards, justice, supervisor support on the one hand and job satisfaction, job involvement and organizational citizenship behaviour on the other. Biswas and Bhatnagar (2013)

assessed the mediating role of employee engagement between perceived organizational support and person organization fit as the antecedents and organizational commitment and job satisfaction as the consequences by using data from six Indian organizations and a sample of 246 Indian managers. Their findings suggested the antecedents had a direct effect on employee engagement leading to variance in organizational commitment and job satisfaction.

The literature indicates employee engagement has been used as an independent variable (Salanova et al., 2005), dependent variable (Schaufeli & Bakker, 2004), and mediator variable (Bakker & Demerouti, 2008; Saks, 2006; Salanova & Schaufeli, 2008).

2.6 Demographic Variables and Employee Engagement

Several demographic variables; gender, age, tenure and ethnicity have been studied in relation to employee engagement. The findings on how these variables relate to employee engagement are not consistent (Maslach & Leiter, 2008). This section will examine the role of gender, age, ethnicity, and workplace location in relation to the development of employee engagement.

2.6.1 Gender

Research findings on gender and employee engagement vary. Banihani, Lewis, and Syed's (2013) review paper proposed a conceptual framework to develop and explain the notion of gendered work engagement. Their findings revealed that work engagement is a gendered concept as it is easier for men to demonstrate work engagement than for women. This is supported by Avery et al. (2007) who suggested that women are at a higher risk of developing stress due to competing work and home responsibilities and report higher levels of burnout which suggests lower levels of

engagement. On the contrary, Yildirim (2008) in his study of Turkish counsellors reported that levels of engagement did not differ significantly between males and females. While results vary, researchers suggest females report higher levels of burnout implying they may report lower levels of engagement and findings on the relation remain inconclusive.

2.6.2 Age

Avery et al. (2007) explored the relationship between age, tenure, perceived co-worker age, job satisfaction with co-workers and employee engagement in the UK. Their findings indicated that employee engagement was negatively related to tenure and age but had a positive relationship with age and job satisfaction. Contrary to the perception that older workers are just marking time until they can retire and might be less engaged, Robinson et al. (2004) found that while engagement generally decreased with age, this pattern reversed at age 60, with over 60's workers reporting the highest levels of engagement. This might be because compared to younger workers, older workers are more loyal to the organization and also appreciate job security (D'Amato & Herzfeld, 2008). James, McKechnie, and Swanberg (2011) suggest that more important is the question of which job conditions are associated with greater engagement on their part. In their study in which they surveyed workers from age 18 to 65, they found out that factors which predict engagement did not differ by age group with exception to career development and promotion, which appeared less important to the retirement eligible age group.

2.6.3 Ethnicity

Using a sample of 2014 employees, Jones, and Harter (2005) explored the relationship between ethnicity and employee engagement and their results indicated that employees who reported higher levels of engagement were cross raced employees compared to same race employees, suggesting that one's race could be an influential factor in engagement levels. Goliath -Yard and Roodt (2011) assessed the differential item functioning of the UWES – 17 for different South African cultural groups in a South African company. They found statistically significant differences between cultural groups on the overall scale level and item level between the white group and most other groups on most of the items. They suggest most of the differences relate to language issues with regards to poor understanding of the UWES-17 and recommended that if organizations are to use the UWES in a South African context, the wording of the respective items needs to be carefully revised.

2.6.4 Workplace Location

The relationship between workplace location and employee engagement have been explored and there have been suggestions that employee engagement levels tend to be lower for employees working in rural areas (Sprang, Clark, & Whitt-Woosley, 2007). It has been suggested this might be due to professional loneliness lack of resources and challenges with transportation.

In conclusion, it is difficult to establish the relationship of employee engagement between variables such as age, tenure, and sex and occupation type due to limited research evidence (Maslach & Leiter, 2008). Few empirical studies have established the relation between demographic variables and employee engagement as shown

above. This study will examine the interplay between selected demographic variables on employee engagement thus adding to the discussion.

2.7 Chapter Summary

This chapter has provided a comprehensive review of the literature on employee engagement in terms of how it is defined, its distinction from related constructs, its conceptual evolution and model development and a discussion on its antecedents and consequences. It is clear from the literature that employee engagement research has been conducted mainly in the United States and Europe where the two most dominant engagement theories were developed. This, according to Rothmann (2014) might result in an understanding that is incomplete and does not adequately represent humanity. Understanding employee engagement in different cultural settings would therefore allow researchers and practitioners to investigate how the construct might be cultivated in a wide variety of settings and add to its theoretical development. This chapter has identified the main theoretical frameworks used to explain engagement in the academic literature. A number of antecedent and outcome variables together with selected demographic variables related to engagement were discussed. The next chapter will provide a discussion on the study variables and suggest a conceptual framework for the study.

Chapter 3 Hypotheses Building and Model Development

3.1 Introduction

Based on the research questions and drawing from the related literature, this chapter will develop the hypotheses and develop the research model. The chapter will present how the research began with a model developed in earlier studies in its original form (JD-R) model. This will be followed by demonstrating how the model was adjusted to reflect and acknowledge the contextual difference between the environments where the model was originally applied to where it will be applied for this study.

A number of employee engagement theories have been suggested in the literature as discussed in chapter 2. Since its emergence the JD-R model has gained popularity in exploring employee engagement in organizations. Specifically, the model proposes that employee engagement is related to work place characteristics that can be categorized as either job demands or job resources. Lepine et al. (2005) suggest that job demands can be categorized into two types (challenges and hindrances) and a distinction between the two can be made. Studies using the JD-R model examine links between job characteristics and positive organizational outcome via employee engagement. A wide range of job resources have been examined and a positive association with employee engagement has been observed (Bailey et al., 2015). A majority of these studies categorize resources into either job or personal resources. A discussion of the demands, resources, and outcome variables adopted for this study follow. The next section will provide a discussion on the study variables followed by the JD-R research model (Bakker & Demerouti, 2008) which was initially adopted for this study.

3.2 Job Resources

This study distinguished between two kinds of resources; job and social resources. Hu et al. (2014) mentioned that although the JD-R model treats job demands and job resources as unitary concepts, a distinction has been made between two types of job demands (hindrances and challenges) (Lepine et al., 2005). They argue that job resources can be distinguished in the same manner and they distinguished between social resources and job resources. Based on their reasoning this study distinguished between job resources - work context resources provided by the organization (job autonomy and distributive justice) and social resources - work related interpersonal interaction (supervisor support and colleague support). A discussion of the selected variables and why they were selected for this study follows.

Distributive Justice (DJ) and Job Autonomy (JA)

Organizational justice has been defined as the study of fairness at work (Bryne & Coparanzalo, 2001). Greenberg (1990) explains that organizational justice implies that fairness is being considered in the organization. There are two main types of organizational justice in the literature: procedural and distributive. Distributive justice deals with the perceived fairness of the outcomes or allocations that individuals in organizations receive whereas procedural justice deals with the fairness of the procedures used to decide outcomes and addresses fairness issues regarding the methods, mechanisms, and processes used to determine those outcomes (Folger & Cropanzano, 1998). Distributive justice is generally constructed in terms of equity and equality (Nowakowski & Conlon, 2005). That is, people determine fairness by evaluating their inputs relative to the rewards they receive. They then compare this to

a set standard to determine whether the rewards they have received for their contributions and efforts are fair. Procedural justice was later introduced to complement distributive justice. Nowakowski and Conlon (2005) state that much of the work on procedural justice was not within the context of organizations but rather the contexts of legal procedures. If distributive justice is considered to be a product of fair decision processes through procedural justice then employees are likely not to doubt procedural justice resulting in less legal procedures. According to Kahn (1990), justice perceptions enhance psychological safety by increasing equity and minimizing concerns over the distribution of resources and authority. Empirically studies have supported the positive relationship between justice and engagement. For example, Gosh, Rai and Sinha (2014) explored whether perceptions of distributive, procedural and interactional justice are related to employee engagement using Saks's (2006) model. Their results showed that distributive and interactional justice take precedence over procedural justice in determining job engagement. Scholars have examined employee engagement and justice perceptions and a positive relationship between them has been established (He, Zhu & Zheng, 2014; Inoue, Kawakami, Ishizaki, Shimazu, Tsuchiya, Tabata, Akiyama, Kitazume & Kuroda, 2010; Malinen, Wright & Cammock, 2013; Robinson et al., 2004; Saks, 2006). Additionally, findings have shown that there are differences in how justice judgments are made in Western and non-Western cultural settings (Morris, Leung, Ames & Lickel 1999). For example, in Eastern Asian cultures justice judgments are influenced by a common heritage of Confucian values (Morris et al. 1999). Whereas Western culture distinguish the goal of harmony from that of productivity, the description of non-Western culture of groups suggests that harmony is central to productivity (Hsu, 1971 cited in Morris et al. 1999). This suggests that employees in collectivistic cultures justice judgments are likely to

be influenced by interpersonal harmony as such more willing to tolerate or accept decisions without questioning the process.

Job autonomy refers to the degree of discretion employees have over important decisions in their work, such as the timing and methods they use to carry out their tasks (Parker, Axtell & Turner, 2001). The provision of job autonomy is an indicator of the organization's trust in employees to make good judgments as to how they will carry out their job. Autonomy increases the meaning of work because it provides a sense of ownership and control over work outcomes (Kahn 1990). According to Crawford, Rich, Buckman and Bergeron (2014) this is consistent with Ryan and Deci (2000) self-determination theory that the satisfaction of a universal basic human need for autonomy motivates employees to be engaged. Empirical findings provide support that job autonomy is positively related to employee engagement. For example, job autonomy was found to have a negative relationship with burnout (Adebayo & Ezeanya, 2010). Since burnout and engagement are regarded as opposites, this suggests a positive relationship between autonomy and engagement. Christian et al. (2011) meta-analytic finding based on 43 studies found out a positive relationship between job autonomy and employee engagement. Based on the theoretical and empirical evidence discussed above, it can be hypothesized that;

Hypothesis1 (a): Distributive justice and job autonomy will be positively related to employee engagement.

3.3 Personal Resources

Personal resources are defined as positive self-evaluations that are linked to resiliency and refer to individuals' sense of ability to successfully control and have impact on their environment (Hobfoll, Johnson, Ennis, & Jackson, 2003). Xanthopoulou et al. (2007) expanded the JD-R model by examining how personal resources operate in relation to the model's processes. Studies have revealed that personal resources have a positive effect on wellbeing (Pierce, Gardener, Cummings & Dunham, 1989). Xanthopoulou, Bakker, Demerouti and Schaufeli (2009) argued that personal resources function in a similar manner as job resources. Employees high in personal resources are more likely to invest energy in order to meet their goals (Luthans & Youssef, 2007). This study examines two types of personal resources (OBSE and GSE), which were established to be important for engagement (Xanthopoulou et al., 2009). The study proposes that personal resources will be positively related with employee engagement and will interact with job demands and boost employee engagement particularly when the demands are high.

Organizational based self-esteem (OBSE) and generalized self-efficacy (GSE)

Gardener and Pierce (1998) define organizational based self-esteem as "the degree to which people perceive themselves to be capable, significant and worthy" (p.41). Due to its importance in human resource management, studies have examined the relationship between self-esteem and several variables, for example, work behaviour (Brockner & Hess, 1987). Research evidence suggests that employees who have a high organizational based self-esteem have greater work motivation and high performance (Pierce et al., 1989). Organizational based self-esteem enhances engagement because it

increases employees' certainty regarding their desire to be part of the organization system and contribute to its end goals (Kahn, 1990). Empirical studies examining employee engagement and OBSE have found a positive relationship between them (Mauno et al., 2007; Xanthopoulou et al., 2007). Elloy and Patil (2012) examined the OBSE relationship with the three dimensions of burnout and found out a negative relationship between them. They concluded that employees who experience reduced personal accomplishment feel emotionally spent and detached from others, will consequently have a negative evaluation of his or her self-worth and self-image within the organization context.

Self-efficacy has been explained as one's belief in one's capability to perform a *task*. Self-efficacy has been explored in relation to a number of HR variables including, selection and recruitment, training, leadership, equal opportunities and performance appraisals (Gardener & Pierce, 1998). Generalized self-efficacy refers to a generalized trait consisting of one's overall estimate of one's ability to effect requisite performances in achievement situations. It consists of trait-like characteristics which are not tied to specific situations or behaviour but generalize to a variety of situations (Stajkovic & Luthans, 1998). According to Kahn (1990), self-efficacy fosters greater psychological availability because it directly affects people's sense of confidence and security that they have the necessary ability to negotiate their work role performances successfully. Generalized self-efficacy has been empirically found to have a positive relationship with employee engagement (van den Heuvel, Demerouti, Schreurs, Bakker & Schaufeli, 2009). Based on these theoretical and empirical reasons, it is hypothesized that;

Hypothesis 1 (b): OBSE and GSE will be positively related to employee engagement.

3.4 Job Demands

Schaufeli and Bakker (2004) define job demands as “the things that have to be done” (p. 296). In every job something has to be done. More specifically they refer to job demands as those physical, psychological, social and organizational aspects of the job that require sustained physical and/or psychological effort and are therefore associated with physiological and/or psychological cost. Although they are not necessarily negative, they may turn into stressors when they require high effort and may elicit negative responses such as depression, anxiety and burnout (Schaufeli and Bakker 2004). This study adopted job overload because due to challenges such as financial constraints, employees are expected to achieve more with less resulting in a lot of job tasks being distributed among few employees. Although initially employees may regard job tasks as challenging, they are likely to feel overwhelmed when the job tasks require high effort and likely to experience burnout (Schaufeli and Bakker 2004). Work family conflict also impose a major work related demand as participation in one domain makes it more difficult to involve oneself in another domain because employees are likely to not have enough time to meet the requirements of both domains satisfactorily. The JD-R model does not suggest a relationship between job demands and engagement but proposes that job demands moderate the relationship between job resources and employee engagement. Theoretical and empirical justifications of why these job demands were selected for this study are discussed below.

Job overload (JO) and work home interference (WHI)

In a general sense, quantitative workload has been defined as the sheer volume of work required of an employee (Spector, Dwyer, & Jax, 1998). It occurs when employees have too much work to do within very little time. This definition has been seen not to contain all aspects of workload since workload can also be measured in terms of hours worked or mental demands. Spector, et al. (1998) argue that having a large amount of work does not necessarily lead to burnout as some individuals might enjoy work and might not find having a lot to do unpleasant and exhausting. This according to Kahn (1990) can enhance meaningfulness of work since it creates potential for accomplishment, mastery and personal growth. However, there comes a point where high workload can overwhelm individual's capacity and trigger negative emotions. Crawford et al. (2010) meta-analysis found out that workload has a significant positive relationship with engagement. Bakker et al. (2005) found a positive relationship between cognitive work demands and engagement. Although workload has been seen to enhance the meaning of work, Crawford, Rich, Buckmann and Bergeron (2014) argue that there comes a point where work demands can overwhelm employees' capacity and trigger negative emotions which will make them feel unable to adequately deal with the demands. This will then make them feel less capable of having the physical, cognitive and emotional energy to invest in their work roles (Kahn, 1990). Empirical evidence provides support for this reasoning. For example, Bakker et al. (2006) found out that police officers who believed their tasks were too complex reported decreased engagement levels. Teachers reported decreased engagement levels when they felt overwhelmed by their work tasks (Hakanen et al. 2006). Bakker and Demerouti (2008) model of work engagement suggests that job resources become more salient and gain their motivational potential when employees are confronted with

high job demands. In summary, research findings show that while challenging workload can be beneficial for engagement, workloads that overwhelm the capacity of the employees to deal with them are unfavorable for engagement.

Research has investigated the relationship between work-home and home-work interference since a number of employees are challenged in combining substantial domestic responsibilities with work obligations. A distinction between work-home interference and home-work interference has been made (Netemeyer, Boles, & McMurrian, 1996). However, in this study that distinction is not maintained, and work home interference will be defined as when the demands, time and strain created by one domain interfere with the other domain. This challenge may become a stressor when pressures from work and family domains become incompatible in some respect (Greenhaus & Beutell, 1985). Bakker and Geurts (2004) indicated that in contrast to the belief among practitioners, research has shown that demands from work are likely to interfere negatively with domestic obligations and the other way round. Work home interference reduces engagement because conflicting events in the two domains may distract the employee to invest energy in role performances (Kahn, 1990). Work home conflict reduces psychological safety because conflicting events in work and non-work lives distract employees to the point where they have reduced energy to invest in role performances (Kahn 1990). Studies investigating engagement and WHI provided mixed results. Mauno et al. (2007) did not find evidence of a significant relationship. Drawing upon the conservation of resources theory, Halbesleben, Harvey and Bolino (2009) investigated this potentially negative outcome of engagement by hypothesizing that engagement will be associated with higher work interference with family due to the resources engaged employees may expend when they engage in extra role work behaviour such as organizational citizenship behaviour. They revealed that

engagement is associated with higher levels of work interference with family. Several scholars have argued workers may also benefit from combining ‘work’ and ‘family’ and that these benefits may outweigh the costs (Bakker & Geurts, 2004). Studies have provided evidence that generated resources in one domain, *home* could be transferred to the other domain, *work* (Lu, Siu, Chen & Wang, 2011). Crawford et al. (2014) suggests that there is therefore need for research to clarify these conflicting relationships before conclusions can be reached on how work - home interference can be managed to elicit engagement. Based on the theoretical and empirical reasons above, it can be hypothesized that;

Hypothesis 2: The positive relationship between resources and employee engagement will be moderated by job overload and WHI such that it is stronger for higher than for lower levels of job overload and WHI.

3.5 Organizational Behavioural Outcomes

As employees’ engagement levels increase, they will find their work more meaningful, self-fulfilling and inspirational and accordingly exhibit desired organizational behaviors in their workplace (Bakker and Demerouti 2008). This positive state of mind should carry over to how they behave with regards to their intentions and commitment to their work roles. This suggests that at the very least engagement will have a positive effect on employees’ intention to quit their jobs and commitment in their work roles. Saks (2006) reported that employees are likely to exhibit desired organizational behavioural outcomes if they are engaged in their jobs. We expect engaged employees intentions to leave their jobs to be very low and also to be affectively committed to their work roles. The JD- R model assumes that resources have a positive effect on engagement especially when job demands are high (Bakker and Demerouti 2008). Work engagement in turn has a positive impact on desired organizational behavior

which in turn is expected to have a positive impact on performance. Intention to turnover and affective commitment are in line with the behavioural components of Saks (2006) consequences of engagement. The following section discusses intention to turnover and affective commitment and give theoretical and empirical justification for their selection for this study.

Intention to Turnover (IT) and Affective Commitment (AC)

Saks (2006) defines turnover intention as an employee's voluntary intention to leave. Turnover intention is an important HR outcome that most interventions made are based on. Employees may decide to leave the organization due to a number of reasons. Some may leave due to reasons beyond the control of the organization whereas some may leave due to circumstances that can be controlled by the organization such as job fit, difficult supervisors, and poor work climate (Meyer & Allen, 1991). Theoretically, Kahn (1992) proposed that engagement leads to individual outcomes as well as organizational outcomes. Additionally Maslach et al. (2001) treat engagement as a mediating variable between work conditions and various work outcomes. According to Saks (2006), there are a number of reasons to expect engagement to be related to work outcomes. For example, engagement has been described as a fulfilling positive work related experience (Schaufeli et al. 2002) and has been related to good health and positive work affect which are likely to result in positive work outcomes.

Prior research on engagement and intention to turnover indicates a negative relation between the two. For example, Schaufeli and Bakker's (2004) study in four Dutch organizations indicated that engagement mediated the relationship between job resources and turnover intentions. Harter et al. (2002) found out engaged employees are less likely to leave the organization. Based on 7939 business units in 36 companies,

they examined the relationship between employee satisfaction, engagement and turnover. Their findings indicated a negative relationship between employee engagement and turnover. Saks'(2006) study among 102 employees working in a variety of organizations showed employee engagement was negatively related to intention to turnover ($B=-0.22$, $p<0.10$). However, the data for this study was collected by college students enrolled in a graduate course as part of their research methods coursework and response bias problems could have occurred. Collini, Guidroz and Perez's (2015) study among 5443 employees in 185 hospitals in the USA examining engagement and employee turnover in healthcare indicated that engagement fully mediated the relationship between respect, mission fulfillment and intention to turnover.

Affective commitment reflects an employee's emotional attachment to, identification with and involvement with the organization. The idea here is that employees with high affective commitment stay with the organization because they want to (Meyer & Allen, 1991).Some studies have supported the use of affective commitment as an antecedent of employee engagement (Shuck et al., 2011) whereas others supported its use as a consequence (Saks 2006). Kahn (1992) suggests engagement leads to individual outcomes as well as organizational level outcomes. According to Kahn (1990) affectively committed employees derive meaningfulness from their work and feel psychologically safe. There are a number of reasons to expect affective commitment to be a consequence of engagement. First, Kahn's (1990) theory of engagement proposed that engaged employees connect to others and to their work suggesting commitment follows from engagement. Second, the social exchange theory suggests individuals who continue to engage themselves do so because of reciprocal exchanges and are likely to have high quality relationships with their employers which will result

in them having an emotional attachment to the organization. Third, commitment has been studied as an outcome of engagement and a positive relationship between the two has been observed (Schaufeli & Bakker, 2003; Sonnetag, 2003). More than any facet of commitment, affective commitment is important as it emphasizes the emotional connection employees have with their organization and maps onto Kahn's (1990) conditions of engagement such as psychological meaningfulness and safety. Further, studies have reported that it shows the highest correlations with behavioural outcomes and was more stable over time compared to other types (Gbadamosi, Ndaba, & Oni, 2006).

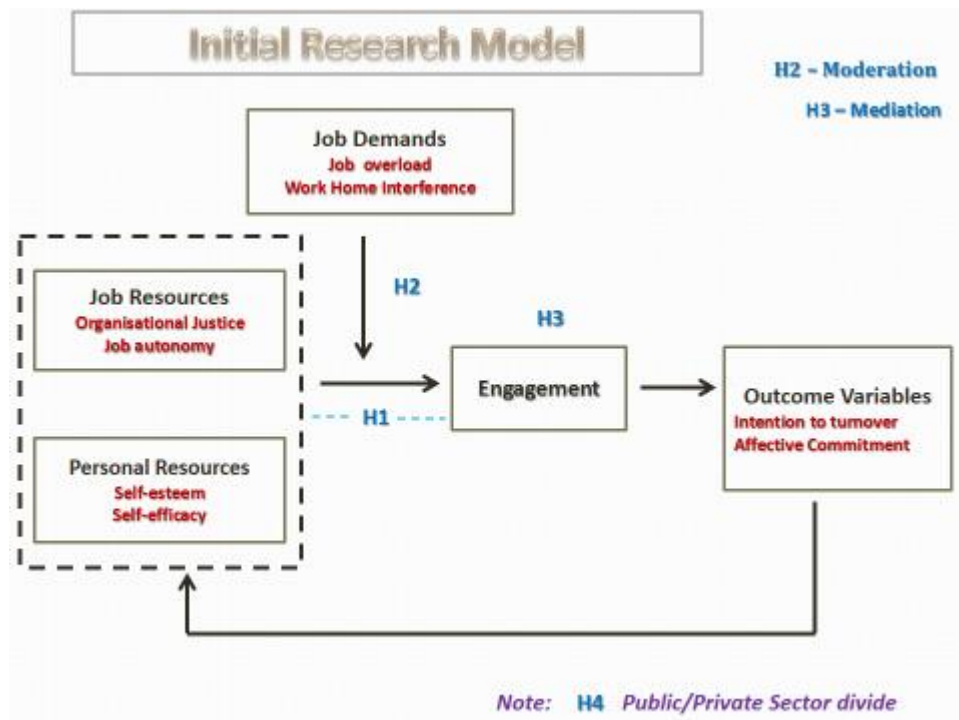
Hypothesis 3: Employee engagement will mediate the relationship between resources (job, personal, social) and outcome variables.

3.6 Private Vs Public Sector Divide

In Botswana the public sector is the largest employer accounting for 48.4% of total employment, followed by the private sector with 47.1% and parastatal organizations employing only 4.5% (Statistics Botswana, 2013). There is a belief that the private sector provides more exhilarating and satisfying jobs compared to the public service which may lead to a conclusion that private sector employees are more engaged in their jobs compared to their public sector counterparts. It could be that different predictors are more relevant in one sector than the other. In terms of performance, public sector employees are perceived not to perform well compared to their private sector counterparts due to their lack of motivation. This is often based on limited evidence and outdated perceptions on areas such as pay. Empirical evidence for this comparison is limited and this study will provide evidence to substantiate this myth. Comparing the two sectors will be useful in the sense that findings from the study can guide facilitating the transfer of practices from one sector to the other. In a study

comparing engagement between the two sectors in the UK, Alfes et al.'s (2010) study revealed mixed findings. They found out that public sector employees are slightly more engaged than their private sector counterparts on the overall strength of engagement although the difference was very small. When considering the frequency of engagement their study revealed that private sector employees are often more engaged compared to the public sector employees, with a more pronounced difference. Based on the above discussion one of the objectives of this study was to examine employee engagement comparatively between the two sectors.

FIGURE 2 INITIAL HYPOTHESIZED RESEARCH MODEL



3.7 Extension Of The Jd-R Model And Identifying The Gap In The Literature

My research topic started as “*An examination of the antecedents and outcomes of employee engagement among private and public sector employees in Botswana using the JD-R model.*” There is a lot of emphasis on finding the ‘gap’ in the literature for one to undertake doctoral study. Given the enormous volumes of work published on employee engagement, in particular quantitative studies using the JD-R model, finding the gap proved to be the most difficult task in my research journey. After an extensive review of the employee engagement literature, it still remained a challenge to find the missing link. Although there was no study in the literature testing the relationship between employee engagement and the combination of variables in my initial research model, I was made aware at my transfer viva and PhD discussion forum that examining the relationship between employee engagement and the suggested variables would not add anything new to the literature. I decided to engage with the literature from other sub-disciplines such as positive psychology in order to identify the missing link. I presented my pilot study findings in doctoral symposiums in order to get opinions from experts in the field and fellow PhD’s. While in search for the ‘gap’ in the literature I had a discussion with one of the leading scholars on employee engagement, Professor Wilmar Schaufeli. He made me aware that, based on my pilot study, my research would not add much to knowledge and that, since I was conducting my research in a different cultural environment from where the JD-R model is usually applied I should consider determining whether cultural aspects could be a contingent factor in the relationship between organizations and human behaviour. By far, the greatest amount of research has been devoted to understanding differences in attitudes, states, and expectations of organizational members and there is very limited empirical evidence

responding to the question of to what extent cultural aspects can explain behaviour in organizations (Hu et al., 2011). I then realized that recent debates in the literature are challenging the application of models developed in Western countries to African samples without considering contextual differences in those samples (Gbadamosi, 2003; Kim et al., 2013). The idea of examining how social resources in organizations can enhance the engagement of employees struck me because in Botswana the principles of Ubuntu are indoctrinated. People are always reminded that '*a person is a person through other persons*', an ideal which shapes a great deal of African people. Ubuntu emphasizes social support and concern for others as the main component that can glue communities together for the common good. I went back to the literature and discovered that although there is literature available on the use of Ubuntu as a management construct, no attempts have been made to examine its relationship with employee engagement. Evidence suggests that so far the JD-R model has been applied in Western countries and if applied to non-Western samples it was studied in its original form (Hu et al., 2011). Since this study sought to apply the JD-R model to a non-Western sample the model was extended with the Ubuntu construct to increase its applicability in an African context. Further, because the principles of Ubuntu emphasize on social support it was reasonable to find out its relationship with the social support provided in organizational structures such as supervisor and colleague support. Scholars have voiced concern that studies utilizing the JD-R framework focus solely on job and personal resources and neglect social resources in explaining employee engagement (Hu et al., 2011). Learning and growth in organizations do not happen solely as a result of job characteristics but occur in a social context hence social resources are also important in explaining employee engagement. Studies using the JD-R model usually combine job and social resources into one category. Weigl et al.

(2010) have, however, argued that social resources are conceptually and theoretically distinct from job resources hence this study included social resources as resources different from job resources. A discussion of both social resources and the Ubuntu construct in management literature follows.

3.8 Social Resources (Supervisor Support and Colleague Support)

Hobfoll and Stokes (1988) define social support as “those social interactions or relationships that provide individuals with actual assistance or with a feeling of attachment to a person or group that is perceived as caring or loving” (p. 88). This is relevant to business operations since scholars voiced the concern that learning and growth do not happen exclusively based on job and personal resources but take place in a social context with other employees (Miller & Stiver, 1997; Wenger, 1998). If employees think their supervisors and colleagues care for their well-being they will feel attached to the organization and feel obligated to ‘*return the favour*’ by staying in the organization. Susskind, Kacmar and Borchgrevink (2003) state that social support in organizations can be derived from two sources: supervisor and colleague. Due to the supervisor’s legitimate authority over the subordinate, when subordinates feel a lack of support from their supervisors they are more likely to remain silent (Milliken, Morrison, & Hewlin, 2003). The relationship one has with their supervisor can have an impact on their perception of their psychological safety at work (May et al., 2004). Supervisors therefore must exert more effort to support their subordinates. Kahn (1990) suggested that interpersonal relations among employees who are supportive can foster psychological safety. These relationships are often based on trust and welfare concerns for one another (May et al., 2004). Co-workers who trust and support each

other are therefore expected to have high levels of psychological safety and engagement. Social support has been found to be an effective resource to cope with stress and increase well-being (Kaufmann & Beehr, 1986). For example support from co-workers and supervisor's feedback are likely to increase the chance of one being successful in the completion of their work goals leading to increased levels of employee engagement. Scholars have investigated the link between social support and employee engagement (Sawang, 2012; Schaufeli & Bakker, 2004; Xanthopoulou et al., 2009). Social support has been shown to be an important antecedent of work engagement. Schaufeli and Bakker's (2004) study among employees from four Dutch service organizations revealed that social support from colleagues and supervisors' feedback were associated with engagement. In a study among Finnish teachers Hakanen, Bakker and Schaufeli (2006) found out that supervisory support was positively related to engagement. Othman and Narsuden's (2013) study among 402 nurses in Malaysia indicated that supervisor support was positively related to engagement. However, they found out that colleague support had no effect on employee engagement. They concluded that, compared to colleague support, supervisor support was a better predictor for engagement. As shown by these studies employees who experience high levels of co-worker and supervisor support will see the workplace as a supportive environment which provides opportunities of learning from both their supervisors and colleagues. Crawford et al. (2010) meta-analytic estimates of the relationship between social support and employee engagement provided evidence that social support is positively related to employee engagement. Christian et al. (2011) also provided empirical evidence that social support is associated with enhanced levels of employee engagement. Based on the theoretical and empirical reasons above, it can be hypothesized that;

Hypothesis 1(c): Supervisor and Colleague support will be positively related to employee engagement.

3.9 Ubuntu Construct

The term Ubuntu is uniquely African and its origin developed within the traditional African family system. It has been used throughout sub Saharan Africa and it defines how people and communities should behave in their interactions (Taylor, 2014). Africans are socialised within a society that promotes collectivism, unity and pluralism. It is a way of life that Africans believe in and practice in their daily interactions with others. The literature on Ubuntu uses the translation of the Xhosa expression as its definition. In English language this can literally be translated as; ‘*a person is a person through other persons*’ and can best be known as humanness or being human although its significance is far greater than that (Taylor, 2014). Ubuntu scholars often note how the concept cannot be easily conveyed in English. It is originally a South African phrase and the use of the term gained popularity since its adoption by a number of business leaders, academics and the South African Constitutional Court (Taylor, 2014). In the words of Desmond Tutu (1999) Ubuntu... “...speaks of the very essence of being human. It is to say, ‘My humanity is caught up, is inextricably bound up, in yours.’ We belong in a bundle of life. We say, ‘A person is a person through other persons’. It is not ‘I think therefore I am.’ It says rather: ‘I am human because I belong. I participate, I share’. A person with Ubuntu is open and available to others, affirming of others, does not feel threatened that others are able and good, for he or she has a proper self-assurance that comes from knowing that he or she belongs in a greater whole and is diminished when others are humiliated

or diminished, when others are tortured or oppressed, or treated as if they were less than who they are” (p.31).

Most Sub Saharan African states have its equivalent. For example, in Tanzania it is called *Ujamaa*; in Botswana, it is known as *Botho*; in Ghana it is referred to as *Biakoye*; in Zimbabwe, *Nunhu* and in Uganda *Abantu* (Broodryk, 2006). Although it is an African concept, it is not difficult to understand since non-African societies have similar morally guiding values existing in their cultures around the world. For example Chinese Confucianism which emphasizes on the importance of the family and social harmony (West, 2014). A number of explanations on what Ubuntu is have been provided in the literature. For example, Boodryk (2002) has defined it as Humanness, Ramose (1999) and Mkhize (2008) argues that Ubuntu could be best understood in terms of its etymology. All its explanations however, emphasizes its nature as a communitarian ethic. In the context of this study the understanding will be that Ubuntu is a means of establishing or determining relationships between people based on the saying that ‘*a person is a person through other people*’, and will be understood to mean *humanness*. Khoza (1994) states that Ubuntu is a concept that brings to the fore images of supportiveness, cooperation and solidarity; a social contract that stems from but transcends the narrow confines of the nuclear family to the community. He suggests that with diligent cultivation it should be extendable to the business corporation. Mbiti (1989) suggests the concept itself can be translated in various ways such as “*I am because we are; and since we are therefore I am.*” (p.106). All explanations of Ubuntu emphasize its nature as a communitarian ethic and it is often contrasted with Western individualism. Mbigi (1997) claims to be the founder of this philosophy in business practices. He claims African businesses have to compete in the global market not by imitating the West or East but by following their own cultural

heritage, and to him this heritage is Ubuntu. Added to this, several cross cultural studies within management literature have included African respondents in their research and constructs identified with African behaviour could provide some evidence regarding the values of Africans. This is supported by Gbadamosi (2003) who states that Western management concepts and writings have dominated the thinking of academics and managers in Africa for a long time without showing how the difference in culture might be taken into account. He recognizes Africans have their own values which are strong, for example, the communalistic nature of the African people. Mbigi (1997) advances five key social values of Ubuntu, which he terms the collective fingers theory. The values are survival, solidarity, compassion, respect and dignity. These dimensions are a collective value system (Poovan, du Toit, & Engelbrecht 2006). Although much has been written about the concept, there seems to be no empirical evidence to support the claims made. Jackson's (2004), survey in four African countries uses the concept as part of his study although he did not specifically measure it.

Ubuntu is about a belief in sharing and caring that connects humanity. Here personal interests are less important than community needs. When employees feel they have become part of the community, they will develop a spirit of Ubuntu. In an organization it could be the spirit of a culture of empowerment and teamwork. According to Sigger, Polak and Pennink (2010), "the '*I*' is eliminated and the '*we*' state of mind is present, so there is a collective mindset" (p.13). Ubuntu can be regarded as more than teamwork because even after working hours employees meet and spend time with each other and are generally concerned about the wellbeing of others. Employees are supposed to be happy for their co-workers when they get a promotion since the need of the organization is more important. This study will extend the JD-R model by including

the indigenous concept of Ubuntu to increase its relevance to the African work context. In contrast to Western team work spirit, which involves working together as a group for the benefit of the organization, Ubuntu involves mutual support within a group which goes beyond the confines of the organization which is embedded in the collective nature of African culture. Shantz, Schoenberg and Chan (2014) observes that most research on employee engagement has been conducted either in North America or Western Europe. This is not surprising since the two main theoretical models in employee engagement research were developed by Kahn (1990) in the United States and Schaufeli, Bakker and Salanova (2006) in Europe. The JD-R model has mainly been applied in samples from Western countries for example, Netherlands, Finland, Germany, Spain, Austria and Australia. When applied to non-Western countries such as China, it was applied in its original form (Hu et al., 2011). There is a significant difference in how employees would behave among these countries. This difference could be influenced by different cultural backgrounds. Rothmann (2014) suggests employee engagement must not only be understood in universal standard approaches, but also in terms of how it can be influenced by cultural contexts. Rousseau and Fried (2001) state that contextualizing the construct has always been an ignored step in the development of theory whereby context is defined as a set of factors surrounding the phenomenon which exerts some direct or indirect influence. Mbigi (1997) believes African organizations must be inspired by Africa's own cultural heritage. According to him, African corporations can only compete in the global market using a uniquely African management concept embedded in the Ubuntu philosophy. This philosophy rests on core values such as respect, solidarity and compassion although questions arise whether they are uniquely African or incorporated in every human being. Most organizations in African countries have

corporate cultures which are based on Western models and are culturally unfamiliar to most African workers. This hinders the development of a more authentic corporate culture because it fails to build on the full potential of the workforce. The inclusion of African values, such as Ubuntu and what role they can play in management practices would therefore seem important to help overcome management problems within African organizations

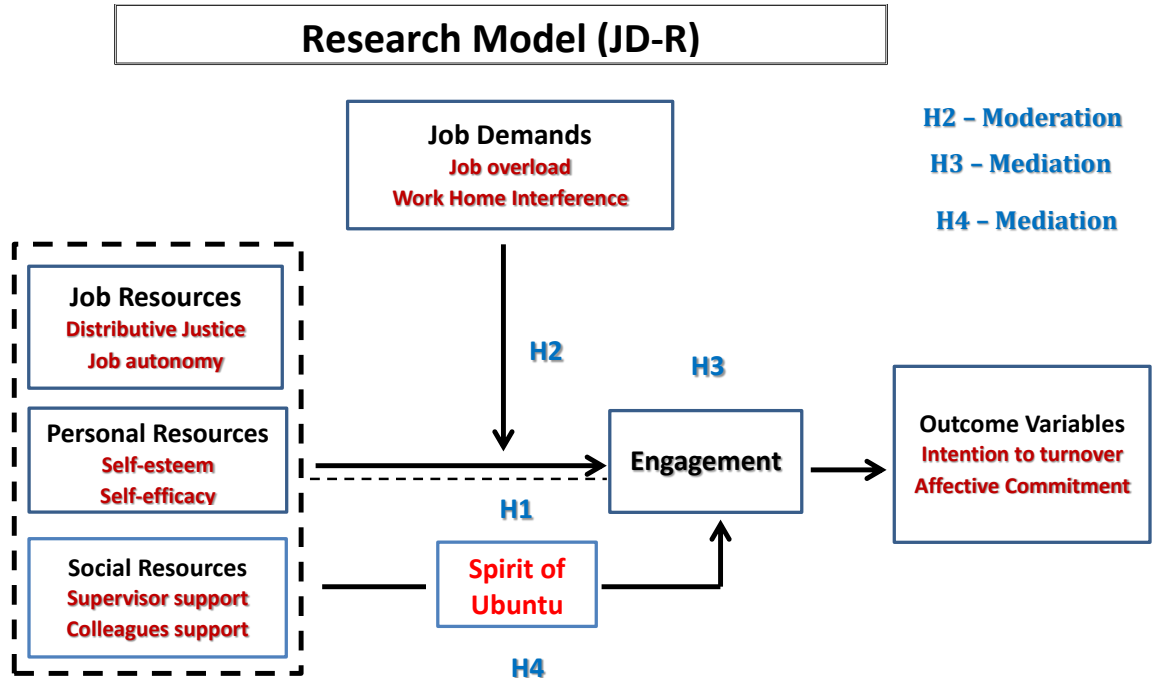
Several studies have examined how Ubuntu can be used as a management concept in African organizations. For example, Karsten and Illa (2005) explored a range of publications indicating how language in organizations is phrased and how cultural backgrounds influence the applicability of management concepts. They illustrated this using the concept of Ubuntu. Their findings suggested that the applicability of Ubuntu in companies will rely on the personality of the manager being a good conversationalist. Kayuni and Tambulasi (2012) examined the relation of Ubuntu to Corporate Social Responsibility (CSR) using qualitative research methods among nine Malawian organizations. Their findings revealed the concept of CSR was being applied within the framework of Ubuntu rather than as a Western - oriented business approach. Based on the discussion above, one can argue that employee engagement can be influenced by the prevailing cultural context and Ubuntu will influence and facilitate the development of employee engagement in organizations.

Hypothesis 4: Ubuntu will mediate the relationship between social resources and employee engagement.

In conclusion, the aim of this study is to examine the sequence of development of employee engagement within the context of JD-R model among employees in private and public sector organizations in Botswana. The extension of the model with the

Ubuntu construct adds to its strength in an African sample. The hypothesized research model is presented in figure 3.

FIGURE 3 EXTENDED JD-R MODEL WITH THE UBUNTU CONSTRUCT AND SOCIAL RESOURCES



3.10 Chapter Summary

This chapter reviewed the literature linking employee engagement with the study variables. Three key job characteristics - resources, demands and outcomes underpinned the development of the hypotheses. The chapter presented the review of the literature relating to the development of the research model and summarised some key elements on how the JD-R model was adopted and extended. Specifically, the African philosophy of Ubuntu and theoretical ways in which it could be applied in the field of management were discussed. The chapter highlighted the usefulness of this construct in informing how cultural phenomenon might influence or explain behaviour of people in organizations. A brief discussion on differences in engagement between

the private/ public sector employees was provided. The next chapter will provide the methodology adopted in conducting this research.

Chapter 4 Methodology

4.1 Introduction

Based on the purpose of study, research aims and questions, this chapter critically discusses the available methodological options and provide adequate justification for all methodological decisions taken. Methodological texts present a wide range of research methodologies from which the researcher can select the most appropriate for their project. Furthermore, a major decision on research paradigms has to be made when a researcher has to choose a methodological approach because such choices deeply reflects not only on the nature and requirements of the work but also on the researcher's view of the social world. Burrell and Morgan (1979) argue that "...to be located in a particular paradigm is to view the world in a particular way" (p.24). In order to make an appropriate choice one must have a broad understanding of different paradigms and their application to research. Given that the understanding of research paradigms is prerequisite in conducting research this chapter will start with a discussion on the research paradigms and provide a justification for the choice adopted for this study. It will then discuss why the quantitative research approach was adopted. The next section will provide detailed discussion of the data collection instrument, sampling technique and process, followed by presentation and discussion of the pilot study. The chapter will conclude with a discussion on generalizability of findings and on the methodological limitations.

4.2 Research Questions and Objectives

The analysis of the literature revealed that there are plenty of studies that sought to examine the antecedents and consequences of employee engagement using different conceptual frameworks (Bakker & Demerouti, 2008; Harter et al., 2002; Kahn, 1990; Maslach & Leiter, 1997). However, a majority of these studies have focused either on private sector organizations and/or specific occupational groups (Kim et al., 2013). In addition to this, these studies have been conducted on samples in Western countries. Despite the benefit of their findings in both academia and practice, empirical evidence on employee engagement in different employment sectors and cultural samples other than the West remains unclear. It follows therefore, that employee engagement researchers recommend an expansion of scope of research in terms of cultural context which they trust will help in reinforcing validity of the results and in turn build a stronger foundation to theory (Kim et al., 2013). In addition, multinational corporations considering employee engagement across their operations are faced with a general question of whether employee engagement is a universal concept or whether it's meaning and its antecedents differ in different parts of the world (Kelliher, Hailey, & Farndale, 2014). There is therefore need for an examination of the construct in culturally different samples and different employment sectors in order to provide input on the current state of employee engagement research.

The aim of this study is to examine the antecedents and consequences of employee engagement within the Job Demands Resource framework with particular focus on how a culturally specific behaviour, Ubuntu, associated with the African people is related with employee engagement. Following the identification of the research aim the following research objectives were formulated;

- a) To determine the relationship between resources (job, personal, social) and employee engagement.
- b) To evaluate whether the process through which resources (job, personal and social) influence employee engagement is dependent on job demands.
- c) To determine whether employee engagement is the mechanism through which resources (job, personal, social) influence desired organizational outcomes.
- d) To determine and examine whether Ubuntu is the mechanism through which social resources influence employee engagement.
- e) To examine comparatively employee engagement and its predictors between public and private sector organizations.

4.3 Research Paradigms

An understanding of research philosophy provides awareness of the available philosophical alternatives which assist in the researcher in adopting a philosophical stance that influences, determines and even informs their decisions about the research strategy and methods to be adopted. Guba and Lincoln (1998) view a paradigm as “...a set of basic beliefs (or metaphysics) that deals with ultimates or first principles. It represents a worldview that defines, for its holder, the nature of the ‘world’, the individual’s place in it, and the range of possible relationships to that world and its parts”(p.200). It can also be defined as a general orientation about the world and the nature of research the researcher holds (Creswell, 2009). From these definitions paradigms are related to both the research and the researcher and they define the knowledge that is there to be found including the researchers’ beliefs on how that knowledge can be found. Sarantakos (2005) views research paradigms as ontological, epistemological and methodological prescriptions that guide the research process. According to Guba and Lincoln (1998) paradigms address three fundamental research questions;

- *Ontological question:* That is, what is the nature of ‘reality’? Is there a real world independent from our knowledge, upon which foundations can be made? (Objectivity). Or is the world socially constructed hence dependent on a particular time or culture (Socially constructed)
- *Epistemological question:* The nature of relationship between the researcher and what he wants to know. It answers the question about how do we know what we want to know?
- *Methodological question:* How do we gain the knowledge in the world? That is, how does the researcher go about finding knowledge? The methodological question answers the questions about choice of research methods and data collection instruments employed.

Esterby-Smith, M., Thorpe, R. and Jackson, P. (2012) stipulate three reasons why it is important to understand research paradigms in particular reference to research methodology. First, it helps the researcher to specify and refine research methods to be used in the study. Second it enables the researcher to evaluate different methodologies and methods and thus avoid their inappropriate use and unnecessary work, by identifying the limitations of particular approaches at an early stage. Third, it helps the researcher to be creative and innovative when selecting methods that are outside his or her experience. Saunders, Lewis and Thornhill (2012) stated that, when conducting research, each researcher follows important views on how they view or perceive the world and these views and assumptions will affect the research strategy and methodology chosen by the researcher. These world views are shaped by the researcher’s past experiences and discipline area and will lead to the researcher’s

choice of methods and approach. Two main paradigms have dominated social science research - positivist and interpretivism. Many scholars have identified a number of paradigms which largely depend on these two. For example, Guba and Lincoln (1998) present four major paradigms: positivism, post positivism, critical theory and constructivism. Creswell (2009) likewise presents four different paradigms namely post positivism, constructivism, advocacy/participatory and pragmatism. In adopting a research paradigm, a brief discussion of the most cited paradigms in management research will be discussed and a justification for the adoption of the paradigm will be specified.

4.3.1 Positivism

Positivism advocates for the application of the methods of the natural sciences to the study of social reality. It has developed from the empiricist view of natural science and considers social science capable of the same possibilities in the natural sciences (Remenyi, Williams, Money, & Swartz, 1998). That is, it is possible to observe reality as objectively as possible without any interference. Positivism proposes an objective view that the researcher should be independent from the research objects; the research has to be undertaken in a value freeway (Remenyi et al., 1998). It uses theory to generate hypotheses which can then be tested. The aim here is to find general laws and causal statements about a social phenomenon (Guba & Lincoln, 1998). Methodologically, positivists use quantitative methods as their research tools and their results could be replicable and generalizable. Their aim is to look for explanations in behaviour rather than in-depth meaning. This approach emphasises empirical data collection, its cause and effect oriented and usually based on previous theories

(Creswell, 2009). Its strengths are that research findings can be generalised and replicated on many different samples and future predictions can be made (Johnson & Onwuegbuzie, 2007). Due to its precise use of methods, reliability and validity are maintained and it is also useful in studying a larger number of people therefore saving time (Cohen, Manion & Morrison, 2007).

Having examined the principles of the positivism paradigm, this section will now turn its attention to its shortcomings and why it is not adopted for the purpose of this study. The greatest shortcoming of positivism is its failure to distinguish between the natural and social worlds. Its insistence that the application of the methods of the natural sciences can be applied to studying social phenomena fails to take into consideration important distinctions between the natural and social sciences. For example, organizations do not exist independently of the employees' views. That is, employees are likely to reflect upon the organizations to which they belong and alter their behaviours accordingly. Hughton (2011) argues that objectivity is not suitable for conducting research on social phenomenon explaining behaviour. Second, unlike the natural sciences, it is difficult to detach oneself from the hypotheses completely (Cohen et al., 2007). Lastly, organizations are shaped by the actions of their members and will therefore change depending on a range of factors such as time and location. This study is conducted in social structures therefore the application of strict natural science methods is not appropriate, and hence the positivism paradigm was not adopted for this study.

4.3.2 Post Positivism

Post positivism was suggested as an attempt to address the criticisms to positivism stated above. According to post positivism, the goal of research is to achieve agreement between the researcher and the nature of reality (Cresswell, 2009). Although it is in a way similar to positivism it acknowledges that one cannot be sure that the scientific methods used will allow the researcher to find absolute truth. The main difference between positivism and post positivism is that positivists advocate that there is a reality found without interference from the researcher which can be understood through the researcher's observations and follows general laws, whereas post positivism proposes that although there is empirical reality, our understanding of this reality is limited by its complexity and the researcher's bias and other limitations (Schutt, 2006). Although considered an improved version of positivism, post positivism is not without criticism. Some scholars argue that social phenomenon is too complex to be understood by quantitative paradigms and needs in-depth qualitative analysis and that the objectivity advocated by positivist paradigms cannot be guaranteed (Johnson & Durberly, 2000). Methodologically, post positivism proposes empirical observation and measurement but also acknowledges that research bias cannot be completely avoided (Saunders et al., 2012). For example, one source of that bias is the researcher's own beliefs and values which are likely to be embedded in the logic by which the researcher chooses the topic to research and the way the researcher handles the research process (Saunders et al., 2012).

Post positivism represents the thinking after positivism, challenging the notion of the absolute truth of knowledge and recognizing that we cannot be too certain about our claims of knowledge when studying the behaviour and actions of human behaviour (Creswell, 2009). The knowledge that develops through a post positivist lens is based

on observation and measurement of the objective reality, suggesting that developing measures of behaviour of individuals is paramount for a post positivist. Thus the accepted approach to research by post positivists is that a researcher begins with a theory and collects data that either supports or refutes the theory (Creswell, 2009).

4.3.3 Interpretivism/Constructivism

Interpretivists, on the other hand believe it is not possible to make objective statements about the real world because there is no such thing as the real world and the world is socially constructed. They believe that because the world is socially constructed, so is social phenomenon and it cannot be examined by objective natural science methods (Bryman & Bell, 2015). Interpretivists make the assumption that individuals seek understanding of the world in which they live and work and develop subjective meanings of their experiences (Cresswell, 2009). Due to their belief in non-objectivity, methodologically, interpretivists usually employ qualitative research methods and look to understand social behaviour and its meaning in more depth rather than focusing on explaining it. They believe construction of reality can be elicited by the interaction between the researcher and the respondent and interpreted through qualitative techniques. The goal of the research under the interpretivist lens is to rely as much as possible on the participant's view of the situation being studied. Researchers' own backgrounds shape their interpretation and they position themselves to acknowledge how their interpretation is influenced by their personal, cultural and historical experiences (Creswell, 2009). This research does not seek to understand the meaning of employee engagement. It adopts an existing definition and meaning of the construct to understand its antecedents and outcomes. It is for this reason that interpretivism was not adopted for this study.

4.3.4 Critical Theory

Guba and Lincoln (1998), considers critical theory as a paradigm that has overtime been shaped by social, political, cultural, economic, ethnic and gender factors and then crystallised into a series of structures that are now taken as ‘real’. Critical theory rejects the principles of both positivism and post positivism and proposes that the researcher’s values not only influence the subject of inquiry, but the two are interactively linked, resulting in value mediated findings (Guba & Lincoln, 1998). Methodologically, critical theory attempts to uncover how the factors and structures shaping it may determine human actions by the use of either qualitative or quantitative research techniques.

4.3.5 Pragmatism

Pragmatism has been viewed as a paradigm arising out of action, situations and consequences rather than antecedent conditions (Cresswell, 2009). It proposes that instead of focusing on methods the researcher must focus on the research problem and use all available approaches to understand the problem (Cresswell, 2009). Tashakkori and Teddlie (1998) state that it is the importance of focusing on the research problem and then employing pluralistic approaches to understand it. According to Cresswell (2009), pragmatism is not committed to any one system of philosophical beliefs. It gives the researcher the freedom of choice to choose the methods and techniques that best meets their needs and purposes.

4.4 The Choice of a Paradigm

Based on the discussion of different paradigms above, what then is the adopted paradigm for this study? The answer to this question lies in the three fundamental questions, (ontological, epistemological and methodological) addressed by the research paradigms above. Additionally, it will be influenced by the researcher's own set of beliefs developed over time. The adoption of a particular paradigm will further influence the choice of a research method, design and instrument. Creswell (2009) suggests that the researcher's world view is influenced by a number of things: (a). the discipline area; (b). the beliefs of the supervisors and other faculty; (c). the researchers past experiences. Based on this discussion and the paradigms discussions above, the researcher adopted a positivist perspective of the philosophical debate. Johnson and Clark (2006) argue that the most important issue is not whether the research is philosophically informed but how well the researcher is able to reflect upon the philosophical choices and defend them in relation to their alternatives. As Saunders et al. (2012) state, no research philosophy is 'better' than another. They are all 'better' at doing different things and which is 'better' depends on the research questions the researcher is seeking to answer. The study's aims and objectives stated above will better be addressed from a positivism side of the philosophical debates. Although the researcher prefers the position of positivism over the other paradigms, the researcher acknowledges that the principles of the positivism paradigm are too difficult to pursue in any social research context. Therefore the positivism paradigm will not precisely fit into the researcher's view of reality for this study; hence the researcher adopted the post positivism paradigm. In summary, whereas positivism suggests that reality can be observed as objectively as possible without interference of the researcher, post positivism acknowledges that there is empirical reality, but our understanding of this

reality is limited by its complexity and the researcher's bias and other limitations (Schutt, 2006). Although post positivism, like positivism has been criticised for its structured approach, the researcher found it to be the most appropriate paradigm for this study. This is because there is need to identify and assess the causes that influence the outcome variable (Creswell, 2009).

4.5 The Choice of Quantitative Approach

As discussed in the previous section, the choice of research approach is heavily influenced by the philosophical position. However, it is also influenced by the study's aims, objectives and research questions (Creswell, 2009). This study does not attempt to generate a new theory from the data but is aimed at testing and extending an existing theory; therefore it does not follow an inductive approach which necessitates the use of qualitative approach to research. In this study the research problem centres on understanding employee engagement by testing a model exploring relationships between selected variables. Therefore it adopts a deductive approach to research. It aims at explaining the relationship between variables and employs a structured methodology which can facilitate replication (Gill & Johnson, 2010). Since Kahn's (1990) qualitative study on employee engagement, academic discussions on the construct have been dominated by the use of quantitative methods which have developed significant insights into its antecedents and outcomes. Additionally, the researcher's own education, training and most importantly past research experiences have also influenced the approach to how the research has been conceived and designed. The researcher is better trained in the fundamentals of quantitative research in comparison to those required for qualitative research. The researcher is also aware

of the limitations of quantitative research such as its highly structured approach which confines the researcher to work within a defined set of rules. The researcher recognised that within this study a research model suggesting relationships among variables was appropriate, therefore a quantitative approach was adopted.

4.6 Data Collection Method

Methods of inquiry associated with quantitative research include experimental designs and non-experimental designs such as surveys. Experimental research seeks to determine if a treatment influences an outcome. It is used mostly in the natural sciences although also employed in social science research, in particular psychology (Saunders et al., 2012). Survey research provides a quantitative description of trends, attitudes and opinions of a population by studying a sample of that population. It includes both cross sectional and longitudinal designs and employs survey strategies for data collection with the intent of generalizing from a sample to a population. A number of data collection techniques belong to the survey strategy. These include structured interviews and survey questionnaires (Bryman & Bell, 2015). This study explores the antecedents and outcomes of employee engagement among private and public sector employees. A number of antecedent and outcome variables have been suggested and assembled to form propositions based on theory. These variables have standardised measures that have been validated in the academic literature and were employed in this study. Based on this, the survey questionnaire was the most appropriate research instrument.

4.6.1 The Choice of Survey Questionnaire

There are several ways of administering a questionnaire. First, self-administered questionnaires which are completed by the respondents. These can either be sent by post and email or delivered and collected by hand. Second, interviewer administered questionnaires are questionnaires recorded by the researcher on the basis of each respondent's answers. A variant of this are telephone. The last category involves structured interviews in which the researcher meets the respondents and asks the questions face to face (Saunders et al., 2012). Like all methodological choices, the choice of which method to employ is influenced by the research questions and objectives. For this study a structured questionnaire containing all the scales of the variables under consideration was prepared. The most appropriate method of administering it was self-administered questionnaires where the researcher delivers and collects by hand. The email option was not appropriate due to challenges in the research country such as power cuts and technological inexperience of for some respondents. Another reason for choosing self-administered questionnaires is that respondents are unlikely to answer in order to please the researcher or because they believe the responses are socially desirable (Dillman, 2007).

4.6.2 Limitations of Survey Questionnaire

Although survey questionnaires were adopted for this study, they are not without limitations as with any other data collection methods. It has been argued that questionnaires are inadequate in understanding some forms of information such as feelings and behaviour (Saunders et al., 2012). There is also no way to tell how truthful the respondent is and how much thought s/he has put in when answering the questions. Respondents may read differently into questions and respond with their own

interpretation resulting in a level of subjectivity which is not always acknowledged. Lastly, there is the possibility researcher's own imposition when making decisions on what is important and what is less important during the development of the questionnaire; for example, the way the questions are arranged. However during the development of the questionnaire efforts were made to minimise the researcher's bias.

4.6.3 Questionnaire Design

This section provides an overview of various issues that were taken into consideration when designing a questionnaire for this study. It will provide details to substantiate some of the decisions that were made relating to the scales selection, structure, layout, covering letter, and the pilot testing. The section will start by presenting the measures used for the study. Second, it will briefly present the pilot study and how preliminary analysis from the pilot data informed some of the decisions made in the main data collection. Lastly, the layout and structure of the questionnaire including covering letter, follow- ups and reminders will be discussed.

4.7 Variables and Measures

4.7.1 Employee Engagement

Employee engagement was measured by using two measures, the Utrecht Work Engagement Scale (UWES-9) developed by Schaufeli et al.(2006) and the Intellectual, Social and Affective engagement scale (ISA) by Soane, Truss, Alfes, Shantz, Reese, and Gatenby (2012). The decision to include both measures was made because their definitions and operationalization suggest that they capture different aspects of engagement. More importantly the ISA captures the social dimension which is not

captured in the UWES. However, the UWES has been extensively validated whereas the ISA measure has not been widely used and tested in empirical research.

4.7.1.1 Utrecht Work Engagement Scale (UWES-9)

Employee engagement was measured with a nine item scale developed by Schaufeli et al. (2006). A five item scale where participants responded along a five point Likert interval from 1 (*strongly disagree*) to 5 (*strongly agree*) was used. A sample item is '*at my work I feel like I am bursting with energy*'. For this data set the reliability coefficient is 0.69.

4.7.1.2 Intellectual, Social and Affective scale (ISA)

The second employee engagement measure used was developed by Soane et al. (2012) consisting of three dimensions: intellectual, social and affective engagement. A five item scale where participants responded along a five point Likert interval 1 (*strongly disagree*) to 5 (*strongly agree*) was used. A sample item is, '*I share the same work values as my colleagues*'. For this data set the reliability coefficient for the ISA is 0.85.

(See appendix 5 for a paper on the two measures)

4.7.2 Ubuntu Construct

Ubuntu was measured using the thirteen item scale developed by Sigger et al. (2010). This measure assesses the five dimensions embedded in the Ubuntu construct suggested by Mbigi (1997) and was developed using empirical results from Tanzania. This was the first step in the development of a tool to measure the level of Ubuntu in organizations as the discussion about the construct in organizational context has recently started. The corresponding dimensions are survival, solidarity, compassion, respect and dignity. The responses were obtained in a five point Likert type scale from 1 (*strongly disagree*) to 5 (*strongly agree*). A sample item is '*when a co-worker gets*

a promotion and I don't I am happy for him or her.' For this data set the reliability coefficient was 0.71.

4.7.3 Distributive Justice (DJ)

Distributive justice was measured using the three item scale developed by Joy and Witt (1992). The responses were obtained in a five point Likert type scale from 1 (*strongly disagree*) to 5 (*strongly agree*). A sample item is '*the treatment I have generally received here is fair*'. For this data set the reliability coefficient was 0.71.

4.7.4 Job autonomy (JA)

Job autonomy was measured using the four item scale developed by Frese, Kring, Soose, and Zempel (1996) which assesses control in a job in terms of an employee's ability to influence working conditions and work strategies. The responses were obtained in a five point Likert type scale from 1 (*very little*) to 5 (*very much*). A sample item is '*can you plan and arrange your work on your own?*' For this data set the reliability coefficient was 0.72.

4.7.5 Organizational based self-esteem (OBSE)

OBSE was measured using the ten item scale developed by Pierce et al. (1989). A five point Likert interval response scale from 1(*strongly disagree*) to 5(*Strongly agree*) was used. A sample item is "*I am taken seriously around here.*' The reliability coefficient for this data set was 0.83.

4.7.6 Generalized Self-efficacy (GSE)

Generalised self-efficacy was measured using the eight item generalized self-efficacy scale developed by Chen, Gully and Eden (2001). A five point Likert interval response scale from 1(*strongly disagree*) to 5(*Strongly agree*) was used. A sample item is, '*when facing difficult tasks, I am certain that I will accomplish them.*' Reliability coefficient for this data set was 0.84.

4.7.7 Colleague Support (CS)

Colleague support was measured using the three item scale developed by Susskind et al. (2003). A five point Likert interval response scale from 1(*strongly disagree*) to 5(*strongly agree*) was used. A sample item is '*when performing my tasks, I rely heavily on my coworkers.*' Reliability coefficient was 0.60.

4.7.8 Supervisor Support (SS)

Supervisor support was measured using the four item scale developed by Susskind et al. (2003). A five point Likert interval response scale from 1(*strongly disagree*) to 5(*strongly agree*) was used. A sample item is '*I find my supervisor very helpful in performing my duties.*' Reliability coefficient was 0.81.

4.7.9 Job Overload (JO)

Job overload was measured by an eleven item scale used to describe an employee's job overload developed by Caplan, Cobb, French, Van Harrison and Pinneau (1980). A five point Likert interval response scale from 1(*Hardly any*) to 5(*a great deal*) was used. A sample item is, '*how often does your job leave you with little time to get things done?*' Reliability coefficient was 0.67.

4.7.10 Work Home Interference (WHI)

Work home interference was measured by an eight item measure developed by Kopelman, Greenhaus and Connolly (1983). A five point Likert interval response scale from 1(*strongly disagree*) to 5(*strongly agree*) was used. A sample item is, '*after work I come home too tired to do some of the things I'd like to do.*' Reliability coefficient for this data set was 0.93.

4.7.11 Intention to Turnover (IT)

Intention to turnover was measured by a four item scale used by Farh, Tsui, Xin and Cheng (1998). A five point Likert scale from 1 (*strongly disagree*) to 5(*strongly agree*) was used. A sample item is, '*I may leave this company and work for another company in the next year*'. For this study the reliability coefficient was 0.77.

4.7.12 Affective Commitment (AC)

Affective commitment was measured using an eight item scale developed by Meyer and Allen (1997). A five point Likert interval response scale from 1(*strongly disagree*) to 5(*Strongly agree*) was used. A sample item is, "*I think I could easily become attached to another organization as I am to this one.* For this data set the reliability coefficient was 0.42. Cronbach alpha reliability coefficient measures the interrelatedness / internal consistency among the items and its value ranges from 0 to 1. The closer the coefficient is to 1, the higher the internal consistency of the items in the scale (Cortina 1993). The following rules of thumb have been provided by George and Mallery (2003) : ≥ 0.9 excellent, ≥ 0.8 good, ≥ 0.7 acceptable, ≥ 0.6 questionable, ≥ 0.5 poor, and < 0.5 unacceptable. The low reliability coefficient for affective commitment reported in both the pilot (0.57) and main study (0.42) could be

caused by a number of things. For example, the researcher suspects that educational status of respondents might have contributed in a different understanding of the scales to what they are supposed to mean. Moreover, the results showed that removing some of the items improved the value of the alpha coefficient. For this data set the Cronbach alpha for respondents with educational status of 'high school' and 'college' was 0.33 and removing the item '*I do not feel like part of the family at my organization*' improved it to 0.41. On the other hand, the Cronbach alpha for more educated respondents holding qualifications of bachelor's degree and above the Cronbach alpha was 0.53 and removing the item '*I think I could easily become attached to another organization as I am to this one*' improved it to 0.66. Both these items are reverse coded items in the Affective commitment scale and could have caused confusion in understanding by the respondents. Although the Cronbach alpha was lower than the required alpha for statistical reliability, evidence from the data suggest that for more educated respondents, the Cronbach alpha improved. This is supported by Gbadamosi & Al-Qahtany (2005) study exploring the influence of performance appraisal discomfort and beliefs on the three facets of commitment in 400 public sector employees in Botswana. Most of their respondents were well educated with 69% possessing a basic university degree or higher and 14 % had professional qualifications. They reported a Cronbach alpha of 0.75 for affective commitment. For this sample, a majority of the respondents (50%) possessed a qualification less than college certificate and only 33.8 % possessed basic university degree or higher with 11.4 % possessing 'other' qualifications and 4.8% respondents did not report their educational status. Perhaps for future studies in a similar cultural sample, the two items responsible for lowering the Cronbach alpha in both educational groups must be re-examined and modified accordingly. Cortina, J.M. (1993) further explains how

coefficient alpha have misunderstood in applied psychological research and how the coefficient is affected by a number of items including item intercorrelations and dimensionality. They argue that alpha can be rather high and acceptable (greater than 0.7) in spite of low average item intercorrelation provided there is a sufficient number of items. This according to her means an adequate coefficient alpha suggests only that, on average, the items are highly correlated and says nothing about the extent to which the items are measuring the construct that they are intended to measure. In other words, coefficient alpha test can be used to measure something consistently, but what that is, could still be unknown (Cortina 1993). The argument brought forward by Cortina (1993) is that although coefficient alpha is useful in measuring internal consistency it is not a remedy or an answer for construct validity but intercorrelation of the items. For example a high alpha of greater than 0.70 does reflect internal consistency of the items and a low alpha reflects that the items are not consistent. It is for this reason that the researcher suspects that the affective commitment scale developed by Meyer and Allen (1997) were probably not very well understood by the sample under consideration for this study resulting in a low internal consistency and low alpha coefficient. The researcher is aware that this low value of alpha can cast doubts on the findings of this study and therefore the results will be interpreted with caution against this limitation.

TABLE 1. SUMMARY OF MEASURES, THEIR SOURCES REPORTED COEFFICIENT ALPHAS FROM THEIR ORIGINAL SOURCES, PILOT STUDY ALPHAS AND MAIN STUDY ALPHA

S/N	Variable	# of items	Source of scale	Reported alpha	Pilot study alpha	Main study alpha
1	Engagement (UWES)	9	Schaufeli et al. (2006)	0.85-0.92	0.91	0.69
2	Engagement (ISA)	9	Soane et al. (2012)	0.91	0.88	0.85
3	Ubuntu	13	Sigger et al. (2010)	0.52-0.69	N/A	0.71
4	DJ	3	Joy and Witt (1992)	0.83	0.80	0.71
5	JA	4	Frese et al. (1996)	0.78	0.80	0.72
6	OBSE	10	Pierce et al. (1989)	0.86-0.96	0.92	0.83
7	GSE	8	Chen et al. (2001)	0.86-0.90	0.84	0.84
8	CS	3	Susskind et al. (2003)	0.74	N/A	0.60
9	SS	3	Susskind et al. (2003)	0.68	N/A	0.81
10	JO	11	Caplan et al. (1980)	0.72-0.81	0.72	0.67
11	WHI	8	Kopelman et al. (1983)	0.78-0.90	0.93	0.93
12	IT	4	Farh et al. (1998)	N/A	N/A	0.77
13	AC	8	Meyer and Allen (1997)	0.77-0.88	0.57	0.42

Note: N=438, OBSE is organizational based self-esteem, GSE is generalised self-efficacy, JA is job autonomy, DJ is distributive justice, JO is Job overload, WHI is work home interference, AC is affective commitment, IT is intention to turnover, Ubuntu is Ubuntu construct, CS is colleague support, SS is supervisor support .

4.8 Demographic Variables

As already explained in the literature review section, a number of demographic variables have been found to be associated with employee engagement. In order to clarify the relationship between employee engagement and its antecedents and outcomes, it is therefore important to control for these variables so that we can be confident that the change in employee engagement is explained by the study variables without any influence from the demographic variables. Demographic variables included in the survey are gender, age, educational status, tenure, marital status, employment status, dependents, citizenship, job position, days working per week, and monthly income. Lastly, employees were requested to report what best describes their organization in terms of sector.

Respondents' options for this question included (1) Government, (2) Parastatal (3) Private sector (4) Not for profit-NGO. Although funded by the government, parastatal organizations are autonomous and conduct their day to day operations such as Human Resource management practices with little or no interference from government therefore holding a similar position to private sector organizations in terms of Human Resource practices. In contrast, the government has direct control of public service and NGO's in terms of their day to day operations. Unlike private and parastatal organizations, these organizations have no profit imperative. Since this study is concerned with the management of human resources it was reasonable to combine employees working for parastatal organizations with those working in the private sector, and those working for NGO's with the public sector, resulting in only two employment sectors (private and public). The categorization of sectors in the survey was done as it would have been difficult for some employees to select between private and public sector based on the explanation given above.

4.9 Structure and Layout of the Questionnaire

Saunders et al. (2012) advise that, when constructing a questionnaire, it is a good idea to spend time considering the order and flow of the questions. The questionnaire began with a small section requesting participation from the respondents on the first page. Although participation was encouraged it was made clear that respondents are free to discontinue participation if they so wish. Following the cover letter all the variables scales were then presented. Demographic variables were placed at the end of the questionnaire resulting in a total of 108 questions to be considered by respondents. Although the questionnaire was a bit long it was printed in only two pages. Dillman (2007) suggests that, in order to achieve a high response rate, in addition to the covering letter the questionnaire must include a clear unbiased banner or title which conveys the topic of the questionnaire and make it sound interesting. This recommendation was taken into consideration when developing the questionnaire. In order to make it more appealing to respondents the questionnaire was printed on good quality paper with colour printing using shades that can generate slightly more responses (Saunders et al., 2012)

4.10 Sampling and the Study Sample

While it may be possible to collect data from every possible case, most of the time it will be impossible to collect all the data because of restrictions of time, money and access. Sampling provides methods that enable the researcher to reduce the amount of data needed by considering data from a sub group instead of all possible cases or elements of study. Selecting a sampling technique depends on the research questions

to be answered and how the results will be used (Saunders et al., 2012). Basic statistics text books identify two sampling techniques: probability and non-probability. As opposed to qualitative research, quantitative research predominantly uses probability sampling techniques. Under this technique every member of the study population has a chance of being selected and it enables statistical inference and generalization of the findings. Probability sampling can be divided into four stages. (1) Defining the population of concern. The population of concern for this study was private and public sector organizations (2) Identifying a suitable frame based on the research question (s) or objectives. For this study a suitable sampling frame is a list of private and public sector organizations in Botswana. (3) Specifying a sampling method. For this study, all organizations and employees willing to participate were invited to take part therefore strict probability sampling procedure was not applied. (4). Deciding on a suitable sample size. The decision on the sample size was governed by a number of factors.

- The type of analyses that were going to be performed and the minimum number of cases needed to make such analysis.
- The margin of error that will be tolerated, that is the level of accuracy for estimates that will be made from the sample.
- The confidence interval. That is the level of certainty that the characteristics of the data collected will represent the characteristics of the total population.

Sampling Technique

The process of how this sample was selected is described below. Prior to data collection, letters of invitation to participate were sent to private and public sector organizations identified by the researcher through personal networks. The organizations identified were those the researcher believed would be willing to participate. This means the use of probability sampling techniques was not meticulously followed since non-probability purposive sampling was used to identify organizations through personal networks. In the private sector, ten organizations were invited to participate and only four were willing to participate. The participating organizations included the following: Botswana Savings Bank (BSB), Oseg Call Centre Group, Habana (an architectural firm) and Motse Hotel. To encourage participation, all organizations were promised a report of the findings that related specifically to them. With regards to the public sector five government ministries were invited to participate and only two were willing to participate. The participating ministries were the Ministry of Education (MoE) and the Ministry of Health (MoH). Public schools teachers and health officials in public health institutions mainly participated in the study.

4.11 Data Collection

Two modes of questionnaire administration (internet based and printed) were prepared for distribution. The Qualtrics online questionnaire development tool was used for online data collection. An Internet-based self-report survey involves a computerized, self-administered questionnaire which the researcher sends and the respondent receives, completes and sends back through the email system. (Simsek & Veiga, 2001).

Such survey according to Bradley (1999) can be categorised into three types: (1) sending an email message with the survey as a part of the message text; (2) sending the survey as an attachment to an email message that the respondent must open and respond to; and (3) sending an email message with a URL embedded- message in the text which the respondent clicks and is then taken to a host site where they view and respond to a survey instrument (Simsek & Veiga, 2001). Internet based self- report surveys have both advantages and limitations. For example, the advantages are that they are less costly and have faster speed of data collection. Their disadvantages are that they usually result in low response rates and they present technical challenges for respondents with limited technological knowledge. Printed self-administered surveys on the other hand can rest assured that the respondents are able to answer the questions, although it is very costly. These two modes of data collection were also piloted during the pilot study and findings showed high response rates for the printed version. Based on the large sample size requirement for data analysis for this study the printed version was preferred over the online version although both were prepared. The researcher approached Human Resources managers in the organizations to discuss how best the data collection process could be handled for optimum results. It is important to note that for private sector organizations, the researcher was not allowed to administer the research but was requested to leave it with the HR department which would then distribute and administer it and the researcher then contacted to come and collect. This was because of the competitive nature and confidentiality issues associated with private sector businesses. The researcher had no direct contact with the respondents and the distribution of the survey was done by the organizations' HR departments. Esterby-Smith et al. (2012) state that when conducting questionnaire surveys and seeking views of specific respondents, there is no guarantee that responses might be

drafted by the respondents themselves. The researcher briefed the HR managers about confidentiality clauses and how employees should be encouraged, but not forced to participate. For public sector organizations, the researcher was allowed to distribute the questionnaire at work and all participating employees were given time to complete the survey. Before administering the survey, employees were informed about the purpose of the study and its confidentiality and were encouraged to participate by the researcher. For all public sector organizations the researcher administered the survey and was always available on the research site to explain any questions arising from respondents.

4.12 Sample Size

One of the questions that confronts a researcher is how big the sample should be (Sudman, 1983). There are several ways of approaching this problem. Sudman (1983) suggests two approaches. (1).the easiest approach is to check the sample size that has been used by other researchers with similar problems. (2).another approach is to balance the value of increased information against the costs of gathering data. These approaches, although reasonable, are not precise on a sample size to be adequate for statistical analysis. The factors governing the sample size for this study have been discussed in section 4.6 above. Statisticians have proved that the larger the sample size, the more closely its distribution will be to the normal distribution. Statisticians have also shown that a sample size of thirty or more will usually result in a sampling distribution for the mean that is very close to the normal distribution. Based on this reason, Stutely (2003) recommends a minimum of thirty cases per in each variable within the overall sample. Following this recommendation, this study had twelve

variables and a minimum required sample of three hundred and sixty was therefore required for undertaking statistical analysis. A total of one thousand printed surveys were administered. Four hundred and seventy were administered in private sector and the remaining five hundred and thirty in public sector organizations. Of the one thousand distributed surveys, four hundred and thirty eight usable questionnaires (175, public sector) and (263, private sector) were returned, resulting in a response rate of 43.8%.

4.12 Pilot Study

Prior to the main field work, a pilot study was conducted in order to develop and test the adequacy of the research instrument and assess the feasibility of the full scale survey. This section will begin by defining a pilot study and its value and why it was necessary for this study. It will then discuss the process involved in conducting the pilot study. The preliminary findings from the pilot study and how they informed decisions made for the actual study will then be presented. The section will conclude by presenting a diagram showing the changes that were adopted based on the pilot study.

4.12.1 Definition and Value of the Pilot Study

A pilot study is a small scale study done in preparation for the full scale study. The purpose of the pilot study is to enable the researcher to obtain some assessment of the questions validity and reliability of the data that will be collected (Saunders et al., 2012). Preliminary analysis of the pilot data can be undertaken to ensure that the data collected will enable the researcher to answer the research questions. Saunders et al. (2012) suggest that initially a researcher should ask a group of experts to comment on

the suitability of the questions and suggest the structure of the questionnaire. The sample size of the pilot study is dependent on a number of things including the size of the research project, availability of time and resources. It was important to conduct a pilot study for this study for a number of reasons. First, this study used already existing measures which have been mostly used in Western samples. Conducting the pilot would help to find out whether respondents in a culturally different research context had any problems in understanding the questions. Their responses helped the researcher assess the reliability and suitability of the questions. Second, the pilot study helped the researcher to find out how long the questionnaire took to complete, the clarity of instructions and questions to respondents, which questions the respondents felt uneasy in answering and whether the structure and layout was clear and attractive. Third, conducting the pilot informed the researcher about the amount of time that was reasonably required to do the main field work. Access to the pilot study sample was sought three months before the researcher left for field work. In summary, the pilot was of value in testing the feasibility of the research instrument and the research process itself.

4.12.2 Sample Selection and Mode of Data Collection

A similar sampling technique and process to that discussed above was employed for the pilot study. Participants (N=157) were employed in five different professions from the fields of healthcare, teaching, banking, government ministries and hospitality. Human Resource managers were approached and informed about the study. After managers expressed consent to participate 568 surveys were distributed to potential respondents and 157 usable were returned resulting in a 27.6% response rate.

Information about the research was provided and voluntariness, anonymity and confidentiality of responses were emphasized. The pilot study used both online and printed surveys. The response rate for the online survey was very low (16.2%) compared to the printed surveys (29.2%). Although both modes of data collection were maintained for the main survey more emphasis was put on the printed hard copy surveys.

4.12.3 Outcomes of the Pilot Study and Application to Main Study

This part of the discussion will cover information gained from the pilot study. The section will be divided into three subsections. The first subsection will discuss the assessment of the questionnaire in terms of inclusion and exclusion of measures. The second subsection will describe the practical consideration with regards to field work protocol and logistical problems that the researcher experienced. Third, the main findings from the pilot study and how they influenced the main study will be discussed. At the end of this section, the researcher will present a diagram showing a brief overview of the outcomes of the pilot and the modification to the main study based on the pilot study and other changes made as the study progressed.

4.12.4 Variables Included in Main Study Which were not in Pilot

With the exception of three variables, all measures used in the main study presented earlier on were included on the pilot study questionnaire. This was because, as the research progressed, there were some modifications on the conceptual framework which resulted in an inclusion of three more variables and a removal of one. The three additional variables which were not included in the pilot study were (a) Ubuntu

construct (b) Supervisor support (c) Colleague support. It is important to note again that this study uses the JD-R model to investigate employee engagement in Botswana. Initially the intention of the study was to apply the JD-R model in its original form. As the research progressed the researcher realised that the JD-R model had been extensively used in understanding employee engagement, and that research findings on how job resources and demands are related to employee engagement are almost in agreement, and conclusive. This implied that using the JD-R model in its original form to investigate engagement would not be adding anything new to theory. Based on this, the researcher decided to include the Ubuntu variable in order to increase the relevance and applicability of the JD-R model in the African context. Because Ubuntu promotes compassion and humanity, it was reasonable to expect that it would explain the process through which social resources influence employee engagement (Mbigi, 1997; Tutu, 1999). Social resources include formal, work related interactions at work such as supervisor support and colleague support. However, people are likely to interact in more informal ways suggesting that the quality of formal interactions are to some degree influenced by the quality of informal interpersonal relationships. These interpersonal relationships can exist in various forms and Ubuntu is one of them. It was therefore expected that Ubuntu would explain the mechanism through which social resources affect employee engagement. Based on this reasoning the variables ‘supervisor support’ and ‘colleague support’ were included to the main study questionnaire.

4.12.5 Variables Excluded in Main Study which were in Pilot

Procedural justice was included in the pilot study but later removed in the main study questionnaire. This was because much of the work on procedural justice was not within the context of organizations but rather in the context of legal procedures (Nowakowski & Conlon, 2005).

4.12.6 Field Work Protocol and Logistical Problems Experienced During Pilot Study

During the data collection period for the pilot, the researcher identified a number of challenges relating to the process which had a negative bearing on the data collection exercise. The bullet points below present the challenges and how the researcher minimised the challenges during the main study.

- The response rate for the online survey was less than for the printed survey. Based on this finding the researcher decided to maintain both modes of data collection but give more preference to the printed survey.
- The timing of the main study. The pilot study was conducted in February- March 2014 which coincided with the end of government fiscal year. Employees were busy with submitting end of year reports. The researcher decided to avoid unfavourable times like this for the main study.
- In the pilot study questionnaire, the two employee engagement measures were placed one after the other. Since these measures are measuring the same construct the questions sounded repetitive. For the main survey the researcher decided to place the two measures in

different sections of the questionnaire. This was also done to allow a psychological separation between the two scales hence minimising the effect of common method bias (Podsakoff, MacKenzie, Jeong-Yeon & Podsakoff, 2003).

4.12.7 Findings from the Pilot Study

This section will present the main findings of the pilot study. Three main findings will be discussed: (1).scale reliabilities and intercorrelations among variables; (2).theoretical operationalization of the two employee engagement measures used and lastly; (3) predictive power of the employee engagement measures.

- (1) ***Scale reliabilities correlations:*** As already stated before, this study used existing measures which were developed and used mostly in samples in Western nations. Although the official language in Botswana is English it was important for the researcher to confirm that the respondents understood the measures the way they are meant to be understood. Secondly it was important for the researcher to examine the correlations among study variables in order to ensure that the variables were not highly correlated. The correlation matrix revealed scale reliabilities within the acceptable range with the exception of affective commitment. The researcher suspected that the low affective commitment reliability could be explained by the small sample size. Visual observation of the correlation coefficients suggested that multicollinearity was not a problem. Interestingly, the correlation coefficient between the two employee engagements was relatively high suggesting that the two measures measure the same thing.

- (2) ***Theoretical Operationalization:*** Different approaches to studying employee engagement and their accompanying measures have been suggested, as already stated in the literature review section. Most of these approaches are in agreement that employee engagement is a three dimensional construct. However, there have been doubts on whether some of the measures used operationalize the construct as a three dimensional construct and the findings of this research are inconclusive. The researcher decided to include two measures (UWES-9) and ISA, in order to check whether the three dimensional structure suggested by their definition would be supported by this sample. In terms of the operationalization of the construct, principal component analysis (PCA) identified a purported three dimensional structure for the ISA. However the same was not identified for the UWES-9.
- (3) ***Predictive Power:*** In answering the research questions, this study will employ the use of regression analysis to predict relationships between the dependent variable (employee engagement) and predictor variables. Although the UWES-9 has been recommended in the literature as having a stronger predictive power, it was important for the researcher to investigate whether this would hold for this sample. Regression analysis indicated the UWES-9 performed slightly better compared to the ISA in predicting affective commitment and intention to turnover indicating that, of the two the UWES-9 is a better predictor of work outcomes.

4.12.8 The Value of the Pilot Study

The value of the pilot study is recognised in a number of modifications made for the full scale study. The pilot study was valuable in assessing both the practical feasibility of the study as well as the validity and reliability of the measures for the study. Through the pilot study findings, the researcher was certain that the study variables were not highly correlated amongst themselves and the scale reliabilities were within acceptable ranges. The psychometric analysis of the employee engagement measures identified which, of the two, was a better predictor of work outcomes. The pilot study therefore contributed immensely towards the success of the main study.

Perhaps the most important lesson learnt from the pilot study was to make the researcher aware that the use of the JD-R model with the study variables in its original form to explore employee engagement would not contribute anything new to knowledge. This was therefore also a process of personal growth towards enhancing the researcher's understanding of identifying the gap in the literature and moving the academic discussion forward.

4.13 Methodological Limitations

Issues arising from methodological limitations can be particularly problematic in management research because, if not addressed properly, they can severely undermine valid inferences and limit the ability to generalize to populations of interest (Cascio, 2012). More specifically they can lead to unsound recommendations to practice. As a direct consequence of this methodology this study encountered two limitations which need to be considered.

1. *Language*: This study used survey items that were developed in one country and then ‘exported’ to a different country. Although the items were in the English language, which is the official language and well understood by majority of employees, the problem is that each culture views life in a unique fashion depending on the norms, values, attitudes and experiences of that culture. Thus, it might be possible that the understanding of some of the items such as affective commitment items were understood in a different way, hence the low reliability coefficient.
2. *Response bias*: Response bias is a type of bias that can affect the results of a statistical survey if respondents answer questions in a way that they think the researcher wants them to answer rather than according to their true belief (Richman, Kiesler, Weisband, & Drasgow, 1999). As stated earlier, for private sector employees the questionnaires were distributed by their HR managers and this could have in a way resulted in respondents answering in a way which they thought was acceptable to the HR department. Consistent with this line of reasoning, although on a lesser scale because the researcher is not part of their organizations, public sector employees may have answered in a way that they think the researcher wanted them to.

In conclusion, it is important to point out that organizations which participated in this study were those willing to take part therefore limiting the generalizability of the findings. Also the inability of the researcher to have direct contact with the respondents may have affected the data collection procedure intended by the researcher. Whilst promises were made to administer the questionnaire and explain to the respondents as instructed, the researcher cannot ascertain that the procedures were followed.

4.14 Data Cleaning and Study Sample

Inspection of the questionnaires was undertaken to check for valid and invalid responses. Numeric codes were assigned to the demographic variables. Data was entered into SPSS and preliminary analysis was performed to explore the data. The goal of this analysis was to identify missing responses, data entry errors, checking for outliers and any abnormalities. A summary of the description of the sample was conducted and results are presented in the table below.

TABLE 2 SAMPLE CHARACTERISTICS

	All Sectors		Public Sector		Private Sector	
Variable	Frequency	%	Frequency	%	Frequency	%
Gender						
Male	156	35.6	71	40.6	85	32.3
Female	279	63.7	101	57.7	178	67.7
Missing	3	0.7	3	1.7	0	0
Age (yrs)						
Below 20	5	1.1	1	6	4	1.5
20-25	76	17.4	13	7.4	63	24.0
26-30	100	22.8	39	22.3	61	23.2
31-40	149	34.0	53	30.3	96	36.5
41-50	76	17.4	44	25.1	32	12.2
Over 50	29	6.6	23	13.1	6	2.3
Missing	3	0.7	2	1.1	1	0.4
Education Status						
High School	57	13.0	25	14.3	32	12.2
College	162	37.0	74	42.3	88	33.5
Bachelor's	129	29.5	40	22.9	89	33.8
Post graduate	19	4.3	2	1.1	17	6.5
Other	50	11.4	23	13.1	27	10.3
Missing	21	4.8	11	6.3	10	3.8
Marital Status						
Single	290	66.2	104	59.4	186	70.7
Married	131	29.9	61	34.9	70	26.6
Separated	5	1.1	2	1.1	3	1.1
Divorced	11	2.5	7	4.0	4	1.5
Widowed	1	2	1	0.6	0	0
Missing	0	0	0	0	0	0
Current Job position						
Staff	295	67.4	98	56.0	197	74.9
Supervisory	60	13.7	28	16.0	32	12.2
Middle Management	53	12.1	30	17.1	23	8.7
Senior Management	26	5.9	18	10.3	8	3.0
Missing	4	0.9	1	0.6	3	1.1
Employment Status						
Full time	418	95.4	165	94.3	253	96.2
Part time	16	3.7	9	5.1	7	2.7
Casual	4	0.9	1	0.6	3	1.1
missing	0	0	0	0	0	0
No. of days working per week						
1-4	4	0.9	2	1.1	2	0.8
5	252	57.5	142	81.1	110	41.8
More than 5	181	41.3	30	17.1	151	57.4
Missing	1	0.2	1	0.6	0	0
Tenure (Total yrs worked)						
0-1	52	11.9	5	2.9	47	17.9
2-5	121	27.6	39	22.3	82	31.2
6-10	94	21.5	33	18.9	61	23.2
11-15	51	11.6	17	9.7	34	12.9
15 and Above	106	24.2	70	40.0	36	13.7
Missing	14	3.2	11	6.3	3	1.1
Tenure (Total Years in organization)						
0-1	98	22.4	14	8.0	84	31.9
2-5	130	29.7	52	29.7	78	29.7
6-10	91	20.8	37	21.1	54	20.5

11-15	40	9.1	12	6.9	28	10.6
15 and above	67	15.3	51	29.1	16	6.1
Missing	12	2.7	9	5.1	3	1.1
Dependents						
Yes	329	75.1	148	84.6	181	68.8
No	109	24.9	27	15.4	82	31.2
Missing	0	0	0	0	0	0
Citizenship						
Citizen	433	98.9	174	99.4	259	98.5
Non-citizen	5	1.1	1	0.6	4	1.5
Missing	0	0	0	0	0	0
Type of organization						
Government	168	38.4				
Parastatal	127	29.0				
Private sector	136	31.1				
Not for profit	7	1.6				
Missing	0	0				
Monthly income						
Under P5,000	122	27.9	29	16.6	93	35.4
P5001-P10K	148	33.8	76	43.4	72	27.4
P10,001-P20K	88	20.1	46	26.3	42	16.0
P20,001-P30K	20	4.6	5	2.9	15	5.7
Over 30K	12	2.7	2	1.1	10	3.8
Prefer not to say	47	10.7	17	9.7	30	11.4
Missing	1	0.2	0	0	1	0.4

4.15 Summary

In this chapter the philosophical assumptions underlying the research methodology were reviewed. In addition a discussion for the design of the study was made. Finally, the data entry and cleaning exercise was described and sample characteristics presented. The measures used to operationalize the study variables together with their reliability coefficients were presented. The next chapter will present data analyses and findings.

Chapter 5 Data Analysis and Results

5.1 Introduction

This chapter presents findings from data analysis. The chapter will be divided into four sections. It will begin by presenting descriptive statistics and a discussion on common method bias. The second section will provide results of hypotheses testing; (a) Hypothesis 1 - multiple regression analysis used to test the relationship between resources and employee engagement. (b) Hypothesis 2 - results testing moderating effects of job demands on the relationship between resources and employee engagement. (c) Hypothesis 3- results testing the mediation effect of employee engagement on the relationship between resources and positive behavioural outcomes. (d) Hypothesis 4 - the mediation effect of Ubuntu on the relationship between social resources and employee engagement. The third section will give a brief summary of the results.

5.2 Descriptive Statistics

Table 3 presents the scale reliabilities, means and standard deviations for each scale and inter correlations for all study variables. All the inter correlations show the expected direction of association and a majority of them are significant at $p < 0.001$ level. It is important to note that correlations coefficients range from -0.104 to 0.57 and there are no correlations above 0.70; therefore we can assume there are no problems of multicollinearity in the regression analysis that will follow. The Variance Inflation Factors (VIF) were all less than 10 with the highest being 8.385 [See appendix 2], again suggesting multicollinearity was not a problem.

TABLE 3 DESCRIPTIVE STATISTICS, CORRELATIONS AND SCALE RELIABILITIES

	Mean	S.D	1	2	3	4	5	6	7	8	9	10	11	12	13
UWES	3.64	.774	(0.70)												
ISA	4.12	.560	.431**	(0.85)											
OBSE	4.03	.526	.415**	.459**	(0.83)										
GSE	4.19	.488	.296**	.426**	.503**	(0.84)									
JA	3.53	.962	.324**	.237**	.193**	.189**	(0.72)								
DJ	3.53	.829	.459**	.366**	.401**	.248**	.285**	(0.71)							
JO	3.52	.504	.095	.181**	.060	.173**	.179**	-.007	(0.67)						
WHI	2.57	.835	-.017	-.038	-.129*	-.086	-.089	-.013	.195**	(0.89)					
AC	3.15	.560	.414**	.252**	.336**	.140**	.293**	.347**	-.012	-.183**	(0.42)				
IT	2.94	.998	-.334**	-.308**	-.280**	-.104*	-.338**	-.306**	.000	.295**	-.500**	(0.77)			
Ubuntu	3.56	.499	.447**	.301**	.270**	.190**	.174**	.333**	.096	.119*	.257**	-.143**	(0.71)		
CS	3.48	.769	.314**	.363**	.269**	.133**	.127**	.471**	.020	.170**	.206**	-.153**	.381**	(0.60)	
SS	3.22	.898	.332**	.343**	.253**	.090	.224**	.487**	.011	.142**	.262**	-.218**	.317**	.570**	(0.81)

Notes: N=438, **Correlation is significant at 0.01 level *Correlation is significant at 0.05 level. Scales reliabilities in parentheses diagonally. UWES is employee engagement using the UWES-9 measure

ISA is employee engagement using the ISA measure. OBSE is Organizational based self-esteem, GSE is generalised self-efficacy, JA is Job Autonomy, DJ is Distributive justice, JO is Job overload, WHI is Work Home interference, AC is affective commitment, IT intention to turnover, Ubuntu is Ubuntu construct, CS is Colleague support, SS is supervisor support.

5.3 Common Method Bias

Common Method Bias (CMB) refers to the spurious variance that is attributable to the measurement method rather than to the constructs the measures are assumed to represent (Podsakoff et al., 2003). Most researchers agree that it is a potential problem in behavioural research (Conway & Lance, 2010; Jakobsen & Jensen, 2015; Meade, Watson & Kroustalis, 2007). Podsakoff et al. (2003) listed potential sources of common method biases and evaluated different procedural and statistical techniques that can be used to control common method bias together with recommendations of how to select appropriate remedies for different types of research settings. Two variables frequently assumed to cause CMB are the respondents' affective states and the tendency to respond in a socially desirable manner (Podsakoff et al., 2003). Since this study used self-reports measures the main focus of discussion on CMB will be on the use of self-reports as a measurement method. Podsakoff and Todor (1985) stated that "invariably, when self-report measures obtained from the same sample are utilized in research, concern over the same source bias or general method variances arises" (p. 65). Organ and Ryan (1995) supported this by stating that studies that use self-ratings along with self-reports of dispositional and attitudinal variables invite spuriously high correlations confounded by common method variance. As a result of this, researchers are encouraged to design studies that minimize CMB and present their research in a way that proactively addresses its concerns. Conway and Lance (2010) catalogue three prevailing misconceptions about CMB that can impede progress of research: (a) relationships between self-reported variables are necessarily and routinely upward biased; (b) other reports/ methods are superior to self-report; (c) rating sources constitute mere alternative measurement methods. They go on to specifically discuss these misconceptions and conclude that it is not possible to ensure

that method effects do not influence results, but it is reasonable for reviewers to expect authors to take certain steps to reduce the likelihood of CMB. They conclude by recommending four things researchers can do to address the problem of CMB.

First, researchers should be able to provide a solid rationale for their choice of method. For example in this study self-reports were particularly appropriate as it has been argued that employees are best suited to self-report because they are the ones who are aware of the subtle things they do in their jobs (Shalley, Gilson, & Blum, 2009). Second, the researcher has to be able to demonstrate construct validity of the measures used and make an argument that the measures they chose have construct validity. This study used established scales and, because they were applied in a different setting from where they were originally developed, they were first piloted and the scale reliabilities were within the recommended ranges. The scale reliabilities of the main study are presented in the correlation matrix above. Third, conceptual overlap in items used to measure different constructs can bias relationships. For this study, the correlation coefficient matrix presented above demonstrates that, although the constructs are statistically associated they are not highly correlated, suggesting there is no conceptual overlap among the variables. Lastly, the researcher has to demonstrate that s/he proactively considered CMB. Based on the findings of the pilot the researcher rearranged the items in the questionnaire which seemed very similar to allow for psychological separation to minimize the effect of CMB (Podsakoff et al., 2003). For example, in the pilot study, employee engagement UWES items were immediately followed by ISA items. However, in the main study questionnaire items of other constructs were placed between them to allow for psychological separation between the two scales. Another way that was used to control for CMB was by protecting the respondents' anonymity and assuring them that there were no right or wrong answers

and they should answer the questions as honestly as possible (Podsakoff et al., 2003). This reduced respondents' apprehensions and made them less likely to edit their responses to be more socially desirable or consistent with how they thought the researcher wanted them to respond (Podsakoff et al., 2003).

Furthermore, the researcher can detect the influence of CMB statistically by carrying out the Harman single factor technique suggested by Podsakoff et al. (2003). [See appendix 2]. This employs calculating the Eigen values for all the study items and loading them into one factor. Note that principal component analysis is specified for a single factor without rotation. If a substantial amount of common method bias is present a single factor will emerge from the factor analysis or one general factor will account for the majority of the covariance between the variables (Podsakoff et al., 2003). In the present study, all the items were loaded into factor analysis using unrotated principal component analysis to determine the number of factors that were necessary to account for the variance in the variables. All the items were loaded into one factor to examine the fit of the analysis model. The unrotated principal factor analysis revealed that the single factor accounted for only 15.75% of the total variance, with the presence of 23 distinct factors with Eigen values greater than 1 and accounting for 68.43% of the total variance. Therefore no general factor is apparent. The KMO statistic value is 0.807 (above the minimum value of 0.5), and the Bartlett measure is significant ($p=0.000$), so we should be confident that the sample size is adequate for factor analysis. These results imply that CMB was not of great concern and therefore unlikely to confound the interpretation of the results. This means all the variables used for this study were distinct and therefore appropriate to be included in the statistical analyses. In summary, Podsakoff et al. (2003) state that the strength of CMB might vary across research contexts and it is often a problem that researcher need to control.

As it has been discussed above both procedural and statistical methods were applied to control for CMB.

5.4 Test of Hypotheses

The dissimilarities between private and public sector organizations in the Botswana context were highlighted in chapter two. One of the objectives of this study was to examine employee engagement comparatively between the two sectors. The test statistic used is Ordinary Least Squares (OLS) regression and therefore its assumptions will be briefly discussed below. Multiple regression, an extension of simple linear regression was use since we wanted to predict the value of the dependent variable (Y) based on the values of more than one independent variable (X_i 's). For moderation analysis the SPSS process plug-in developed by Hayes (2013) was used to generate the parameters of the regression models. For mediation analysis, Baron and Kenny (1986) four step regression approach was used.

5.4.1 Multiple Regression Analysis

Regression Assumptions

(a) *Additivity /Linearity* - This assumption states that the dependent variable should be linearly related to any predictors, and with several predictors, their combined effect is best described by adding their effects together. That is, the process we are trying to model can be described using a linear model. If this assumption is not met, then the model is not valid. In this study we have a dependent variable (Employee Engagement) and several predictors: Distributive Justice (DJ), Job Autonomy (JA), Organizational Based Self Esteem (OBSE), Generalized Self Efficacy (GSE), Supervisor Support (SS), and Colleague Support (CS). Our

objective is to find the combined effect on explaining employee engagement. The model can be represented as

$$Y = \alpha + \beta (DJ) + \beta (JA) + \beta (OBSE) + \beta (GSE) + \beta (SS) + \beta (CS) + e_i,$$

meeting the requirements of linearity.

(b) *Normal distribution of the error term* - This assumption suggests that the residuals in the model are random, normally distributed variables with mean 0 and variance σ^2 . It means that the difference between the model and the observed data are very close to zero. If it turns out that the random errors are not normally distributed, then inferences made may be incorrect.

(c). *Multicollinearity* - This assumption states that if the model has more than one predictor, then there should be no perfect linear relationship between two or more of the predictors. That is, predictor variables should not correlate too highly. One way of identifying multicollinearity is to scan the correlation matrix to see whether the predictors correlate very highly. However collinearity diagnostics in SPSS can be performed by the Variance Inflation Factor (VIF). If the VIF is greater than 10, then there is cause for concern (Bowerman & O'Connell, 1990). For this data set no VIF value was greater than 10 with the highest value being 8.385 (*See Appendix 2*) so multicollinearity was not a problem.

(d). *Strict exogeneity* - The OLS estimator is consistent when the repressors are exogenous. That is, independent of the random error term in the linear model. This assumption assumes that there are negligible errors in the independent variables since the OLS attempts to minimise the mean square error in the dependent variable. This assumption is critical for the OLS theory. That is, if you have the equation

$$Y = \alpha + \beta X_i + e_i \quad \text{then } E[e_i / X_i] = 0 \quad (i = 1, 2, \dots, n)$$

5.4.1 Hypothesis 1: Job (JA, DJ), personal (OBSE, GSE) and social (CS, SS) resources are positively related to employee engagement.

TABLE 4 SUMMARY REGRESSION ANALYSIS FOR VARIABLES PREDICTING EMPLOYEE ENGAGEMENT

Variable	All Sectors					Public sector (N=175)					Private sector (N=263)				
	β	SE (β)	R ²	AdjR ²	F	β	SE (β)	R ²	AdjR ²	F	β	SE (β)	R ²	AdjR ²	F
1 Control Variables			0.110	0.073	2.936**			0.333	0.258	4.442**			0.189	0.138	3.675**
2 OBSE	0.374**	0.088	0.409	0.372	11.022**	0.440*	0.193	0.605	0.534	11.578**	0.356**	0.083	0.444	0.389	13.950**
GSE	0.145	0.091				0.093	0.172				0.115	0.083			
JA	0.262*	0.056				0.247	0.084				0.007	0.039			
DJ	0.261**	0.041				0.342**	0.102				0.185*	0.058			
CS	0.118	0.060				0.009	0.101				0.150*	0.063			
SS	0.064	0.053				0.044	0.120				0.001	0.060			

Notes: *P<0.05, **p<0.01, β is unstandardized regression coefficient. OBSE is Organizational based self-esteem, GSE is generalised self-efficacy, JA is Job Autonomy, DJ is distributive justice, CS is Colleague support, SS is supervisor support. Control variables are gender, age, education status, tenure, marital status, employment status, job position, and citizenship status, days working per week, dependants and monthly income. Full table including control variables in appendix 1.

5.4.1.1 Interpretation of the Regression Coefficients (All Sectors)

Here we have a multiple regression equation to consider;

Y = Employee Engagement, X_1 = OBSE, X_2 = GSE, X_3 = JA, X_4 = DJ, X_5 = CS, X_6 = SS

Constant = 0.430 (*see appendix 2*)

$$Y = 0.430 + 0.374(X_1) + 0.145(X_2) + 0.262(X_3) + 0.261(X_4) + 0.118(X_5) + 0.064(X_6) + \epsilon_i$$

From table 4 above, we can see that only three predictors of employee engagement are statistically significant OBSE ($\beta = 0.374$, $p < 0.001$) suggesting that a one unit increase in OBSE will result in 0.374 increase in employee engagement, JA ($\beta = 0.262$, $p = 0.05$) suggesting that a one unit increase in JA will lead to a 0.262 increase in employee engagement. DJ ($\beta = 0.261$, $p < 0.001$) suggesting that a one unit increase in DJ will lead to a 0.261 unit increase in employee engagement. The remaining three predictors are not statistically significant meaning that we cannot meaningfully interpret them. The same interpretation will apply for both private and public sector multiple regression equations.

5.4.1.2 Interpretation of the Regression Models

Results in Table 4 indicate that 40.7% of the variance in employee engagement is explained by the independent variables partly lending support for Hypothesis 1. It is however important to note that not all the independent variables are statistically significant predictors of employee engagement. In the ‘all sector’ column, colleague and supervisor support are not statistically significant predictors of employee engagement. This finding also holds for public sector employees. Interestingly, for private sector employees, colleague support is a statistically significant predictor of employee engagement. OBSE and DJ are the only predictors that are statistically

significant predictors of employee engagement across sectors including all sectors, combined. The goodness of fit for the public sector model is higher ($R^2 = 60.6\%$) compared with private sector ($R^2 = 44.4\%$) of the variation in employee engagement explained by the predictors. Three predictors (OBSE, DJ and CS) are statistically significant as predictors for employee engagement among private sector employees. For public sector employees significant predictors are OBSE, JA and DJ. This suggests that both OBSE and DJ are important predictors of employee engagement for both sectors. However, CS is more important in private sector employees and JA in public sector employees. Finally, a reasonably good fit was observed in model 1 for public sector employees ($R^2 = 33.4\%$), signalling that, for public sector employees, demographic variables explain a reasonable amount of variance in employee engagement compared to private sector employees ($R^2 = 18.9\%$) employees. Of all the predictors tested OBSE appears to be the strongest predictor of work engagement.

5.4.1.2 Demographic Variables

Demographic variables which come out as significant predictors of employee engagement for all sectors are age ($\beta = -0.216$, $p < 0.001$), total tenure ($\beta = -0.032$, $p < 0.001$) and marital status ($\beta = -0.172$, $p = 0.05$). [Appendix 2]. Table 4 above show that demographic variables explain 10.7% of the variance in employee engagement for all sectors. For public sector employees demographic variables that are statistically significant predictors are gender ($\beta = 0.399$, $p < 0.05$), age ($\beta = -0.664$, $p < 0.001$) and total tenure ($\beta = 0.066$, $p < 0.001$) [appendix 2] with 33.4% of the variance in employee engagement explained by demographic variables. With regards to private sector employees only two demographic variables are statistically significant predictors; marital status ($\beta = -0.181$, $p < 0.05$) and citizenship status ($\beta = -0.851$, $p < 0.05$)

[appendix 2]. For this sector demographic variables are responsible for 18.9 % of the variance in employee engagement.

Decision Table for hypothesis 1

Hypotheses	All Sectors	Public Sector	Private Sector
(a)There is a positive relationship between OBSE and employee engagement	Supported	Supported	Supported
(b)There is a positive relationship between GSE and employee engagement	Not Supported	Not Supported	Not Supported
(c)There is a positive relationship between JA and employee engagement.	Supported	Not Supported	Not supported
(d)There is a positive relationship between DJ and employee engagement.	Supported	Supported	Supported
(e)There is a positive relationship between CS and employee engagement.	Not Supported	Not Supported	Supported
(f)There is a positive relationship between SS and employee engagement.	Not Supported	Not Supported	Not supported.

5.4.2 Hypothesis 2: Job demands moderates the relationship between resources

(job, personal, social) and employee engagement.

Specific hypotheses derived from the research model are:

(i) The positive relationship between distributive justice and employee engagement is moderated by job overload such that it is stronger for higher than for lower levels of job overload.

(ii).The positive relationship between job autonomy and employee engagement is moderated by job overload such that it is stronger for higher than for lower levels of job overload.

(iii).The positive relationship between OBSE and employee engagement is moderated by job overload such that it is stronger for higher than for lower levels of job overload.

(iv).The positive relationship between GSE and employee engagement is moderated by job overload such that it is stronger for higher than for lower levels of job overload.

(v).The positive relationship between SS and employee engagement is moderated by job overload such that it is stronger for higher than for lower levels of job overload.

(vi).The positive relationship between CS and employee engagement is moderated by job overload such that it is stronger for higher than for lower levels of job overload.

(vii).The positive relationship between distributive justice and employee engagement is moderated by WHI such that it is stronger for higher than for lower levels of job overload.

(viii).The positive relationship between job autonomy and employee engagement is moderated by WHI such that it is stronger for higher than for lower levels of job overload.

(ix).The positive relationship between OBSE and employee engagement is moderated by WHI such that it is stronger for higher than for lower levels of job overload.

(x).The positive relationship between GSE and employee engagement is moderated by WHI such that it is stronger for higher than for lower levels of job overload.

(xi).The positive relationship between SS and employee engagement is moderated by WHI such that it is stronger for higher than for lower levels of job overload.

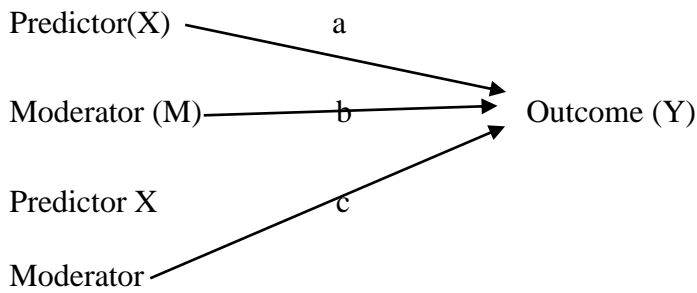
(xii).The positive relationship between CS and employee engagement is moderated by WHI such that it is stronger for higher than for lower levels of job overload.

5.4.2 Moderation Analysis

A moderator (M) is a variable that specifies the conditions under which a given independent variable (X) is related to an outcome (Y). Moderation implies an interaction effect where introducing it will change the strength and/or magnitude of the relationship between two variables. Hierarchical multiple regression is used to assess the effects of a moderating variable. To test moderation, we look at the statistical significance of the interaction between X and M in predicting Y. It is desirable that the moderator variable be uncorrelated with both the independent and outcome variable to provide a clearly interpretable interaction term (Baron & Kenny, 1986).

Statistically, moderation can be represented in the diagram below with three causal paths (Baron & Kenny, 1986).

FIGURE 4 MODERATOR MODEL



Path a represents the impact of X on Y. Path b represents the effect of moderator controlling for X. and path c represent the interaction product of path a and b. The moderator hypothesis is supported if the interaction path is statistically significant.

Two job demands (Job overload and Work Home Interference) were suggested for this study. The analysis section will be organized as follows. First it will present the findings of the whole sample to examine the interaction effect using all 438 respondents {Tables (a)'s}. Second, it will examine the interaction effect in both public {Tables (b)'s} and private {Tables(c)'s} sector employees and compare the results for the two sectors.

Table 5a. Regression results for testing moderation of job overload on the relationship between distributive justice and employee engagement for all sectors.

Variable	β	SE (β)	T	p
Constant	3.746**	0.705	5.316	0.000
JO	0.111	0.160	0.694	0.488
DJ	0.460**	0.069	6.638	0.000
DJ x JO	0.083	0.258	0.323	0.747
Gender	0.154	0.102	1.502	0.134
Age	-0.193	0.190	-1.017	0.310
Education	0.030	0.045	0.661	0.509
Total tenure	0.031*	0.014	2.221	0.027
Tenure :org	-0.006	0.008	-0.858	0.392
Marital Status	-0.148*	0.062	-2.387	0.018
Employment status	0.179	0.129	1.387	0.166
Children/Dependents	-0.217*	0.106	-2.044	0.042
Citizenship	-0.098	0.459	-0.213	0.832
Job Position	0.107	0.073	1.467	0.143
No. Of days working	0.072	0.090	0.797	0.426
Org Type	0.029	0.067	0.437	0.662
Income	-0.003	0.026	-0.125	0.901

Note: N= 324, $R^2 = 0.307$, ** $p < 0.01$, * $p < 0.05$, $F(16,307) = 7.641^{**}$ and β is unstandardized regression coefficient.

Interpretation of the Regression Coefficients

Here, we have a multiple regression equation to consider:

Y = Employee Engagement

X₁ = Distributive Justice

X₂ = Job overload (Moderator variable)

X₃ = Interaction term that is, (Distributive Justice X Job Overload)

A = constant

$$Y = 3.746 + 0.460(X_1) + 0.111 (X_2) + 0.083 (X_3) + \varepsilon_i$$

Regression coefficient for distributive justice is significant ($\beta_1 = 0.460$, $p < 0.000$)

suggesting that a one unit increase in distributive justice will result in 0.460 unit change in employee engagement.

Regression coefficient for job overload is not significant ($\beta_2 = 0.111$, $p > 0.05$), therefore we cannot meaningfully interpret it.

Similarly, regression coefficient for the interaction term is not significant ($\beta_3 = 0.083$, $p > 0.747$) suggesting that there is no significant moderation effect going on. β_3 estimates how much the change in employee engagement by one unit on distributive justice changes as a result of a unit change in job overload. Similar interpretation logic will apply for all moderation tables presented below.

Table 5b. Regression results for testing moderation of job overload on the relationship between distributive justice and employee engagement for public sector employees.

Variable	β	SE(β)	T	p
Constant	5.350	11.703	0.457	0.648
JO	0.124	0.273	0.457	0.649
DJ	0.528**	0.111	4.766	0.000
DJ x JO	0.109	0.439	0.248	0.805
Gender	0.289	0.152	1.899	0.060
Age	-0.746	0.458	-1.628	0.106
Education	0.086	0.083	1.035	0.303
Total tenure	0.076*	0.038	2.013	0.047
Tenure :org	-0.005	0.010	-0.434	0.665
Marital Status	-0.141	0.140	-1.006	0.317
Employment status	0.270	0.171	1.577	0.118
Children/Dependents	-0.467*	0.187	-2.497	0.014
Citizenship	0.070	11.629	0.006	0.995
Job Position	0.092	0.089	1.030	0.306
No. Of days working	0.008	0.182	0.044	0.965
Income	-0.053	0.070	-0.750	0.455

Note: N= 124, $R^2 = 0.498$, ** $p < 0.01$, * $p < 0.05$, $F(15,108) = 3.373^{**}$ and β is unstandardized regression coefficient

Table 5c. Regression results for testing moderation of job overload on the relationship between distributive justice and employee engagement for private sector employees.

Variable	β	SE(β)	T	p
Constant	3.417**	0.839	4.074	0.000
JO	0.028	0.120	0.236	0.814
DJ	0.366**	0.076	4.837	0.000
DJ x JO	-0.036	0.156	-0.232	0.817
Gender	-0.044	0.087	-0.502	0.616
Age	0.112	0.065	1.723	0.087
Education	0.005	0.043	0.119	0.906
Total tenure	0.015	0.010	1.482	0.140
Tenure :org	-0.017	0.010	-1.671	0.096
Marital Status	-0.135*	0.061	-2.207	0.029
Employment status	0.078	0.241	0.322	0.748
Children/Dependents	-0.025	0.102	-0.250	0.803
Citizenship	-0.073	0.778	-0.094	0.925
Job Position	0.042	0.062	0.680	0.497
No. Of days working	0.002	0.088	0.020	0.984
Income	0.017	0.028	0.617	0.538

Note: N= 200, $R^2 = 0.329$, ** $p < 0.01$, * $p < 0.05$, $F(15,184) = 5.451$ ** and β is unstandardized regression coefficient

To interpret the tables above we can examine the simple slopes which are shown in tables 5 a, b and c. Essentially, the moderation tables show us the results of three different regressions. For example, in the above tables: (a).The regression for the independent variable (DJ) as a predictor for the dependent variable (EE); (b). The regression for the moderator variable as a predictor of the dependent variable; (c). The regression for the interaction term. These regression lines are interpreted as any other. We are interested in the value of β for the interaction term and its statistical significance.

From the table above, the interaction term (DJ X JO) has an insignificant β value for all sectors ($\beta = 0.083$, $p > 0.05$), public sector ($\beta = 0.109$, $p > 0.05$) and private sector ($\beta = -0.036$, $p > 0.05$) suggesting that job overload does not moderate the relationship between distributive justice and employee engagement for this sample.

Table 6a. Regression results for testing moderation of job overload on the relationship between job autonomy and employee engagement for all sectors.

Variable	β	SE(β)	T	p
Constant	3.769**	0.793	4.754	0.000
JO	0.005	0.179	0.027	0.979
JA	0.208**	0.062	3.332	0.001
JA x JO	0.052	0.237	0.220	0.826
Gender	0.126	0.113	1.114	0.266
Age	-0.123	0.209	-0.585	0.559
Education	0.011	0.055	0.204	0.838
Total tenure	0.027	0.017	1.581	0.115
Tenure :org	-0.007	0.008	-0.898	0.370
Marital Status	-0.151*	0.067	-2.242	0.026
Employment status	0.146	0.123	1.186	0.237
Children/Dependents	-0.137	0.112	-1.228	0.220
Citizenship	-0.399	0.540	-0.740	0.460
Job Position	0.130	0.090	1.447	0.149
No. Of days working	0.114	0.100	1.139	0.255
Org Type	0.029	0.071	0.412	0.681
Income	-0.018	0.027	-0.677	0.499

Note: N= 325, $R^2 = 0.156$, **p<0.01, *p<0.05, F (16,308) = 3.795** and β is unstandardized regression coefficient

Table 6b. Regression results for testing moderation of job overload on the relationship between job autonomy and employee engagement for public sector employees.

Variable	β	SE(β)	T	p
Constant	5.692	4.109	1.385	0.169
JO	0.080	0.255	0.314	0.754
JA	0.436**	0.101	4.337	0.000
JA x JO	0.197	0.320	0.614	0.541
Gender	0.235	0.152	1.543	0.126
Age	-0.740	0.520	-1.421	0.158
Education	0.076	0.079	0.964	0.337
Total tenure	0.064	0.044	1.470	0.145
Tenure :org	0.002	0.012	0.183	0.855
Marital Status	-0.143	0.132	-1.083	0.281
Employment status	0.073	0.244	0.300	0.765
Children/Dependents	-0.377	0.244	-1.545	0.125
Citizenship	0.330	3.788	0.087	0.931
Job Position	0.071	0.103	0.685	0.495
No. Of days working	-0.126	0.186	-0.678	0.499
Income	-0.056	0.061	-0.930	0.355

Note: N= 124, $R^2 = 0.474$, ** $p < 0.01$, * $p < 0.05$, $F(15, 108) = 2.998^{**}$ and β is unstandardized regression coefficient

Table 6c. Regression results for testing moderation of job overload on the relationship between job autonomy and employee engagement for private sector employees.

Variable	β	SE(β)	T	p
Constant	3.424**	0.964	3.552	0.000
JO	-0.049	0.137	-0.632	0.718
JA	0.043	0.055	0.786	0.433
JA x JO	0.025	0.141	0.175	0.861
Gender	-0.072	0.104	-0.695	0.488
Age	0.188*	0.071	2.627	0.009
Education	0.004	0.047	0.094	0.925
Total tenure	0.011	0.010	1.139	0.256
Tenure :org	-0.021*	0.009	-2.313	0.022
Marital Status	-0.089	0.077	-1.163	0.246
Employment status	0.115	0.223	0.515	0.607
Children/Dependents	0.027	0.115	0.235	0.814
Citizenship	-0.485	0.914	-0.531	0.596
Job Position	0.092	0.066	1.398	0.164
No. Of days working	0.032	0.097	0.333	0.740
Income	0.010	0.027	-0.370	0.712

Note: N= 201, $R^2 = 0.163$, ** $p < 0.01$, * $p < 0.05$, $F(15, 185) = 4.344$ ** and β is unstandardized regression coefficient

From the table above, the interaction term (JA X JO) has an insignificant β value for all sectors ($\beta = 0.052$, $p > 0.05$), public sector ($\beta = 0.197$, $p > 0.05$) and private sector ($\beta = 0.025$, $p > 0.05$) suggesting that job overload does not moderate the relationship between JA and employee engagement for this sample.

Table 7a. Regression results for testing moderation of job overload on the relationship between organizational based self-esteem and employee engagement for all sectors.

Variable	β	SE(β)	T	p
Constant	4.109**	0.769	5.344	0.000
JO	0.031	0.171	0.182	0.856
OBSE	0.668**	0.099	6.735	0.000
OBSE x JO	0.335	0.367	0.913	0.362
Gender	0.148	0.117	1.263	0.208
Age	-0.176	0.189	-0.932	0.352
Education	0.002	0.049	0.034	0.973
Total tenure	0.029*	0.014	2.025	0.044
Tenure :org	-0.004	0.009	-0.485	0.628
Marital Status	-0.117	0.063	-1.853	0.065
Employment status	0.121	0.128	0.947	0.344
Children/Dependents	-0.150	0.114	-1.318	0.189
Citizenship	-0.634	0.637	-0.995	0.321
Job Position	0.104	0.077	1.346	0.179
No. Of days working	0.147	0.099	1.481	0.140
Org Type	0.016	0.064	0.255	0.799
Income	-0.005	0.027	-0.205	0.838

Note: N=311, $R^2 = 0.293$, ** $p < 0.01$, * $p < 0.05$, $F(16, 294) = 6.760^{**}$ and β is unstandardized regression coefficient

Table 7b. Regression results for testing moderation of job overload on the relationship between organizational based self-esteem and employee engagement for public sector employees.

Variable	β	SE(β)	T	p
Constant	4.804	11.873	0.405	0.687
JO	-0.022	0.248	-0.089	0.930
OBSE	0.839**	0.203	4.126	0.000
OBSE x JO	0.609	0.739	0.825	0.411
Gender	0.453*	0.196	2.311	0.023
Age	-0.682	0.447	-1.525	0.130
Education	0.047	0.097	0.491	0.625
Total tenure	0.079	0.042	1.867	0.065
Tenure :org	-0.001	0.013	-0.094	0.925
Marital Status	-0.170	0.129	-1.313	0.192
Employment status	0.175	0.223	0.783	0.436
Children/Dependents	-0.295	0.229	-1.290	0.200
Citizenship	0.247	11.804	0.021	0.983
Job Position	0.033	0.100	0.326	0.745
days working per week	0.010	0.184	0.054	0.957
Income	-0.092	0.067	-1.374	0.172

Note: N= 115, $R^2 = 0.486$, ** $p < 0.01$, * $p < 0.05$, $F(15, 99) = 2.307^{**}$ and β is unstandardized regression coefficient

Table 7c. Regression results for testing moderation of job overload on the relationship between organizational based self-esteem and employee engagement for private sector employees.

Variable	β	SE(β)	T	p
Constant	4.416**	0.915	4.826	0.000
JO	-0.003	0.119	-0.028	0.978
OBSE	0.529**	0.112	4.723	0.000
OBSE x JO	0.170	0.246	0.694	0.488
Gender	-0.125	0.087	-1.432	0.154
Age	0.144*	0.062	2.334	0.021
Education	-0.014	0.039	-0.348	0.728
Total tenure	0.008	0.009	0.901	0.369
Tenure :org	-0.015	0.008	-1.820	0.070
Marital Status	-0.065	0.064	-1.028	0.305
Employment status	0.032	0.223	0.144	0.886
Children/Dependents	0.020	0.114	0.173	0.863
Citizenship	-1.146	0.754	-1.521	0.130
Job Position	0.038	0.057	0.660	0.510
No. Of days working	0.052	0.085	0.608	0.544
Income	0.012	0.030	0.419	0.676

Note: N=196, $R^2 = 0.362$, ** $p < 0.01$, * $p < 0.05$, $F(15, 180) = 6.703^{**}$ and β is unstandardized regression coefficient

From the table above, the interaction term (OBSE X JO) has an insignificant β value for all sectors ($\beta = 0.335$, $p > 0.05$), public sector ($\beta = 0.609$, $p > 0.05$) and private sector ($\beta = 0.170$, $p > 0.05$) suggesting that job overload does not moderate the relationship between OBSE and employee engagement for this sample.

Table 8a. Regression results for testing moderation of job overload on the relationship between generalized self-efficacy and employee engagement for all sectors.

Variable	β	SE(β)	T	p
Constant	4.020*	0.768	5.236	0.000
JO	-0.033	0.155	-0.214	0.831
GSE	0.501**	0.120	4.175	0.000
GSE x JO	0.241	0.376	0.641	0.522
Gender	0.103	0.112	0.916	0.361
Age	-0.154	0.185	-0.832	0.406
Education	0.018	0.049	0.377	0.706
Total tenure	0.032*	0.015	2.092	0.037
Tenure :org	-0.006	0.009	-0.632	0.528
Marital Status	-0.200*	0.071	-2.806	0.005
Employment status	0.130	0.138	0.945	0.346
Children/Dependents	-0.129	0.112	-1.154	0.250
Citizenship	-0.448	0.545	-0.822	0.412
Job Position	0.157	0.083	1.889	0.060
No. Of days working	0.085	0.093	0.916	0.361
Org Type	-0.003	0.067	-0.044	0.965
Income	-0.005	0.028	-0.181	0.856

Note: N=318, $R^2 = 0.185$, **p<0.01, *p<0.05, F (16, 301) = 4.036** and β is unstandardized regression coefficient

Table 8b. Regression results for testing moderation of job overload on the relationship between generalized self-efficacy and employee engagement for public sector employees.

Variable	β	SE(β)	T	p
Constant	4.875	34.029	0.143	0.886
JO	-0.049	0.228	-0.216	0.829
GSE	0.650**	0.147	4.471	0.000
GSE x JO	0.463	0.569	0.814	0.417
Gender	0.326	0.180	1.810	0.073
Age	-0.660	0.451	-1.463	0.146
Education	0.051	0.089	0.569	0.571
Total tenure	0.077	0.044	1.761	0.081
Tenure :org	-0.001	0.013	-0.105	0.917
Marital Status	-0.284*	0.141	-2.018	0.046
Employment status	0.311	0.297	1.048	0.297
Children/Dependents	-0.310	0.220	-1.406	0.163
Citizenship	0.356	34.001	0.010	0.992
Job Position	0.102	0.105	0.977	0.331
No. Of days working	-0.081	0.181	-0.444	0.658
Income	-0.069	0.074	-0.926	0.357

Note: N= 123, $R^2 = 0.404$, ** $p < 0.01$, * $p < 0.05$, $F(15, 107) = 2.506^{**}$ and β is unstandardized regression coefficient

Table 8c. Regression results for testing moderation of job overload on the relationship between generalized self-efficacy and employee engagement for private sector employees

Variable	β	SE(β)	T	p
Constant	3.748**	0.994	3.770	0.000
JO	-0.086	0.132	-0.655	0.513
GSE	0.332*	0.132	2.522	0.013
GSE x JO	-0.005	0.307	-0.017	0.987
Gender	-0.101	0.102	-0.988	0.324
Age	0.131	0.071	1.860	0.065
Education	0.002	0.045	0.039	0.969
Total tenure	0.016	0.010	1.638	0.103
Tenure :org	-0.019*	0.009	-2.001	0.047
Marital Status	-0.132	0.079	-1.675	0.096
Employment status	0.000	0.279	-0.002	0.999
Children/Dependents	0.036	0.114	0.317	0.751
Citizenship	-0.516	0.916	-0.564	0.574
Job Position	0.112	0.068	1.666	0.098
No. Of days working	0.036	0.096	0.379	0.705
Income	0.004	0.029	0.137	0.891

Note: N = 195, $R^2 = 0.198$, ** $p < 0.01$, * $p < 0.05$, $F(15, 179) = 4.593^{**}$ and β is unstandardized regression coefficient

From the table above, the interaction term (GSE X JO) has an insignificant β value for all sectors ($\beta = 0.241$, $p > 0.05$), public sector ($\beta = 0.463$, $p > 0.05$) and private sector ($\beta = -0.005$, $p > 0.05$) suggesting that job overload does not moderate the relationship between GSE and employee engagement for this sample.

Table 9a. Regression results for testing moderation of job overload on the relationship between supervisor support and employee engagement for all sectors.

Variable	β	SE(β)	T	p
Constant	4.007**	0.834	4.804	0.000
JO	0.054	0.163	0.328	0.743
SS	0.300**	0.066	4.565	0.000
SS x JO	0.138	0.253	0.547	0.585
Gender	0.100	0.105	0.950	0.343
Age	-0.126	0.190	-0.664	0.507
Education	0.000	0.047	0.000	1.000
Total tenure	0.028	0.015	1.889	0.060
Tenure :org	-0.008	0.008	-0.951	0.343
Marital Status	-0.147*	0.069	-2.136	0.033
Employment status	0.148	0.142	1.044	0.297
Children/Dependents	-0.194	0.115	-1.697	0.091
Citizenship	-0.329	0.657	-0.501	0.617
Job Position	0.102	0.076	1.344	0.180
No. Of days working	0.048	0.093	0.512	0.609
Org Type	0.029	0.070	0.420	0.675
Income	-0.001	0.027	-0.044	0.965

Note: N= 324, $R^2 = 0.205$, ** $p < 0.01$, * $p < 0.05$, $F(16,307) = 4.555^{**}$ and β is unstandardized regression coefficient

Table 9b. Regression results for testing moderation of job overload on the relationship between supervisor support and employee engagement for public sector employees.

Variable	β	SE(β)	T	p
Constant	5.851	8.579	0.682	0.497
JO	0.096	0.291	0.329	0.743
SS	0.354*	0.118	3.009	0.003
SS x JO	0.219	0.440	0.497	0.620
Gender	0.161	0.161	1.001	0.319
Age	-0.745	0.494	-1.508	0.135
Education	0.064	0.087	0.734	0.465
Total tenure	0.074	0.043	1.746	0.084
Tenure :org	0.000	0.013	-0.019	0.984
Marital Status	0.205	0.137	-1.494	0.138
Employment status	0.103	0.336	0.307	0.759
Children/Dependents	-0.369	0.244	-1.512	0.133
Citizenship	0.312	8.446	0.037	0.971
Job Position	0.010	0.097	0.102	0.919
No. Of days working	-0.120	0.199	-0.601	0.549
Income	-0.026	0.088	-0.296	0.768

Note: N=123, $R^2 = 0.418$, ** $p < 0.01$, * $p < 0.05$, $F(15,107) = 1.745^{**}$ and β is unstandardized regression coefficient

Table 9c. Regression results for testing moderation of job overload on the relationship between supervisor support and employee engagement for private sector employees.

Variable	β	SE(β)	T	p
Constant	3.552**	0.962	3.691	0.000
JO	-0.032	0.126	-0.249	0.803
SS	0.233*	0.073	3.194	0.002
SS x JO	0.008	0.157	0.051	0.960
Gender	-0.040	0.095	-0.423	0.673
Age	0.165*	0.069	2.397	0.018
Education	-0.022	0.042	-0.528	0.598
Total tenure	0.013	0.009	1.386	0.167
Tenure :org	-0.018	0.009	-1.944	0.053
Marital Status	-0.085	0.069	-1.241	0.216
Employment status	0.113	0.230	0.489	0.625
Children/Dependents	-0.031	0.118	-0.264	0.792
Citizenship	-0.377	0.947	-0.398	0.691
Job Position	0.083	0.065	1.294	0.197
No. Of days working	-0.016	0.097	-0.170	0.866
Income	0.006	0.028	0.222	0.825

Note: N=201, $R^2 = 0.235$, ** $p < 0.01$, * $p < 0.05$, $F(15, 185) = 5.368^{**}$ and β is unstandardized regression coefficient

From the table above, the interaction term (SS x JO) has an insignificant β value for all sectors ($\beta = 0.138$, $p > 0.05$), public sector ($\beta = 0.219$, $p > 0.05$) and private sector ($\beta = 0.008$, $p > 0.05$) suggesting that job overload does not moderate the relationship between SS and employee engagement for this sample.

Table 10a. Regression results for testing moderation of job overload on the relationship between colleague support and employee engagement for all sectors.

Variable	β	SE(β)	T	p
Constant	3.855**	0.824	4.680	0.000
JO	0.073	0.175	0.418	0.676
CS	0.302**	0.080	3.771	0.000
CS x JO	0.367	0.400	0.919	0.359
Gender	0.115	0.104	1.102	0.271
Age	-0.201	0.210	-0.956	0.340
Education	0.023	0.049	0.470	0.639
Total tenure	0.039*	0.018	2.157	0.032
Tenure :org	-0.008	0.008	-1.018	0.309
Marital Status	-0.144*	0.068	-2.117	0.035
Employment status	0.197	0.110	1.797	0.073
Children/Dependents	-0.146	0.110	-1.322	0.187
Citizenship	-0.276	0.686	-0.402	0.688
Job Position	0.095	0.067	1.415	0.158
No. Of days working	0.078	0.091	0.852	0.395
Org Type	0.042	0.067	0.623	0.534
Income	-0.009	0.027	-0.341	0.734

Note: N= 320, $R^2 = 0.212$, **p<0.01, *p<0.05, F (16,303) = 3.890** and β is unstandardized regression coefficient

Table 10b. Regression results for testing moderation of job overload on the relationship between colleague support and employee engagement for public sector employees.

Variable	β	SE(β)	T	p
Constant	5.161	22.433	0.230	0.818
JO	0.102	0.285	0.357	0.722
CS	0.341	0.193	1.768	0.080
CS x JO	0.577	0.973	0.593	0.555
Gender	0.217	0.175	1.243	0.217
Age	-0.724	0.523	-1.384	0.169
Education	0.112	0.098	1.138	0.258
Total tenure	0.075	0.046	1.604	0.112
Tenure :org	0.005	0.013	0.394	0.695
Marital Status	-0.202	0.127	-1.589	0.115
Employment status	0.202	0.258	0.783	0.435
Children/Dependents	-0.391	0.223	-1.756	0.082
Citizenship	0.378	22.365	0.017	0.987
Job Position	0.004	0.087	0.049	0.961
No. Of days working	-0.014	0.280	-0.050	0.961
Income	0.042	0.079	-0.536	0.593

Note: N= 121, $R^2 = 0.421$, ** $p < 0.01$, * $p < 0.05$, $F(15,105) = 1.558^{**}$ and β is unstandardized regression coefficient

Table 10c. Regression results for testing moderation of job overload on the relationship between colleague support and employee engagement for private sector employees.

Variable	β	SE(β)	T	p
Constant	3.451*	1.121	3.077	0.002
JO	-0.016	0.142	-0.111	0.912
CS	0.225*	0.078	2.899	0.004
CS x JO	0.060	0.193	0.311	0.756
Gender	-0.046	0.103	-0.447	0.656
Age	0.121	0.079	1.526	0.129
Education	0.000	0.046	0.008	0.993
Total tenure	0.021*	0.010	2.006	0.046
Tenure :org	-0.022*	0.009	-2.552	0.012
Marital Status	-0.102	0.080	-1.280	0.202
Employment status	0.117	0.195	0.598	0.551
Children/Dependents	0.049	0.111	0.439	0.661
Citizenship	-0.410	1.125	-0.364	0.716
Job Position	0.073	0.068	1.065	0.288
No. Of days working	0.038	0.095	0.398	0.691
Income	0.000	0.029	0.000	1.000

Note: N= 199, $R^2 = 0.227$, ** $p < 0.01$, * $p < 0.05$, $F(15, 183) = 4.617^{**}$ and β is unstandardized regression coefficient

From the table above, the interaction term (CS X JO) has an insignificant β value for all sectors ($\beta = 0.367$, $p > 0.05$), public sector ($\beta = 0.577$, $p > 0.05$) and private sector ($\beta = 0.060$, $p > 0.05$) suggesting that job overload does not moderate the relationship between CS and employee engagement for this sample.

Table 11a. Regression results for testing moderation of work home interference on the relationship between distributive justice and employee engagement for all sectors.

Variable	β	SE(β)	T	p
Constant	3.567**	0.556	6.421	0.000
WHI	0.007	0.070	0.095	0.925
DJ	0.466**	0.077	6.032	0.000
DJ x WHI	0.186	0.113	1.643	0.101
Gender	0.132	0.091	1.443	0.150
Age	-0.208	0.157	-1.322	0.187
Education	0.009	0.043	0.220	0.826
Total tenure	0.036*	0.014	2.550	0.011
Tenure :org	-0.011	0.007	-1.541	0.124
Marital Status	-0.149**	0.052	-2.869	0.004
Employment status	0.121	0.137	0.882	0.379
Children/Dependents	-0.110	0.093	-1.182	0.238
Citizenship	0.094	0.308	0.305	0.760
Job Position	0.087	0.060	1.437	0.152
No. Of days working	0.135	0.077	1.760	0.079
Income	-0.006	0.026	-0.248	0.804

Note: N= 339, $R^2 = 0.327$, **p<0.01, *p<0.05, F (15, 323) = 7.727** and β is unstandardized regression coefficient

Table 11b. Regression results for testing moderation of work home interference on the relationship between distributive justice and employee engagement for public sector employees.

Variable	β	SE (β)	T	p
Constant	4.873	25.354	0.192	0.848
WHI	0.059	0.091	0.645	0.520
DJ	0.539**	0.118	4.576	0.000
DJ x WHI	0.219	0.193	1.136	0.258
Gender	0.271	0.160	1.688	0.094
Age	-0.564	0.343	-1.646	0.103
Education	0.045	0.075	0.598	0.551
Total tenure	0.060	0.031	1.953	0.053
Tenure :org	-0.003	0.010	-0.254	0.800
Marital Status	-0.187	0.097	-1.936	0.055
Employment status	0.237	0.192	1.238	0.218
Children/Dependents	-0.365*	0.181	-2.015	0.046
Citizenship	0.050	25.335	0.002	0.998
Job Position	0.071	0.084	0.847	0.398
No. Of days working	0.048	0.217	0.223	0.824
Income	-0.045	0.070	-0.644	0.521

Note: N= 131, $R^2 = 0.475$, ** $p < 0.01$, * $p < 0.05$, $F(15, 115) = 3.307$ ** and β is unstandardized regression coefficient

Table 11c. Regression results for testing moderation of work home interference on the relationship between distributive justice and employee engagement for private sector employees.

Variable	β	SE (β)	T	p
Constant	3.197**	0.622	5.144	0.000
WHI	-0.122	0.066	-1.840	0.067
DJ	0.354**	0.077	4.584	0.000
DJ x WHI	0.081	0.091	0.885	0.377
Gender	-0.063	0.084	-0.747	0.456
Age	0.066	0.063	1.058	0.291
Education	-0.001	0.042	-0.023	0.981
Total tenure	0.019	0.011	1.831	0.069
Tenure :org	-0.020*	0.009	-2.111	0.036
Marital Status	-0.125*	0.058	-2.164	0.032
Employment status	0.081	0.266	0.302	0.763
Children/Dependents	0.051	0.097	0.530	0.597
Citizenship	0.172	0.484	0.356	0.722
Job Position	0.031	0.057	0.549	0.584
No. Of days working	0.024	0.091	0.260	0.795
Income	0.016	0.028	0.562	0.575

Note: N= 208, $R^2 = 0.343$, ** $p < 0.01$, * $p < 0.05$, $F(15, 192) = 6.114^{**}$ and β is unstandardized regression coefficient

From the table above, the interaction term (DJ X WHI) has an insignificant β value for all sectors ($\beta = 0.186$, $p > 0.05$), public sector ($\beta = 0.219$, $p > 0.05$) and private sector ($\beta = 0.081$, $p > 0.05$) suggesting that WHI does not moderate the relationship between DJ and employee engagement for this sample.

Table 12a. Regression results for testing moderation of work home interference on the relationship between job autonomy and employee engagement for all sectors.

Variable	β	SE (β)	T	p
Constant	3.476**	0.653	5.326	0.000
WHI	0.014	0.090	0.156	0.876
JA	0.219**	0.059	3.727	0.000
JA x WHI	0.049	0.133	0.369	0.712
Gender	0.133	0.114	1.168	0.244
Age	-0.107	0.161	-0.661	0.509
Education	-0.002	0.051	-0.033	0.973
Total tenure	0.028	0.015	1.835	0.067
Tenure :org	-0.009	0.008	-1.068	0.287
Marital Status	-0.167*	0.064	-2.604	0.010
Employment status	0.128	0.115	1.111	0.267
Children/Dependents	-0.097	0.101	-0.959	0.338
Citizenship	-0.164	0.468	-0.350	0.726
Job Position	0.121	0.073	1.649	0.100
No. Of days working	0.146	0.090	1.620	0.106
Income	-0.012	0.027	-0.462	0.644

Note: N= 339, $R^2 = 0.164$, ** $p < 0.01$, * $p < 0.05$, $F(15, 323) = 4.255^{**}$ and β is unstandardized regression coefficient

Table 12b. Regression results for testing moderation of work home interference on the relationship between job autonomy and employee engagement for public sector employees.

Variable	β	SE (β)	T	p
Constant	5.097	33.838	0.151	0.881
WHI	0.109	0.100	1.085	0.280
JA	0.526**	0.107	4.896	0.000
JA x WHI	0.322	0.200	1.609	0.110
Gender	0.234	0.159	1.472	0.144
Age	-0.503	0.309	-1.629	0.106
Education	0.013	0.065	0.196	0.845
Total tenure	0.040	0.026	1.503	0.136
Tenure :org	0.011	0.013	0.805	0.422
Marital Status	-0.192	0.101	-1.909	0.059
Employment status	0.126	0.206	0.613	0.541
Children/Dependents	-0.195	0.201	-0.970	0.334
Citizenship	0.193	33.824	0.006	0.995
Job Position	0.070	0.088	0.797	0.427
No. Of days working	-0.143	0.214	-0.667	0.506
Income	-0.042	0.060	-0.703	0.483

Note: N= 131, $R^2 = 0.501$, **p<0.01, *p<0.05, F (15, 115) = 2.800** and β is unstandardized regression coefficient

Table 12c. Regression results for testing moderation of work home interference on the relationship between job autonomy and employee engagement for private sector employees.

Variable	β	SE (β)	T	p
Constant	2.879**	0.726	3.969	0.000
WHI	-0.184*	0.069	-2.658	0.009
JA	0.062	0.052	1.198	0.232
JA x WHI	-0.118	0.086	-1.379	0.169
Gender	-0.074	0.093	-0.795	0.428
Age	0.170*	0.070	2.437	0.016
Education	0.007	0.046	0.160	0.873
Total tenure	0.006	0.010	0.570	0.569
Tenure :org	-0.015	0.009	-1.635	0.104
Marital Status	-0.093	0.069	-1.343	0.181
Employment status	0.202	0.209	0.966	0.335
Children/Dependents	0.050	0.106	0.471	0.638
Citizenship	-0.008	0.664	-0.013	0.990
Job Position	0.091	0.060	1.520	0.130
No. Of days working	0.021	0.101	0.207	0.836
Income	0.000	0.028	-0.007	0.994

Note: N=208, $R^2 = 0.209$, ** $p < 0.01$, * $p < 0.05$, $F(15, 192) = 4.983^{**}$ and β is unstandardized regression coefficient

From the table above, the interaction term (JA X WHI) has an insignificant β value for all sectors ($\beta = 0.049$, $p > 0.05$), public sector ($\beta = 0.322$, $p > 0.05$) and private sector ($\beta = -0.118$, $p > 0.05$) suggesting that WHI does not moderate the relationship between JA and employee engagement for this sample.

Table 13a. Regression results for testing moderation of work home interference on the relationship between organizational based self-esteem and employee engagement for all sectors.

Variable	β	SE (β)	T	p
Constant	4.043**	0.676	5.984	0.000
WHI	0.062	0.074	0.842	0.401
OBSE	0.606**	0.109	5.540	0.000
OBSE x WHI	0.194	0.211	0.921	0.358
Gender	0.152	0.120	1.269	0.205
Age	-0.144	0.173	-0.833	0.405
Education	-0.022	0.050	-0.448	0.655
Total tenure	0.032*	0.015	2.092	0.037
Tenure :org	-0.007	0.008	-0.923	0.357
Marital Status	-0.144*	0.057	-2.517	0.012
Employment status	0.091	0.126	0.722	0.471
Children/Dependents	-0.077	0.105	-0.734	0.464
Citizenship	-0.671	0.521	-1.288	0.199
Job Position	0.099	0.069	1.440	0.151
No. Of days working	0.168	0.093	1.816	0.070
Income	0.003	0.028	0.121	0.904

Note: N= 325, $R^2 = 0.267$, ** $p < 0.01$, * $p < 0.05$, $F(15, 309) = 7.264^{**}$ and β is unstandardized regression coefficient

Table 13b. Regression results for testing moderation of work home interference on the relationship between organizational based self-esteem and employee engagement for public sector employees.

Variable	β	SE (β)	T	p
Constant	4.719	120.005	0.039	0.969
WHI	0.094	0.098	0.961	0.339
OBSE	0.843**	0.189	4.453	0.000
OBSE x WHI	0.324	0.440	0.737	0.463
Gender	0.375*	0.177	2.119	0.036
Age	-0.591	0.395	-1.495	0.138
Education	0.017	0.089	0.193	0.848
Total tenure	0.067	0.036	1.866	0.065
Tenure :org	-0.002	0.013	-0.183	0.855
Marital Status	-0.192	0.098	-1.961	0.053
Employment status	0.070	0.222	0.315	0.754
Children/Dependents	-0.202	0.224	-0.898	0.371
Citizenship	0.313	120.000	0.003	0.998
Job Position	0.014	0.087	0.161	0.872
No. Of days working	0.015	0.235	0.062	0.951
Income	-0.052	0.067	-0.771	0.442

Note: N= 122, $R^2 = 0.456$, **p<0.01, *p<0.05, F (15,106) = 2.513** and β is unstandardized regression coefficient

Table 13c. Regression results for testing moderation of work home interference on the relationship between organizational based self-esteem and employee engagement for private sector employees.

Variable	β	SE (β)	T	p
Constant	4.175**	0.966	4.324	0.000
WHI	-0.073	0.075	-0.969	0.334
OBSE	0.416*	0.131	3.163	0.002
OBSE x WHI	0.037	0.158	0.236	0.814
Gender	-0.115	0.087	-1.330	0.185
Age	0.167*	0.069	2.436	0.016
Education	-0.027	0.038	-0.707	0.480
Total tenure	0.008	0.009	0.850	0.396
Tenure :org	-0.013	0.008	-1.581	0.116
Marital Status	-0.088	0.066	-1.338	0.183
Employment status	0.101	0.234	0.433	0.665
Children/Dependents	0.075	0.109	0.693	0.489
Citizenship	-1.032	0.808	-1.277	0.203
Job Position	0.060	0.059	1.019	0.310
No. Of days working	0.009	0.089	0.107	0.915
Income	0.013	0.030	0.430	0.668

Note: N= 203, $R^2 = 0.319$, ** $p < 0.01$, * $p < 0.05$, $F(15, 187) = 6.504^{**}$ and β is unstandardized regression coefficient

From the table above, the interaction term (OBSE X WHI) has an insignificant β value for all sectors ($\beta = 0.194$, $p > 0.05$), public sector ($\beta = 0.324$, $p = 0.05$) and private sector ($\beta = 0.037$, $p > 0.05$) suggesting that WHI does not moderate the relationship between OBSE and employee engagement for this sample.

Table 14a. Regression results for testing moderation of work home interference on the relationship between generalized self-efficacy and employee engagement for all sectors.

Variable	β	SE (β)	T	p
Constant	3.854**	0.688	5.604	0.000
WHI	-0.015	0.073	-0.200	0.842
GSE	0.388**	0.102	3.799	0.000
GSE x WHI	0.287	0.200	1.434	0.152
Gender	0.087	0.100	0.872	0.384
Age	-0.142	0.169	-0.838	0.403
Education	0.002	0.051	0.031	0.975
Total tenure	0.035*	0.016	2.165	0.031
Tenure :org	-0.011	0.008	-0.450	0.148
Marital Status	-0.185*	0.070	-2.636	0.009
Employment status	0.106	0.138	0.768	0.443
Children/Dependents	-0.114	0.103	-0.101	0.272
Citizenship	-0.323	0.436	-0.742	0.458
Job Position	0.153*	0.073	2.105	0.036
No. Of days working	0.115	0.089	1.291	0.198
Income	-0.005	0.028	-0.161	0.872

Note: N= 333, $R^2 = 0.185$, ** $p < 0.01$, * $p < 0.05$, $F(15, 317) = 4.259^{**}$ and β is unstandardized regression coefficient

Table 14b. Regression results for testing moderation of work home interference on the relationship between generalized self-efficacy and employee engagement for public sector employees.

Variable	β	SE (β)	T	p
Constant	5.002	8.842	0.566	0.573
WHI	0.054	0.102	0.527	0.599
GSE	0.577**	0.144	4.005	0.000
GSE x WHI	0.381	0.419	0.909	0.366
Gender	0.209	0.153	1.364	0.175
Age	-0.613	0.413	-1.484	0.141
Education	0.039	0.086	0.456	0.649
Total tenure	0.071	0.039	1.821	0.071
Tenure :org	-0.006	0.012	-0.509	0.611
Marital Status	-0.210	0.138	-1.525	0.130
Employment status	0.163	0.256	0.636	0.526
Children/Dependents	-0.253	0.216	-1.170	0.244
Citizenship	0.419	8.738	0.048	0.962
Job Position	0.094	0.092	1.027	0.307
No. Of days working	-0.099	0.209	-0.474	0.636
Income	-0.057	0.077	-0.747	0.457

Note: N=128, $R^2 = 0.391$, ** $p < 0.01$, * $p < 0.05$, $F(15, 112) = 2.673^{**}$ and β is unstandardized regression coefficient

Table 14c. Regression results for testing moderation of work home interference on the relationship between generalized self-efficacy and employee engagement for private sector employees.

Variable	β	SE(β)	T	p
Constant	3.335**	0.733	4.550	0.000
WHI	-0.168*	0.068	-2.463	0.015
GSE	0.228	0.117	1.955	0.052
GSE x WHI	0.255	0.154	1.659	0.099
Gender	-0.110	0.096	-1.146	0.253
Age	0.139*	0.070	1.990	0.048
Education	-0.010	0.045	-0.217	0.829
Total tenure	0.014	0.010	1.339	0.182
Tenure :org	0.020*	0.009	-2.162	0.032
Marital Status	0.142	0.076	-1.862	0.064
Employment status	0.029	0.261	0.113	0.910
Children/Dependents	0.055	0.106	0.525	0.600
Citizenship	-0.160	0.600	-0.267	0.790
Job Position	0.090	0.064	1.411	0.160
No. Of days working	0.052	0.102	0.509	0.612
Income	0.017	0.030	0.573	0.567

Note: N= 205, $R^2 = 0.215$, **p<0.01, *p<0.05, F (15,189) = 5.424** and β is unstandardized regression coefficient

From the table above, the interaction term (GSE X WHI) has an insignificant β value for all sectors ($\beta = 0.287$, $p > 0.05$), public sector ($\beta = 0.381$, $p > 0.05$) and private sector ($\beta = 0.255$, $p > 0.05$) suggesting that WHI does not moderate the relationship between GSE and employee engagement for this sample.

Table 15a. Regression results for testing moderation of work home interference on the relationship between supervisor support and employee engagement for all sectors.

Variable	β	SE (β)	T	p
Constant	3.666**	0.709	5.167	0.000
WHI	-0.048	0.069	-0.695	0.488
SS	0.288**	0.060	4.825	0.000
SS x WHI	0.149	0.117	1.267	0.206
Gender	0.069	0.097	0.707	0.480
Age	-0.119	0.155	-0.767	0.443
Education	-0.020	0.047	-0.415	0.687
Total tenure	0.030*	0.014	2.151	0.032
Tenure :org	-0.010	0.008	-1.271	0.205
Marital Status	-0.130*	0.056	-2.320	0.021
Employment status	0.097	0.141	0.689	0.491
Children/Dependents	-0.130	0.100	-1.297	0.196
Citizenship	-0.029	0.569	-0.050	0.960
Job Position	0.105	0.071	1.485	0.138
No. Of days working	0.093	0.082	1.141	0.255
Income	0.000	0.028	-0.013	0.990

Note: N= 339, $R^2 = 0.217$, **p<0.01, *p<0.05, F (15, 323) = 5.071** and β is unstandardized regression coefficient

Table 15b. Regression results for testing moderation of work home interference on the relationship between supervisor support and employee engagement for public sector employees.

Variable	β	SE (β)	T	p
Constant	5.605	168.004	0.033	0.973
WHI	0.039	0.105	0.373	0.710
SS	0.326*	0.112	2.913	0.004
SS x WHI	0.181	0.200	0.904	0.368
Gender	0.098	0.161	0.606	0.546
Age	-0.593	0.360	-1.649	0.102
Education	0.011	0.082	0.135	0.893
Total tenure	0.066	0.035	1.925	0.057
Tenure :org	0.001	0.014	0.051	0.959
Marital Status	-0.220*	0.096	-2.291	0.024
Employment status	-0.009	0.297	-0.031	0.975
Children/Dependents	-0.257	0.241	-1.064	0.290
Citizenship	0.086	168.000	0.001	1.000
Job Position	0.007	0.092	0.078	0.938
No. Of days working	-0.054	0.219	-0.248	0.805
Income	-0.008	0.078	-0.103	0.918

Note: N=129, $R^2 = 0.370$, $**p < 0.01$, $P < 0.05$, $F(15, 113) = 1.761^{**}$ and β is unstandardized regression coefficient

Table 15c. Regression results for testing moderation of work home interference on the relationship between supervisor support and employee engagement for private sector employees.

Variable	β	SE (β)	T	p
Constant	3.108**	0.735	4.231	0.000
WHI	-0.169*	0.069	-2.450	0.015
SS	0.241*	0.069	3.475	0.001
SS x WHI	0.064	0.085	0.759	0.449
Gender	-0.057	0.086	-0.664	0.508
Age	0.150*	0.066	2.286	0.023
Education	-0.027	0.041	-0.660	0.510
Total tenure	0.010	0.009	1.099	0.273
Tenure :org	-0.018*	0.009	-2.082	0.039
Marital Status	-0.067	0.060	-1.111	0.268
Employment status	0.178	0.230	0.776	0.439
Children/Dependents	-0.008	0.105	-0.074	0.941
Citizenship	0.062	0.695	0.089	0.929
Job Position	0.086	0.059	1.456	0.147
No. Of days working	-0.028	0.096	-0.288	0.774
Income	0.007	0.028	0.259	0.796

Note: N= 210, $R^2 = 0.276$, **p<0.01, *p<0.05, F (15, 194) = 7.104** and β is unstandardized regression coefficient

From the table above, the interaction term (SS X WHI) has an insignificant β value for all sectors ($\beta = 0.149$, $p > 0.05$), public sector ($\beta = 0.181$, $p > 0.05$) and private sector ($\beta = 0.064$, $p > 0.05$) suggesting that WHI does not moderate the relationship between SS and employee engagement for this sample.

Table 16a. Regression results for testing moderation of work home interference on the relationship between colleague support and employee engagement for all sectors.

Variable	β	SE (β)	T	p
Constant	3.843**	0.715	5.374	0.000
WHI	-0.080	0.064	-1.248	0.213
CS	0.328**	0.080	4.078	0.000
CS x WHI	0.249	0.159	1.566	0.118
Gender	0.095	0.099	0.955	0.340
Age	-0.195	0.175	-1.110	0.268
Education	0.004	0.047	0.086	0.932
Total tenure	0.036*	0.015	2.405	0.017
Tenure :org	-0.010	0.008	-1.140	0.255
Marital Status	-0.130*	0.055	-2.369	0.018
Employment status	0.197	0.113	1.750	0.081
Children/Dependents	-0.112	0.102	-1.099	0.272
Citizenship	-0.316	0.579	-0.547	0.585
Job Position	0.120	0.071	1.682	0.094
No. Of days working	0.126	0.084	1.497	0.135
Income	-0.009	0.028	-0.329	0.743

Note: N=335, $R^2 = 0.226$, ** $p < 0.01$, * $p < 0.05$, $F(15, 319) = 5.055^*$ and β is unstandardized regression coefficient

Table 16b. Regression results for testing moderation of work home interference on the relationship between colleague support and employee engagement for public sector employees.

Variable	β	SE (β)	T	p
Constant	5.181	22.321	0.232	0.817
WHI	0.047	0.120	0.387	0.700
CS	0.382*	0.172	2.225	0.028
CS x WHI	0.396	0.316	1.253	0.213
Gender	0.152	0.157	0.968	0.335
Age	-0.627	0.349	-1.796	0.075
Education	0.051	0.086	0.596	0.552
Total tenure	0.065*	0.031	2.071	0.041
Tenure :org	0.004	0.013	0.279	0.781
Marital Status	-0.199	0.111	-1.784	0.077
Employment status	0.179	0.243	0.735	0.464
Children/Dependents	-0.344	0.232	-1.484	0.141
Citizenship	0.268	22.295	0.012	0.990
Job Position	0.034	0.090	0.382	0.703
No. Of days working	-0.039	0.244	-0.160	0.874
Income	-0.027	0.076	-0.354	0.724

Note: N= 127, $R^2 = 0.397$, $**p < 0.01$, $*p < 0.05$, $F(15, 111) = 1.378^{**}$ and β is unstandardized regression coefficient

Table 16c. Regression results for testing moderation of work home interference on the relationship between colleague support and employee engagement for private sector employees.

Variable	β	SE (β)	T	p
Constant	3.217**	0.742	4.337	0.000
WHI	-0.203*	0.065	-3.108	0.002
CS	0.258**	0.069	3.753	0.000
CS x WHI	0.076	0.100	0.763	0.446
Gender	-0.073	0.091	-0.808	0.420
Age	0.110	0.065	1.703	0.090
Education	-0.002	0.042	-0.040	0.968
Total tenure	0.016	0.010	1.667	0.097
Tenure :org	-0.019*	0.008	-2.384	0.018
Marital Status	-0.092	0.067	-1.375	0.171
Employment status	0.206	0.186	1.107	0.270
Children/Dependents	0.057	0.098	0.578	0.564
Citizenship	-0.132	0.752	-0.175	0.861
Job Position	0.078	0.060	1.296	0.196
No. Of days working	0.004	0.092	0.042	0.967
Income	0.003	0.029	0.099	0.921

Note: N= 208, $R^2 = 0.291$, ** $p < 0.01$, * $p < 0.05$, $F(15, 192) = 8.431^{**}$ and β is unstandardized regression coefficient

From the table above, the interaction term (CS X WHI) has an insignificant β value for all sectors ($\beta = 0.249$, $p > 0.05$), public sector ($\beta = 0.396$, $p > 0.05$) and private sector ($\beta = 0.076$, $p > 0.05$) suggesting that WHI does not moderate the relationship between CS and employee engagement for this sample. In summary, no moderation hypotheses was supported by the data.

5.4.3 Mediation Analysis

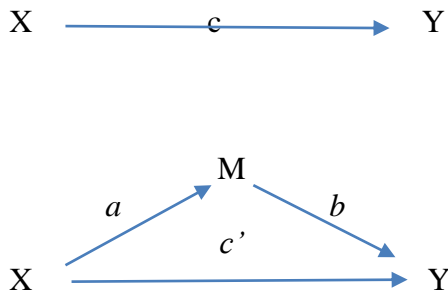
Hypothesis 3 Stated that Employee Engagement Mediates the Relationship between Resources (Job, Personal and Social) and Outcome Variables (IT and AC)

A variable is said to mediate the relationship between an independent and dependent variable if the independent variable first has an effect on the mediator and this in turn influences the dependent variable. That is, a mediator accounts for the relationship between the independent variable and the dependent variable. Complete mediation exists if the independent variable exerts its total influence via the mediating variable and partial mediation exists if the independent variable exerts some of its influence via the mediating variable and also exerts some of its influence directly on the dependent variable, not through the mediator (Baron & Kenny, 1986). Hierarchical multiple regression analysis was used to test mediation analysis. In all analyses demographic variables were entered as control variables. Mediation was tested following the steps outlined by Baron and Kenny (1986). To establish mediation,

1. The independent variable must affect the mediator in the first equation.
2. The independent variable must be shown to affect the dependent variable in the second equation.
3. The mediator must affect the dependent variable in the third equation.

If these conditions all hold in the predicted direction, then the effect of the independent variable on the dependent variable must be less in the third equation than in the second. Perfect mediation occurs when the relationship between independent variable and outcome variable is completely wiped out by including the mediator in the model. The following approach suggested by Baron and Kenny (1986) in which several regression analyses are conducted and significance of the coefficients is examined at each step was conducted.

FIGURE 5 BARON AND KENNY (1986) MEDIATOR MODEL



1. Total effect $c = ab + c'$
2. Direct effect $c' = c - ab$
3. Indirect effect $c - c' = ab$

Step	Analysis
1	Conduct a simple linear regression analysis with X predicting M. Variables X and M must be related, that is coefficient a in fig 5 must be non-zero.
2	Conduct a simple linear regression with X predicting Y. (indirect effect) Variables X and Y must be related, that is coefficient c in fig. 5 must be non-zero and in the expected direction.
3	Conduct a simple linear regression with M predicting Y. Variables M and Y must be related once the effect of X is controlled for. That is coefficient b must be non-zero (direct effect).
4	Conduct a multiple regression with X and M predicting Y. That, is the relationship between X and Y must be significantly reduced in absolute value if not non-significant when controlling for the effect of M. (Baron and Kenny 1986). The direct and indirect effect perfectly shows how differences in X map onto differences in Y. The total effect of X is the sum of direct and indirect effects. The sum of direct and indirect effects quantifies how much two cases that differ by a unit on X are estimated to differ on Y.

The purpose of step 1 -3 is to establish that relationships among variables exist. If one or more of these relationships are non-significant mediation is not possible. If the relationships are significant, one should proceed to step 4. In step 4, mediation is supported if the effect of M on Y remains significant after controlling for X. If the

effect of X on Y is no longer significant when M is controlled, the finding supports full mediation. If the effect of X on Y is still significant but smaller in absolute value compared to the effect of M on Y the finding supports partial mediation (Baron and Kenny 1986).

Although the Baron and Kenny (1986) approach has been widely used by researchers to test for mediation (Pardo & Roman 2013) its limitations have been pointed out and discussed. These limitations do not in any way recommend that researchers should abandon this approach but contribute to the awareness of its methodology and to improve the way in which mediation analysis is conducted. The first limitation is based on the first condition of this approach which states that for mediation to occur, the independent variable, X must be related to the dependent variable Y. This according to Pardo and Roman (2013) is based on the idea that the objective of mediation analysis is to contribute to the understanding of the relationship between two variables and if this relationship does not exist there is nothing to mediate. Many scholars have however argued that this condition can be overlooked (Judd & Kenny 2010; James & Brett 1984; Shrout & Bolger 2002). From their perspective mediation analysis can make sense even when no relationship between X and Y is observed. The absence of the relationship between X and Y can occur due to a number of reasons. For example, X can influence M but that isn't entirely reflected on Y due to the problems associated between X and Y. This is likely to happen when the independent and dependent variables are separated by long periods of time as is the case with longitudinal studies; the further apart the independent and dependent variable the less probable is it for the relationship between them to reach statistical significance (Pardo & Roman 2013). The other limitation is based on the fourth step of the Baron and Kenny 1986 approach.

The mediation analysis section will be organized as follows. First it will present findings of the whole sample to examine the mediation of employee engagement between resources and outcome variables in the whole sample {table (a)'s}. Second it present the mediation analysis for public {table (b)'s} and then for private sector {table (c's)}.

Table 4 on multiple regression presented the summary of regression analysis for variables predicting employee engagement in the whole sample, public sector and private sector. Only variables which had a statistically significant relationship with employee engagement among all the three samples will be considered for mediation analysis since one of the conditions for mediation analysis is that the independent variables (X's) should be related to the mediating variable, employee engagement. For the whole sample only OBSE, JA and DJ had a statistically significant relationship with employee engagement satisfying the first condition of mediation (Baron & Kenny 1986). Following multiple regression analysis, the variables which met the first condition of mediation analysis were selected for consideration of mediation analysis.

Employee engagement mediates the relationship between OBSE, JA, DJ and (a) intention to turnover (b) affective commitment.

Table 17a. Hierarchical results for testing mediation of employee engagement between OBSE, JA, DJ and intention to turnover (IT) - All sectors

Variable	Step1		Step 2		Step 3		Step 4	
	β	SE (β)	β	SE (β)	β	SE (β)	β	SE (β)
Control vars								
OBSE	0.363**	0.068	-0.251**	0.097			-0.190	0.100
JA	0.132**	0.036	-0.245**	0.051			-0.103**	0.051
DJ	0.302**	0.044	-0.205**	0.063			-0.155**	0.066
Engagement					-0.376**	0.063	-0.168*	0.073
F - Statistic	12.914**		6.952**		5.554**		6.930**	
R ² (Adj. R ²)	0.36(0.33)		0.23 (0.20)		0.17(0.14)		0.24(0.21)	

Notes *p<0.05, **p<0.01, N=438 Control variables are gender, age, education status, tenure, marital status, employment status, job position, and citizenship status, days working per week, dependants and monthly income.

From the table above, (X_i 's,) independent variables are OBSE, JA and DJ. Mediator variable (M), is Employee engagement and dependent variable (Y) is IT. OBSE, JA and DJ have a statistically significant relationship with employee engagement satisfying the first condition of mediation.

Second, the independent variables (X 's) have a statistically significant relationship with the dependent variable (Y) satisfying the second condition of mediation. Third, the mediator variable, employee engagement has a statistically significant relationship with the dependent variable (IT) lending support for the third condition of mediation. After controlling for the independent variables, step 4, the effect of M, employee engagement on Y, turnover intention remains statistically significant and the effect of the independent variables on the dependent variables (JA and DJ) is less in the 4th equation than in the second hence mediation is supported. However, the effect of OBSE on turnover intention is no longer significant when employee engagement is controlled for suggesting that employee engagement fully mediates the relationship between OBSE and intention to turnover and partially mediates the relationship between JA, DJ and intention to turnover (IT) in all employees.

Table 17b. Hierarchical results for testing mediation of employee engagement between OBSE, JA, DJ and affective commitment (AC) - All sectors

Variable	Step1		Step 2		Step 3		Step 4	
	β	SE (β)	β	SE (β)	β	SE (β)	β	SE (β)
Control vars								
OBSE	0.363**	0.068	0.186**	0.053			0.130*	0.054
JA	0.132**	0.036	0.086**	0.028			0.065*	0.028
DJ	0.302**	0.044	0.137**	0.034			0.090*	0.036
Engagement					0.259**	0.034	0.156**	0.040
F - Statistic	12.914**		8.319**		8.910**		9.051**	
R ² (Adj. R ²)	0.36(0.33)		0.27(0.23)		0.25(0.22)		0.30(0.026)	

Notes * $p < 0.05$, ** $p < 0.01$, N=438 Control variables are gender, age, education status, tenure, marital status, employment status, job position, and citizenship status, days working per week, dependants and monthly income.

From the table above, X's: Independent variables are OBSE, JA and DJ. Mediator variable (M), is Employee engagement and dependent variable (Y) is affective commitment AC. The table above shows that OBSE, JA and DJ have a statistically significant relationship with employee engagement satisfying the first condition of mediation. Second, the independent variables (X's) have a statistically significant relationship with the dependent variable (Y) satisfying the second condition of mediation. Third, the mediator variable, engagement, has a statistically significant relationship with the dependent variable (Y) lending support for the third condition of mediation. After controlling for the independent variables, step 4, the effect of M, employee engagement on Y, affective commitment remains statistically significant hence mediation is supported. The beta coefficients drop in strength after controlling for engagement, but remain significant indicating that engagement partially mediates the relationship between OBSE, JA, DJ and affective commitment. In conclusion, employee engagement partially mediates the relationship between OBSE, JA, DJ and affective commitment (AC) for all employees.

For public sector, multiple regression analysis (Table 4) shows that only OBSE and DJ had a statistically significant relationship with the mediator variable, employee engagement hence satisfying the first condition for mediation (Baron & Kenny, 1986) hence will be considered for mediation analysis.

Table 18a. Hierarchical results for testing mediation of employee engagement between OBSE, DJ and intention to turnover (IT) - Public sector

Variable	Step 1		Step 2		Step 3		Step 4	
	β	SE (β)	β	SE (β)	β	SE (β)	β	SE (β)
Control vars								
OBSE	0.443**	0.143	-0.092	0.182			-0.061	0.189
DJ	0.405**	0.083	-0.344**	0.106			-0.316**	0.116
Engagement					-0.235*	0.094	-0.070	0.111
F - Statistic	8.188**		2.71**		2.269*		2.582	
R ² (Adj. R ²)	0.047 (0.041)		0.23 (0.14)		0.18(0.10)		0.23(0.14)	

Notes *p<0.05, **p<0.01, N=175 Control variables are gender, age, education status, tenure, marital status, employment status, job position, and citizenship status, days working per week, dependants and monthly income.

OBSE and DJ have a statistically significant relationship with employee engagement among public sector employees satisfying the first condition for mediation. However only DJ has a statistically significant relationship with intention to turnover satisfying the second condition of mediation. OBSE does not have a statistically significant relationship with intention to turnover hence does not meet condition for mediation in public sector employees. Third, the mediator variable, employee engagement has a statistically significant relationship with Y (intention to turnover) lending support for the third condition of mediation. This suggests that the relationship OBSE intention to turnover is not mediated by employee engagement among public sector employees. However, after controlling for the independent variables (step 4), the beta coefficient for distributive justice is reduced in strength suggesting that employee engagement partially mediates the relationship between DJ and intention to turnover among public sector employees.

Table 18b. Hierarchical results for testing mediation of employee engagement between OBSE, DJ and affective commitment (AC) - Public sector

Variable	Step1		Step 2		Step 3		Step 4	
	β	SE (β)	β	SE (β)	β	SE (β)	β	SE (β)
Control vars								
OBSE	0.443**	0.143	0.257*	0.101			0.206*	0.103
DJ	0.405**	0.083	0.052	0.059			0.005	0.063
Engagement					0.166**	0.051	0.115	0.061
F - Statistic	8.188**		2.294**		2.489**		2.424**	
R ² (Adj. R ²)	0.047 (0.041)		0.20 (0.11)		0.19 (0.11)		0.22 (0.13)	

Notes *p<0.05, **p<0.01, N=175 Control variables are gender, age, education status, tenure, marital status, employment status, job position, and citizenship status, days working per week, dependants and monthly income.

OBSE and DJ have a statistically significant relationship with employee engagement among public sector employees satisfying the first condition for mediation. However only OBSE has a statistically significant relationship with affective commitment satisfying the second condition of mediation. It is important to note that DJ does not have a statistically significant relationship with AC hence does not meet condition for

mediation in public sector employees. Third, the mediator variable, employee engagement has a statistically significant relationship with Y (affective commitment) lending support for the third condition of mediation. After controlling for the independent variables, the effect of employee engagement (M) on intention to turnover (Y) is not statistically significant hence lending no support for mediation of employee engagement between DJ and affective commitment among public sector employees. This suggests that the relationship between the independent variables OBSE and DJ with affective commitment among public sector employees could be a more direct one.

Table 19a. Hierarchical results for testing mediation of employee engagement between OBSE, DJ, CS and intention to turnover (IT) - Private sector

Variable	Step1		Step 2		Step 3		Step 4	
	β	SE (β)	β	SE (β)	β	SE (β)	β	SE (β)
Control vars								
OBSE	0.308**	0.070	-0.359**	0.123			-0.220	0.124
DJ	0.228**	0.052	-0.47*	0.090			-0.114	0.091
CS	0.108*	0.050	-0.089	0.087			-0.040	0.085
Engagement					-0.610**	0.096	-0.452**	0.113
F - Statistic	9.210**		3.298**		4.691**		4.289**	
R ² (Adj. R ²)	0.38(0.34)		0.18 (0.13)		0.21(0.17)		0.24 (0.18)	

Notes *p<0.05, **p<0.01, N=263 Control variables are gender, age, education status, tenure, marital status, employment status, job position, and citizenship status, days working per week, dependants and monthly income.

OBSE and DJ and CS have a statistically significant relationship with employee engagement among private sector employees satisfying the first condition for mediation. However only OBSE and DJ has a statistically significant relationship with intention to turnover (IT) satisfying the second condition of mediation. It is important to note that CS does not have a statistically significant relationship with IT hence does not meet condition for mediation in private sector employees. Third, the mediator variable, employee engagement has a statistically significant relationship with Y (intention to turnover) lending support for the third condition of mediation.

After controlling for the independent variables, the effect of employee engagement (M) on intention to turnover (Y) is statistically significant hence lending support for

mediation of employee engagement between OBSE, DJ and intention to turnover. When all variables are entered into the model simultaneously, the independent variables are not statistically significant indicating that employee engagement fully mediates the relationship between OBSE, DJ and intention to turnover among private sector employees.

Table 19b. Hierarchical results for testing mediation of employee engagement between OBSE, DJ, CS and affective commitment (AC) - Private sector

Variable	Step 1		Step 2		Step 3		Step 4	
	β	SE (β)	β	SE (β)	β	SE (β)	β	SE (β)
Control vars								
OBSE	0.308**	0.070	0.182**	0.065			0.081	0.063
DJ	0.228**	0.052	0.204**	0.048			0.130**	0.046
CS	0.108*	0.050	0.055	0.046			0.019	0.043
Engagement					0.440**	0.050	0.328**	0.058
F - Statistic	9.210**		7.133**		10.256**		9.645**	
R ² (Adj. R ²)	0.38 (0.34)		0.33 (0.28)		0.38(0.34)		0.41(0.37)	

Notes *p<0.05, **p<0.01, N=263 Control variables are gender, age, education status, tenure, marital status, employment status, job position, and citizenship status, days working per week, dependants and monthly income.

OBSE and DJ and CS have a statistically significant relationship with employee engagement among private sector employees satisfying the first condition for mediation.

However only OBSE and DJ has a statistically significant relationship with affective commitment (AC) satisfying the second condition of mediation. It is important to note that CS does not have a statistically significant relationship with AC hence does not meet condition for mediation in private sector employees. Third, the mediator variable, employee engagement has a statistically significant relationship with Y (affective commitment) lending support for the third condition of mediation.

After controlling for the independent variables, the effect of employee engagement (M) on affective commitment (Y) is statistically significant hence lending support for mediation of employee engagement between OBSE, DJ and affective commitment.

When all variables are entered into the model simultaneously, the independent variable (OBSE) drop in significance indicating that employee engagement fully mediates the relationship between

OBSE and affective commitment. DJ however drops in strength but remains significant indicating that employee engagement partially mediates the relationship between it and affective commitment among private sector employees.

Decision table for mediation of employee engagement between resources and outcome variables (Intention to turnover and Affective Commitment)

Hypotheses	All Sectors	Public Sector	Private Sector
Employee engagement mediates the relationship between OBSE and IT.	Supported	Supported	Supported
Employee engagement mediates the relationship between JA and IT.	Supported	N/A	N/A
Employee engagement mediates the relationship between DJ and IT.	Supported	Supported	Supported
Employee engagement mediates the relationship between CS and IT.	N/A	N/A	Not supported
Employee engagement mediates the relationship between OBSE and AC.	Supported	Not Supported	Supported
Employee engagement mediates the relationship between JA and AC.	Supported	N/A	N/A
Employee engagement mediates the relationship between DJ and AC.	Supported	Not Supported	Supported
Employee engagement mediates the relationship between CS and AC	N/A	N/A	N/A

Note: N/A shows that one of the conditions of mediation was not satisfied hence mediation was not conducted for those variables in the sector.

5.4.4 Hypothesis 4: Ubuntu construct mediate the relationship between CS, SS and employee engagement. Specific hypotheses were,

- i) *Ubuntu mediates the relationship between Supervisor Support and employee engagement.*

- ii) *Ubuntu mediates the relationship between Colleague Support and employee engagement.*

The Ubuntu construct was modelled as a mediator due to the nature of its relationship with social resources. The Ubuntu construct suggests that a person is who they are because of the interaction of the community around them. One could therefore argue that the Ubuntu construct can be used to explain the relationship between social resources and employee engagement due to the nature of its relationship with social resources.

According to Baron and Kenny (1986) a variable can function as a mediator when if it can intervene between the independent and dependent variable. The argument here is that the effect of the independent variable on the dependent variable is mediated by a process internal to the variable. Evidence suggest that the Ubuntu construct is inherent among Africans and also emphasizes on the interaction of the individual with the community around them. This is also supported by a positive association between social resources (CS and SS) and the Ubuntu variable in the correlation matrix. Based on this reasoning, it was logical to expect the Ubuntu construct to influence the relationship between social resources and employee engagement. Since there is no theoretical support for this relationship within the JD-R framework an independent mediation analysis for the proposed mediation was conducted. This means that the multiple regression analysis findings on Table 4 were not used to show if the conditions of mediation were met.

Table 20a. Hierarchical results for testing mediation of Ubuntu construct between social resources (SS, CS) and employee engagement - All sectors.

Variable	Step 1		Step 2		Step 3		Step 4	
	β	SE (β)	β	SE (β)	β	SE (β)	β	SE (β)
Control vars								
CS	0.166**	0.039	0.183**	0.061			0.093	0.061
SS	0.194**	0.034	0.207**	0.054			0.157**	0.052
Ubuntu					0.096**	0.078	0.551**	0.085
F - Statistic	4.443** 0.16(0.13)		5.913* 20.9 (17.4)		8.624** 0.27(0.24)		8.910** 0.31(0.27)	
R ² (Adj R ²)								

Notes *p<0.05, **p<0.01, N=263 Control variables are gender, age, education status, tenure, marital status, employment status, job position, and citizenship status, days working per week, dependants and monthly income

From the table above, the independent variables (X's) CS and SS have a statistically significant relationship with the mediator variable, Ubuntu hence lending support for the first condition of mediation. CS and SS also have a statistically significant relationship with the dependent variable lending support for the second condition of mediation. The mediator variable, Ubuntu has a statistically significant relationship with the dependent variable, employee engagement lending support for the third condition of mediation. After controlling for the independent variables (X's), the effect of the Ubuntu construct (M) on employee engagement (Y) is statistically significant hence lending support for the mediation of Ubuntu construct between SS and employee engagement. The relationship between CS and employee engagement becomes statistically not significant after controlling for the independent variables suggesting that the Ubuntu construct fully mediates the relationship between CS and employee engagement. The beta value for the relationship between SS and employee engagement

reduces in absolute value after controlling for the independent variable suggesting that Ubuntu partially mediates the relationship between SS and employee engagement among all employees.

Table 20 b. Hierarchical results for testing mediation of Ubuntu construct between social resources (SS, CS) and employee engagement - Public sector.

Variable	Step1		Step 2		Step 3		Step 4	
	β	SE (β)	β	SE (β)	β	SE (β)	β	SE (β)
Control vars								
CS	0.185**	0.061	0.220*	0.128			0.055	0.124
SS	0.065**	0.046	0.266**	0.094			0.243**	0.088
Ubuntu					0.936**	0.169	0.808**	0.185
F -	2.455**		4.926**		6.883**		6.898**	
Statistic	0.22(0.13)		0.38(0.30)		0.43(0.37)		0.48(0.41)	
R ² (Adj R ²)								

Notes *p<0.05, **p<0.01, N=263 Control variables are gender, age, education status, tenure, marital status, employment status, job position, and citizenship status, days working per week, dependants and monthly income

From the table above, CS and SS have a statistically significant relationship with the mediator variable, Ubuntu hence lending support for the first condition of mediation. CS and SS has a statistically significant relationship with the dependent variable (engagement) lending support for the second condition of mediation. The mediator variable, Ubuntu has a statistically significant relationship with the dependent variable, employee engagement lending support for the third condition of mediation. After controlling for the independent variables (X's), the effect of the Ubuntu construct (M) on employee engagement (Y) is statistically significant hence lending support for the mediation of Ubuntu construct between SS and employee engagement. CS becomes non-significant suggesting that Ubuntu fully mediates the relationship between CS and employee engagement. In conclusion, the Ubuntu construct mediates the relationship

between the independent variables CS, SS and employee engagement for public sector employees.

Table 20c. Hierarchical results for testing mediation of Ubuntu construct between social resources (SS, CS) and employee engagement - Private sector

Variable	Step 1		Step 2		Step 3		Step 4	
	β	SE (β)	β	SE (β)	β	SE (β)	β	SE (β)
Control vars								
CS	0.149**	0.050	0.157**	0.061			0.091	0.059
SS	0.091*	0.046	0.145**	0.056			0.104	0.054
Ubuntu					0.553**	0.074	0.449**	0.077
F - Statistic	3.552** 0.18(0.13)		5.497** 0.25(0.21)		7.637** 0.31(0.27)		7.958** 0.35(0.31)	
R ² (Adj R ²)								

Notes *p<0.05, **p<0.01, N=263 Control variables are gender, age, education status, tenure, marital status, employment status, job position, and citizenship status, days working per week, dependants and monthly income

From the above table, CS and SS have a statistically significant relationship with the mediator variable lending support for the first condition of mediation. Second, CS and SS have a statistically significant relationship with the dependent variable (employee engagement) lending support for the second condition of mediation. The mediator variable, Ubuntu has a statistically significant relationship with the dependent variable lending support for the third condition of mediation. After controlling for the independent variables, (step 4), the regression coefficients for the independent variables (CS and SS) become non-significant suggesting that the Ubuntu construct fully mediates the relationship between CS, SS and employee engagement.

Decision table for the mediation of Ubuntu construct on the relationship between social support (CS and SS) and employee engagement.

Hypotheses	All Sectors	Public Sector	Private Sector
Ubuntu mediates the relationship between CS and employee engagement.	Supported	Supported	Supported
Ubuntu mediates the relationship between SS and employee engagement.	Supported	Supported	Supported

5.5 Chapter Summary

This chapter has presented the findings from the data and explained the test statistics employed to examine the proposed hypotheses. This study focused on testing the JD-R model by considering the Ubuntu construct with regard to public and private sector organizations. The extension of the JD-R model with Ubuntu provided the opportunity to examine the ways in which a cultural phenomenon could be imperative in explaining organizational behavior. The study identified four main findings.

First, the findings provided evidence that specific job resources are important predictors of employee engagement in both private and public sector employees. This finding strengthens the argument in the literature that job resources are important predictors of employee engagement (Bakker & Demerouti, 2008). Multiple regression analysis (Table 4) indicated that for all employees, organizational based self-esteem (OBSE), job autonomy (JA) and distributive justice (DJ) have statistically significant positive relationship with employee engagement. Generalized self-efficacy (GSE), colleague support (CS) and supervisor support (SS) did not have a statistically significant relationship with employee engagement. This indicates that, for this data set, OBSE, DJ and JA are important predictors of employee engagement. OBSE and

DJ were statistically significant predictors for both public and private sector employees. Interestingly, job autonomy turned out to have a statistically significant positive relationship among all employees, but was not statistically significant in specific sectors. Additionally colleague support turned out to have a statistically significant relationship with engagement for only private sector employees. Second, the interaction of job demands and resources in the prediction of employee engagement were not evident with no interaction effect examined demonstrating statistical significance. This finding is in line with Brough, Timms, Siu, Kaliath, O'Driscoll, and Sit (2013) longitudinal research which evaluated the JD-R model in Australian and Chinese samples. Third, the results confirmed employee engagement as a mechanism which accounts for the relationship between specific job resources resources and desired organizational behavioural outcomes. Specifically among all employees, employee engagement mediated the relationship between OBSE, DJ, JA and intention to turnover and affective commitment. Differences on the mediation of employee engagement between specific job resources and outcome variables were observed between the private and public sector. Among public sector employees, employee engagement mediated the relationship between OBSE, DJ and intention to turnover whereas no mediation was supported between OBSE, DJ and affective commitment. Mediation of employee engagement between resources and outcome variables seem to be more imperative for private sector employees with mediation supported between OBSE, DJ and intention to turnover and affective commitment. It is important to note that mediation analysis is conceptually a causal analysis and data for this study was conducted at a point in time. The findings therefore should be interpreted against this limitation.

Fourth, the proposed mediation analysis of the Ubuntu construct between CS, SS and employee engagement revealed that the Ubuntu construct can be used to explain the relationship between social support and employee engagement. This finding was supported across all sectors and among all employees. Added to this, a statistically significant positive relationship was observed between the Ubuntu construct and employee engagement signaling that the presence of Ubuntu is important for predicting employee engagement among employees. As already stated, mediation analysis is conceptually causal and in order to get a clearer picture of the mediation of the Ubuntu construct longitudinal data would be more useful. However, the findings for this study give an indication of the presence of mediation and should also be interpreted against this limitation.

Chapter 6 Discussion of Findings

6.1 Introduction

Chapter one detailed the statement of the problem by pointing out that valid comparisons across countries cannot be made because of lack of empirical work on representative national samples (Schaufeli, 2014). Added to this, there have been calls for studies examining culture specific constructs and how they are related to employee engagement and research on employee engagement in non-Western cultures (Hu et al., 2014; Kim et al., 2012). In response to these concerns, this study drew from the JD-R model and explored employee engagement within the context of an African sample by extending the JD-R model with the Ubuntu construct. The study modelled Ubuntu as a mediator between social resources and employee engagement. Since there are questions as to whether theories developed in Western cultures may lack validity when exported to other cultural contexts, this study examined an employee engagement theory developed largely in Europe and factored in a cultural construct so as to account for cultural variance. Data from 438 employees in public and private sector organizations in Botswana partly supported the conceptual framework. The purpose of this chapter is to discuss the results from the previous chapter and their theoretical and practical implications. The chapter will be divided into three sections.

First, it will discuss results of the first hypothesis. This will be followed by a discussion on moderation of job demands on the relationship between job resources and employee engagement (Hypothesis 2). Third, a discussion on employee engagement as a mediator between job resources and desired organizational behavioural outcomes will be provided.

Fourth, a discussion on how the JD-R model can be extended with the Ubuntu construct and how that will make it relevant to management in the African context will be provided.

6.2 Motivational Process of the JD-R (Hypothesis 1)

Multiple regression analysis was conducted to examine which of the resources were statistically significant predictors of employee engagement. A significant beta value suggests that the predictor is important in the prediction of employee engagement. The motivational process of the JD-R model occurs when job resources are available to assist employees to perform their job and are predictive of their employee engagement levels (Bakker & Demerouti, 2008). This study provided evidence that distributive justice (DJ), job autonomy (JA), organizational based self-esteem (OBSE), generalized self-efficacy (GSE) and colleague support (CS) can all be considered important predictors of employee engagement. In line with hypothesis 1, multiple regression analysis resulted in statistically significant predictors of these job resources on employee engagement. This study found evidence of this motivational process in three regression models predicting engagement in all sectors, public and private. The coefficients of determination (R^2 's) for all the three models were reasonably high (All sectors = 36.9%, public sector = 53.6%, private sector = 38.9%) suggesting that the models fitted the data well.

A notable finding is that while OBSE and DJ are significant predictors for both sectors, JA is a significant predictor for public sector but not private sector employees. However, CS is a significant predictor for private sector but not public sector employees. This means that JA is an important predictor for employee engagement in

the public sector. This could be because of the hierarchical nature of the public sector organizations where lower levels employees are not given much decision making power (Eaton-Walley & Lowe, 1990). On the other hand, for private sector employees, colleague support emerged as a more important predictor compared to public sector employees. Whereas public sector employees are usually employed on a permanent and pensionable basis, private sector employees are usually employed on renewable contracts and this employment status could have influenced the importance of colleague support as an important employee engagement predictor for private sector employees. This suggests that although OBSE and DJ are important predictors in both sectors, other predictors are statistically significant in a specific sector implying that the type of job resources can be a crucial element in the employment sector one works in. This leads to a conclusion that different resources are likely to be important in different jobs, therefore specific professions are more likely to regard resources differently. Since this research used a heterogonous sample in terms of professions it was not possible to find out which specific resources are significant to which groups of professions.

On the whole, these particular findings are consistent with earlier research findings which showed that when employees have higher levels of self-esteem and were allowed to have some discretion over decisions about how they plan and do their tasks they were more likely to be engaged in their work (Mauno et al., 2007; Bakker et al., 2007). Equally, employees are likely to experience burnout when they experience lack of job autonomy (Littman-Ovadia et al., 2013) and experience low self-esteem (Elloy & Patil, 2012). Akkermans, Schaufeli, Brenninkmeijer and Blonk (2013) found out that job resources (career competencies) are positively related to work engagement and Brough et al.'s (2013) longitudinal study on Australian and Chinese employees

revealed that job resources (supervisor support and colleague support) accounted for substantial variance in employee engagement. With regards to personal resources, Mauno et al.'s (2007) two year longitudinal study showed that work engagement was frequently experienced by employees with high levels of organizational based self-esteem and they found out that job autonomy and organizational based self-esteem proved to be the best predictors of the three dimensions of work engagement. Xanthopoulou et al. (2009) also found out that self-esteem, self-efficacy and optimism are related to work engagement and financial returns in their study of a Greek fast food company. Additionally, both personal and job resources have been found to be equally important in predicting employee engagement (Bakker & Sanz -Vergel, 2013).

Combining the results of hypothesis 1, one may conclude that the relationship between resources and employee engagement is similar to the one portrayed in the majority of earlier studies conducted elsewhere, reported in the literature. The results have shown that in line with the JD-R model, employees with a strong resource base are likely to be more engaged in their work roles irrespective of their employment sector.

6.3 The Interaction of Job Demands and Job Resources (Hypothesis 2-Moderation)

As stated in the previous chapter, a significant interaction term suggests that the introduction of the moderator variable will change the strength and or the magnitude of the relationship between the independent and dependent variables. The JD-R model proposes that the interaction of job demands and job resources gain their motivational potential when employees are confronted with high job demands (Bakker &

Demerouti, 2008). One of the objectives of this study was to test if the interaction of job demands (WHI and JO) and resources (job, personal and social) will positively influence employee engagement. Contrary to this assumption, this research found out that none of the interactions between job demands and job resources were statistically significant in either sector demonstrating no support for the hypothesized interactions of job demands and job resources. Of the six moderation effects examined in both private and public sector, none was significant. Hayes (2013) points out that the interaction term only tells us whether there is moderation between X and Y, but does not establish whether X has an effect on Y on high or low levels of M. If interaction term is significant follow up inferential tests are needed to establish where in the distribution of the moderator X has an effect on Y. Since there were no statistically significant interaction terms, there was no need to perform a follow up test of the interaction term to establish whether high job demands are important in the motivational process.

These results are therefore markedly different from significant job demands/ job resources interactions reported in the literature (Bakker et al., 2007; Hakanen et al., 2005; Xanthopolou et al., 2007). It is important to note that while the interaction terms were not significant, the moderation models displayed significant amounts of variance explaining employee engagement (R^2 values), suggesting that the interaction terms may well add to the explained variance of the dependent variable but may not influence the direction and strength of the relationship between the independent and dependent variable. This finding appears to conflict with the literature on moderation of job demands on job resources to influence employee engagement. One explanation for this finding could be related to the type job demands selected for this study. Research reports there are two types of job demands: challenges and hindrances. These two are

differently associated with work engagement (Inoue, Kawakami, Tsutsumi, Shimazu, Miyaki, Takahashi, Kurioka, Eguchi, Tsuchiya, Enta, Kosugi, Sakata & Totsuzaki, 2014). Challenges are defined as circumstances that, although potentially stressful, have potential gains for individuals, and hindrances are defined as circumstances that tend to constrain or interfere with an individual's work achievement (Cavanaugh, Boswell, Roehling & Boudreau, 2000). Although the JD-R model does not assume any association between job demands and engagement, empirical studies have demonstrated that challenging job demands are associated with engagement (Bakker, Demerouti & Schaufeli, 2005) whereas hindrances are negatively associated with engagement (Lorente, Salanova, Martinez & Schaufeli, 2008). The JD-R model also proposes that job demands moderate the relationship between job, personal resources and employee engagement such that the relationship is stronger when job demands are high (Bakker & Demerouti, 2008). Although there is empirical support for this moderation effect, empirical findings have not been consistent. For example, Bakker and Sanz-Vergel (2013), in their study of health care nurses, found out that nurses perceived work pressure more as a hindrance demand than a challenge demand. The results revealed that contrary to the JD-R model, job demands do not moderate the relationship between resources and employee engagement for neither private nor public sector employees. Findings from this study also demonstrate a statistically insignificant relationship between job demands and employee engagement suggesting that it is not very clear whether job overload and work home interference were perceived as hindrance or challenging demands. It may be that when testing for the moderation effect of job demands on the relation between resources and employee engagement, those job demands employees perceive as challenges may moderate the relationship. The interpretation of the insignificant interaction terms may also be

influenced by the sample size (Baron & Kenny, 1986). In most cases the sample size is flagged as a limitation. However, given the sample size for this study (n=438), underestimation or overestimation is likely not to be a problem and therefore the moderation results, at least for the whole sample, are interpreted with some degree of confidence (Brough et al., 2013). In conclusion, despite research progress in the understanding of these interaction effects, it is still unclear under which conditions and which type of job demands this interaction effect is likely to occur (Tadic, Bakker, & Oerlemans, 2015).

Another explanation for this finding could be that the interaction between job demands and job resources in the prediction of employee engagement may be more temporary or occur at specific moments. The correlation coefficients showed associations between job demands and job resources implying a linear relationship between the two. However, this does not mean that employees will experience employee engagement. This could mean that although resources are made available, there could be either under or over provided to meet the current job demands in order to predict employee engagement. Organizations therefore may need to regularly monitor job resources available to employees to ensure that their job demands are met. It should also be noted that the sample for this study combined different kinds of workers with different job demands and job resources at their disposal. Perhaps the testing of interaction in a specific sample of workers could result in a significant interaction term as they may have similar job demands and resources. Different professions consider job demands differently. For example, whereas physical job resources are considered important for factory employees, other professions such as academics are likely to consider cognitive resources more highly (Brough et al., 2013). The inclusion of job specific demands therefore appears to be valuable in testing the interaction effects.

This was supported by Hakanen, Schaufeli and Ahola (2008) in their study of dentists in Finland. Lastly, this research was conducted at a point in time and it could be that the interaction of job demands and job resources is more pronounced over a period of time.

6.4 The Mediation of Employee Engagement on the Relationship Between Resources and Desired Organizational Behaviour Outcome.

One of the objectives of this research was to test the JD-R model of how job resources affect levels of employee engagement (Hypothesis1) and further how the relationship between job resources and desired behavioural outcomes is mediated by employee engagement. As hypothesized, it was found out that in both employment sectors employee engagement mediated the relationship between specific job resources and organizational behavioural outcomes (IT and JA). That is, an increase in resources is related to an increase in employee engagement, which in turn is positively related to desired organizational outcomes. This means that, hypothesis 1 and 3 are confirmed. The model fits well in two employment samples (private and public) although slight differences were observed between the two samples in terms of which job resources were mediated by employee engagement to influence desired organizational behavioral outcomes. These results agree with recent research about how job resources increases employee engagement and – in their turn- increase desired organizational behavioural outcomes such as affective commitment and intention to turnover (Salanova and Schaufeli 2008). The findings suggest that instead of directly affecting desired organizational behavior, job resources indirectly affect behavioral outcomes via increasing levels of employee engagement. On a more general level, this finding is

supported by Hackman and Oldham's (1980) job characteristics theory that assumes that psychological states mediate between job characteristics and outcomes. In this study, employee engagement was a psychological state that played that role. The psychological state of employee engagement would therefore be beneficial to the employees in terms of facilitating the relationship between resources and desired positive organizational behaviours. The study found out that work engagement partially mediated the relationship between OBSE, JA, DJ and AC, IT among all employees. This suggests that employees who perceive abundance of these resources would feel highly engaged in their work roles which in turn is likely to influence desired behavior in a positive way.

These findings are in line with the results of some existing research. For example, Alfes et al. (2013) study found out that employee engagement was a mediator between HRM practices and organizational citizenship behavior. A theoretical explanation of the mediating role of employee engagement could be understood through the Social Exchange Theory (Saks, 2006) which suggests that if employees feel their organizations are investing in them through the provision of resources, they are more willing to reciprocate through higher levels of engagement which will in turn influence positive behavioural outcomes. However, a focus on the provision of job resources alone is not likely to capture the experiences of employees and is likely to omit the critical dimensions of the social exchange relationships (Alfes et al. 2013). It is therefore not the provision of resources that is most significant, but rather how employees perceive and experience those resources, lending support to the argument that the views of employees are also important in the exchange relationship (Den Hartog, Boselie & Paauwe, 2004). These findings points to engagement as a promising underlying mechanism for explaining employees' behaviour at work. Explaining the

magnitude of this mechanism may contribute greatly to our understanding of the mechanism that may account for the effect of different kinds of resources on desired organizational behavioural outcomes.

6.5 The Mediation of Ubuntu on the Relationship Between Social Resources (SS & CS) and Desired Organizational Behaviour Outcome (Hypothesis 4).

This study contributes to the cross cultural development of the JD-R model by extending it with Ubuntu, a typical African phenomenon to increase its applicability in the African context. It further builds on the work of Hu et al. (2014) by distinguishing between job and social resources than to test a model with a single composite resource factor. Distinguishing social resources from job resources was necessary because jobs are embedded with networks of interpersonal relationships which are either formal or informal (Brass 1981). As Hu et al. (2014) argue, work related interactions are to some extent influenced by the quality of informal interpersonal relationships and in the African context the Ubuntu construct has been considered as a typical product of African values inherent in the ethics of the African people. As already explained in chapter 3, at the core of Ubuntu is the idea that a person depends on others to be a person and this claim is seen as a unique product that Ubuntu can be applied as an ethic in management for better productivity and service delivery (Matolino & Kwindigwi 2013). Ubuntu emphasizes the spirit of community and solidarity and includes the voices of all participants in an organization and the building of consensus (Mbigi and Maree 1995). It has been argued that Ubuntu can be a source of competitive advantage as it emphasizes social well-being and favours solutions that are preferred by a wider group of employees (Mangaliso 2001). Based on the Social Exchange Theory, this study suggested that the Ubuntu construct will

mediate the relationship between social resources and employee engagement. That is, if employees have high levels of social support, they are likely to exhibit the Ubuntu values which will in turn positively influence their employee engagement levels. The social resources used for this study were based on work related interactions but their availability was to a large extent influenced by the presence of the Ubuntu construct as shown by the positive relationship between social resources and Ubuntu construct in both employment sectors. While the last years have witnessed interest in employee engagement research, the knowledge of employee engagement models incorporating indigenous concepts such as Ubuntu are not adequately reflected in original Western management theories. More context – specific research drawing on indigenous thought in developing new theories will not only help to better understand management theories in emerging economies but will also contribute to global management knowledge as well. This study has illustrated how a locally meaningful context specific indigenous construct of Ubuntu can be incorporated in Western models in order to be applicable in the African context. As argued by West (2014) and Gbadamosi (2003) strategies based on Western European scientific techniques ignore the rich resources which exist in non – Western societies. Local or traditional knowledge has become relevant and a resource bank from which alternative strategies might be built. In addition Jackson, Amaeshi and Yavuz (2008) demonstrated how the success of firms in Africa is affected by the use of local management techniques that have evolved over several centuries. It therefore becomes vital to analyze indigenous management concepts such as the Ubuntu and their impact on management behavior and outcomes in countries where it exists. This can be useful in further understanding the implicit assumptions of Western theories and improve the universal theories of HR management. As Broodryk (2005) argue, indigenous concepts such as Ubuntu are not

limited to the regions they originate from, but may be used to influence global management knowledge.

6.6 Other Findings

The literature suggests that several demographic variables such as gender, age, and tenure, have been studied in relation to employee engagement. In this study the following demographic variables came out as statistically significant predictors of employee engagement: age, total tenure, marital status and citizenship. In a similar way a number of empirical studies have supported the negative relationship between age and engagement (Avery et al., 2007; D'Amato & Herzfeld, 2008; James et al., 2011; Robinson et al., 2004). However, the negative relationship between marital status and engagement and positive relationship between tenure and engagement found in this study has not been reported elsewhere in the literature, hence this study adds to the debate around demographic variables and engagement. Demographic variables which significantly predicted engagement in the public sector were age ($\beta = -0.664$, $p=0.000$) and total tenure ($\beta = 0.066$, $p=0.000$) and in the private sector only marital status ($\beta = -0.181$, $p=0.017$) and citizenship ($\beta = -0.085$, $p=0.035$) were significant predictors.

In comparison to the private sector, public sector employees are revealed to be older with more tenure hence the importance of these demographic indicators. The private sector is more likely to employ expatriates than the public sector therefore citizenship status is more significant in the private sector.

6.7 Chapter Summary

This research was set out to examine ways in which employees perceive and respond to the resources and demands in organizations through the development and testing of the JD-R model. Specifically the research introduced Ubuntu as a key mediator between social resources (CS and SS) and employee engagement. The study revealed a positive relationship between resources and employee engagement lending support for hypothesis 1. Marked differences between private and public sector were observed. With regards to the moderation effect of job demands on the relationship between resources and employee engagement, none of the interactions were statistically significant demonstrating no support for hypothesis 2. The study further found that employee engagement mediated the relationship between resources and two types of employee behaviour, namely affective commitment and intention to turnover lending support for hypothesis 3. Lastly the study found out that Ubuntu mediated the relationship between social resources (supervisor support and colleague support) and employee engagement lending support for hypothesis 4. Except for the moderation effect of job demands, these findings are consistent with the propositions of the JD-R model which suggest that job, personal and social resources are able to increase employee engagement which will likely encourage positive organizational behaviour outcomes from employees. The study has demonstrated that employees consider the availability of resources as an important factor to their motivation. This suggests HR managers should consider ways in which to strengthen the availability of different types of resources in order to create opportunities for employees to be engaged in their jobs. Even though the job demands/ resources interaction was not supported as is the case with this study, it is important for HR managers to maintain a balance between job demands and resources in order to make employees feel challenged and stimulated

by their job tasks which is likely to be viewed favorably by the employees hence increase their likelihood of engagement. Lastly, the study has shown that social resources, through the Ubuntu construct, are important in enhancing employee engagement in the work place. HR managers should therefore ensure that they promote activities that can encourage social interactions in the workplace.

Chapter 7 Conclusions, Implications, Limitations and Suggestions for Future Work

7.1 Introduction

The previous chapter has presented analysis and discussions of the findings in relation to the literature. This chapter will integrate and tie together the various issues covered in this thesis and comment on their meaning by making a final judgment based the research evidence by providing what is unique in terms of what the current theory is missing and the need to amend it for an African context.

The chapter will begin with a section reiterating the question that the study was set out to answer and justify its necessity. This will be followed by a section establishing the research context, background and importance of the study, after which a discussion on the gap in the literature will be presented. The chapter then presents conclusions on the key findings of the study and concludes by presenting limitations and suggestions for future work. This will then be followed by a discussion on the usefulness of the JD-R theory for work engagement and a suggestion on how it can be amended for more relevance in the African context.

7.2 Research Questions and Objectives

This study set out to explore employee engagement by extending the JD-R model with Ubuntu, a specific cultural construct in Botswana. In the past few years the Botswana government has taken initiatives such as training and development, performance management and benchmarking as a way of increasing productivity. However, there

has been significant evidence showing that these initiatives are not successful as the workforce still remained unmotivated and disengaged in their jobs. This could be because of lack of involvement on the part of the employees. Although these initiatives are good, the current changes in the world of work such as diversity, teamwork and job crafting require a substantial psychological adaptation and involvement from employees (Schaufeli, 2014). Modern organizations need employees who are willing to invest in their jobs psychologically instead of merely bringing their physical presence to work. It is therefore important for organizations to invest in the cultivation of psychological constructs such as employee engagement.

The study sought to answer the following two questions:

- a) What is the relationship between job demands, job resources, organizational outcomes and employee engagement?
- b) To what extent does the presence of Ubuntu influence employee engagement?

In order to answer the above research questions, the following specific objectives were suggested.

1. To determine the relationship between resources (job, personal, social) and employee engagement.
2. To evaluate whether the process through which resources (job, personal and social) influence employee engagement is dependent on job demands.
3. To determine whether employee engagement is the mechanism through which resources (job, personal, social) influence desired organizational outcomes.
4. To determine and examine whether Ubuntu is the mechanism through which social resources influence employee engagement.
5. To examine comparatively employee engagement and its predictors between public and private sector organizations.

7.3 Conclusions

In order to examine the relationship between job demands, job resources and, desired organizational behaviour outcomes, this study drew from the JD-R model. (Bakker & Demerouti, 2008). The model posits that two main categories of job characteristics- job demands and job resources- are crucial for work related wellbeing regardless of occupational setting. Job resources are particularly related to employee engagement whereas job demands require considerable physical and psychological effort. The model also suggests that job demands and job resources have an interactive effect on employee engagement and that employee engagement is a mechanism that can be used to explain the relationship between resources and desired organizational behaviour outcomes. Not all hypotheses were confirmed for this study. The results clearly demonstrated that resources (job, personal and social) are important in influencing employee engagement (Bakker & Demerouti, 2008). The job demands- resource interaction effect was not supported. One explanation to this could be that the effects of interactions are dependent on the type of demand that is whether employees perceive the demand as a challenge or hindrance demand. (Inoue, Kawakami, Tsuno, Shimazu, Tomioka & Nakanishi, 2013). Another explanation is that the interaction effect might depend on the daily job resources and demands provided (Tadic et al., 2015). Different demands and resources are likely to be made available on different days meaning that work experiences are likely to change daily, with days when employees feel more challenged than others. Further, job resources and demands are likely to be job specific. As already highlighted, research on the job demands-resource interaction is inconclusive and more research is needed to uncover the interaction effect hypothesis of the JD-R model.

With regards to mediation process, the hypotheses were partly supported. On the whole the findings support the mediation effect of employee engagement on the relationship between job resources (DJ and JA) and desired organizational behaviour outcomes (IT and AC). However the relationship between personal resources (OBSE and GSE) and desired organizational behaviour outcomes came out as a more direct relationship. These findings could mean that employees make a judgment on resources provided for by the organization in order to be engaged in their work and further decide on desired organizational behaviour. However, the absence of employee engagement as a mediator between personal resources and behavioural outcomes could suggest that even without being engaged, employees will decide, based on their personal resources, on desired organizational behaviour outcomes.

This study illustrated that the importance of widening the scope of testing organizational behaviour theories in culturally diverse samples is important for theory building. The findings presented in chapter five support the hypothesis that Ubuntu mediates the relationship between social resources (SS and CS) and employee engagement for both public and private sector employees. These findings mean that the presence of Ubuntu among African people can be used as a mechanism to explain the relationship between social resources and employee engagement. Ubuntu defines how people and communities behave in their interactions but its significance is more than that. It contains a wider African reality known as humanness (Taylor 2014). Organizations form part of the society, meaning that whatever happens in the society has a bearing on how organizations behave (Kayuni & Tambulasi, 2012). In the context of this research the understanding was that Ubuntu is a proper means of determining how social interactions in the workplace influence employee engagement. Employees are expected to engage in joint projects thereby embracing a sense of

togetherness and caring for one another's quality of life can highly influence a positive state of mind in the workplace which is likely to translate in positive organizational outcomes. This thesis has argued that it is likely that the effect of Ubuntu would be more instrumental in explaining the relationship between social resources and employee engagement. In line with the principles of Ubuntu, one can recognize that the concerns of employees about each other can have a bearing on organizational outcomes. Organizations can therefore encourage employees to be supportive and cooperative to each other in ways that will express compassion, reciprocity, dignity and humanity in the interest of building and maintaining a community of practice with mutual caring. In fact the concept of Ubuntu has been shown to be a concept that can be applied effectively to many aspects of social development such as business management and religion (Kayuni & Tambulasi, 2014). Karsten and Illa (2005) provided evidence that Ubuntu provides a strong philosophical base for management practices. In this regard, the aim of organizations should not only be about enhancing profits, also providing working environments that can encourage care for one another. This study therefore contributes to the understanding of employee engagement by bringing on board the Ubuntu construct. The argument is that, Ubuntu can be used as a management concept to promote motivation in the workplace. Furthermore the increasing integration of Western type working conditions within some non-Western countries due to the presence of multinational companies, makes it important to validate and test accepted organizational behaviour theories in these non-Western cultures before their implementation occur. By identifying culture specific variables researchers and practitioners will be able to maximize the benefit of these models in both theory and practice.

7.4 Theoretical implications

This study contributes to the understanding of employee engagement in Africa by extending the JD- R model by a specific African construct, Ubuntu. By focusing on how Ubuntu can be used as a management practice to elicit employee engagement, the study has the opportunity of contributing to the employee engagement literature. The findings reveal that Ubuntu could be integrated into the JD-R model when used as a framework to explore employee engagement in an African sample. Specifically; (a) Ubuntu was positively related to social resources among both public and private sector employees; (b) Ubuntu was positively related with engagement among employees in both sectors; (c) Ubuntu mediated the relationship between social resources and employee engagement in both sectors.

Ubuntu characterizes the social interactions of African beings and therefore is embedded in social interactions that take place in formal work situations. Social and colleague support used in this study were based on work interactions but their ability to predict employee engagement was to a large degree influenced by the presence of Ubuntu. No prior studies have examined the link between social resources, Ubuntu and employee engagement. Although findings from this study are new findings, they are in line with the predictions in engagement literature. Earlier research conducted in China has shown that cultural constructs are important in the study of engagement and supported the distinction of social resources from job resources (Hu et al., 2014). The findings strengthen the argument that the dimensions of resources at work should be reconsidered. That is, a distinction between different resources at work should be reflected. Further, the study proposes to consider not only formal work resources but also informal interpersonal cultural constructs such as Ubuntu when focusing on the effect of social resources on employee engagement.

7.5 Practical Implications

In practical terms, the results indicate that organizations need to be aware that, the availability of different kind of resources is critical to establishing an environment in which employees are willing to be engaged in their jobs and translate their engagement to into desired organizational behaviour outcomes such as increased affective commitment and lower turnover intentions. The study has demonstrated that the extent to which resources are translated into positive organizational behaviour varies as a function of employee engagement. That is, employees who are highly engaged are likely to exhibit these behaviours (Saks, 2006). This means human resource managers need to focus on increasing employees' engagement with their job by providing required resources to meet job demands in the workplace.

Additionally, HR managers should acknowledge that Ubuntu may promote engagement and desired organizational behavioural outcomes because it promotes trust and facilitates institutional support .It follows that employees and managers should be motivated to develop informal personal relationships in organizations. Mangaliso (2001) suggests a number of ways in which this can be done: (a) Relationships with others; employees should be encouraged to treat others as brothers and sisters and focus on belonging to the collective. People will be motivated contribute when they are valued members; (b) Meaning of words should be strongly related to the context thereby enabling a shared understanding of deeper meanings. (c). Respect for older people should be encouraged since older workers bring experience, wisdom and informal networks. (d). Productivity must be optimized and rewards shared. This will create strong loyalty to group goals.

7.6 Limitations and Suggestions for Future Research

7.6.1 Limitations

While this study has provided evidence regarding the extension of the JD-R model the results of the study should be assessed against the study's limitations. First, data was collected at a point in time therefore limiting conclusions that can be made regarding the causal order of relationships. Researchers are therefore encouraged to conduct longitudinal studies which can be used to validate or support the causality of the hypotheses suggested for the study.

Second, this study was quantitative in nature and relied on employees' self-reports for all the study variables, raising concern for common method bias (CMB). However measures were taken to address this and an assessment of CMB using factor analysis revealed it was not a major problem for this study. While this study has been mainly quantitative the use of a mixed methods approach could have enabled the researcher to have a deeper understanding of whether the respondents' understanding of the phenomena matched the proposed theoretical meaning in the study sample. Mixed method research has been recommended as the best method to explore psychological constructs in a culture specific context as it can capture the uniqueness of a psychological phenomenon within a specific culture. Bartholomew and Brown (2012) suggest that mixed methods is an integral means to ask complex psychological questions without imposing Western norms and ignoring contextual factors.

Third, this study was conducted among a heterogeneous group of employees. Future studies conducted in specific professional groups with specific job resources and job demands may be valuable in the interaction of job demands and resources for the prediction of employee engagement.

7.6.2 Suggestions for Future Research

Due to the increasing integration of Western type working conditions within some non-Western countries resulting from the expansion of multinational companies, it is important to validate and test accepted organizational behaviour theories in these non-Western cultures before their implementation occur. By identifying culture specific variables researchers and practitioners will be able to maximize the benefit of these models in both theory and practice. Organizational behaviour theories may provide different perspectives when ‘*exported*’ to other cultural contexts. It is therefore important for both practitioners and researchers to study how differences occur, rather than search for the universality of theory, especially in the study of human behaviour as it is significantly influenced by cultural differences.

Empirical studies of specific countries/cultures and comparisons between African and non-African groups may allow for a more detailed appreciation of the value systems and could identify values that are distinct to certain African countries and could inform claims for Ubuntu as a specific African construct that could contribute to business ethics globally.

Lastly, there are still identified problems in the literature concerning Ubuntu’s empirical claims and ambiguities regarding its distinctiveness. Future research could consider a discussion of other constructs similar to Ubuntu in order to provide a more fruitful application of the role that it can play in the sphere of business management. This includes identifying research questions that require both empirical and non-empirical evidence as well as considering different methodological options.

7.7. Main Points of Study and the Need to Amend Employee Engagement theory for an African context.

Employee engagement literature has provided suitable approaches to stimulating work engagement which have been empirically tested across different samples, particularly in the West as demonstrated in chapter 2 and 3. However, as already pointed out by researchers, the cultural differences between African people and Westerners would suggest that although modifying these approaches to be more relevant to the management of people in the African context is imperative. This means the need to go beyond dominant conceptual frameworks and considering how cultural phenomenon could be used to improve their relevance. This is particularly important given the continuing investment by Western organizations in Africa.

The aim of this study was to contribute to the debate on how to utilize a cultural phenomenon to raise employee engagement by employing the JD-R model of work engagement. The thesis discussed the uniqueness of African people and suggests that managing them could warrant a closer examination and integration of their cultural beliefs. The Ubuntu construct was modelled as a mediator between social resources and employee engagement in an attempt to evaluate the antecedents and outcomes of employee engagement. In summary this thesis argues two main points.

First, in terms of the management of employees, private and public sector employees are distinct and would require different antecedents of work engagement. Second, and more importantly, the thesis argues that there is need for conceptual models that not only recognize the uniqueness of the African context but which sufficiently examines and suggest different cultural concepts which could be beneficial in management in the context of Africa. In this regard, the thesis sought to achieve a better understanding of the factors relevant in eliciting employee engagement by assessing the current state

of the JD-R work engagement theory and propose an approach which might improve it and its practice in the African context.

The findings of this study revealed that it is apparent that the JD-R framework is compatible with the organizational realities in Africa although Africa is by no means homogeneous culturally, politically and otherwise.

7.8 References

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Appendix 1: Survey Questionnaires

Main Study questionnaire

Dear Respondent,

This questionnaire seeks information about employee engagement. I would be grateful if you would give the following questions your serious attention. It should not take more than a few minutes of your time as the questionnaire has been designed to be quickly and easily answered.

There is no right or wrong answer, so please put down what you feel is correct for you. Your individual feedback will remain confidential.

*If you so wish, you will receive a copy of the summary of the findings from the research upon request at the end of the research project. If you have any questions regarding the survey or this research project in general, please contact Joy Tauetsile at 3550000. **Thank you in anticipation of your help.***

Section 1: On the scale from strongly agree to strongly disagree can you determine how closely you identify with each of the work related attitudes below. Please cross (X) the relevant box:

[SD = Strongly Disagree] [D = Disagree] [N = Neutral] [A = Agree] [SA = Strongly Agree]

I focus hard on my work	SD	D	N	A	SA
I concentrate on my work	SD	D	N	A	SA
I pay a lot of attention to my work	SD	D	N	A	SA
I share the same work values as my colleagues	SD	D	N	A	SA
I share the same work goals as my colleagues	SD	D	N	A	SA
I share the same work attitude as my colleagues	SD	D	N	A	SA
I feel positive about my work	SD	D	N	A	SA
I feel energetic in my work	SD	D	N	A	SA
I am enthusiastic in my work	SD	D	N	A	SA
I count around here	SD	D	N	A	SA
I am taken seriously around here	SD	D	N	A	SA
I am important around here	SD	D	N	A	SA
I am trusted around here	SD	D	N	A	SA
There is faith in me around here	SD	D	N	A	SA
I can make a difference around here	SD	D	N	A	SA
I am valuable around here	SD	D	N	A	SA
I am helpful around here	SD	D	N	A	SA
I am efficient around here	SD	D	N	A	SA
I am cooperative around here	SD	D	N	A	SA
I will be able to achieve most of the goals that I have set for myself	SD	D	N	A	SA
When facing difficult tasks, I am certain that I will accomplish them	SD	D	N	A	SA
In general I think I can obtain outcomes that are important to me	SD	D	N	A	SA
I believe I can succeed at almost any endeavour to which I set my mind	SD	D	N	A	SA
I will be able to successfully overcome many challenges	SD	D	N	A	SA
I am confident that I can perform effectively on many different tasks	SD	D	N	A	SA
Compared to other people, I can do most tasks very well	SD	D	N	A	SA
Even when things are tough I can perform quite well.	SD	D	N	A	SA
Most of my job assignments have been fair	SD	D	N	A	SA
The treatment that I have generally received here has been fair	SD	D	N	A	SA
I have received fair performance evaluations / appraisals	SD	D	N	A	SA
I find my co-workers very helpful when performing my tasks	SD	D	N	A	SA
When performing my tasks I rely heavily on my co-workers	SD	D	N	A	SA

My co-workers provide me with important work related information and advice that make performing my job easier	SD	D	N	A	SA
I find my supervisor very helpful in performing my tasks	SD	D	N	A	SA
When performing my tasks I rely heavily on my supervisors	SD	D	N	A	SA
My supervisor provides me with important work related information and advice that make performing my job easier	SD	D	N	A	SA
[SD = Strongly Disagree] [D = Disagree] [N = Neutral] [A = Agree] [SA = Strongly Agree]					
I can count on my supervisor to do the 'right things' at my job	SD	D	N	A	SA
The demands of my work interfere with my home and family life	SD	D	N	A	SA
The amount of time my job takes up makes it difficult to fulfil family responsibilities	SD	D	N	A	SA
Things I want to do at home do not get done because of the demands my job puts on me	SD	D	N	A	SA
My job produces strain that makes it difficult to fulfil family duties	SD	D	N	A	SA
Due to work related issues, I have to make changes to my plans for family activities	SD	D	N	A	SA
The demands of my family or spouse/ partner interfere with work related activities	SD	D	N	A	SA
I have to put off doing things at work because of demands on my time at home	SD	D	N	A	SA
Things I want to do at work don't get done because of the demands of my family or spouse/partner	SD	D	N	A	SA
My home life interferes with my responsibilities at work such as getting to work on time, accomplishing daily tasks and working overtime	SD	D	N	A	SA
Family related strain interferes with my ability to perform job related issues	SD	D	N	A	SA
I enjoy discussing my organization with people outside it	SD	D	N	A	SA
I really feel as if this organization's problems are my own	SD	D	N	A	SA
I think I could easily become attached to another organization as I am to this one	SD	D	N	A	SA
I do not feel like part of the family at my organization	SD	D	N	A	SA
I do not feel emotionally attached to this organization	SD	D	N	A	SA
This organization has a great deal of personal meaning to me	SD	D	N	A	SA
I do not feel a sense of belonging to this organization	SD	D	N	A	SA
My co-workers are friendly and helpful	SD	D	N	A	SA
I care about the wellbeing of my co-workers	SD	D	N	A	SA
I respect the religion of my co-workers	SD	D	N	A	SA
I respect the beliefs and customs of my co-workers	SD	D	N	A	SA
I believe that older co-workers have more knowledge and skills than younger ones	SD	D	N	A	SA
When a co-worker gets a promotion and I don't I am happy for him/her	SD	D	N	A	SA
My co-worker is someone I inform about my personal life	SD	D	N	A	SA
I rely on my co-workers for support when things at work or at home are not going well	SD	D	N	A	SA
I see myself as an active listener towards my co-workers	SD	D	N	A	SA
My co-workers and I get together outside of work time	SD	D	N	A	SA
Relatives of my co-workers should have an advantage over outsiders in competing for job openings	SD	D	N	A	SA
I take the time to greet my co-workers	SD	D	N	A	SA
At work I feel bursting with energy	SD	D	N	A	SA
At my job I feel strong and vigorous	SD	D	N	A	SA
When I get up in the morning I feel like going to work	SD	D	N	A	SA
I am enthusiastic about my job	SD	D	N	A	SA
My job inspires me	SD	D	N	A	SA
I am proud of the work that I do	SD	D	N	A	SA
I feel happy when I am working intensely	SD	D	N	A	SA

I am immersed in my job	SD	D	N	A	SA
I get carried away when I am working	SD	D	N	A	SA
I often think of quitting my present job	SD	D	N	A	SA
I may leave this company and work for another company in the next year	SD	D	N	A	SA
I plan to stay in this company to develop my career for a long time	SD	D	N	A	SA
I may not have a good future if I stay with this organisation	SD	D	N	A	SA

Section 2: On the scale from very little to very much, how much control do you have in your work. Please tick ‘√’ the relevant box:

If you look at your job as a whole, how many decisions does it allow you to make	Very Little	Rather Little	Somewhat Little	Rather Much	Very Much
Can you determine how you do your work	Very Little	Rather Little	Somewhat Little	Rather Much	Very Much
Can you plan and arrange your work on your own	Very Little	Rather Little	Somewhat Little	Rather Much	Very Much
How much can you participate in the decisions of your superior	Very Little	Rather Little	Somewhat Little	Rather Much	Very Much

Section 3: On the scale from rarely to very often how would you describe the speed at which you have to do your work? Please tick ‘√’ the relevant box:

How often does your job require you to work very fast	Rarely	Occasionally	Sometimes	Fairly often	Very Often
How often does your job require you to work very hard	Rarely	Occasionally	Sometimes	Fairly often	Very Often
How often does your job leave you with little things to get things done	Rarely	Occasionally	Sometimes	Fairly often	Very Often
How often is there a great deal to be done	Rarely	Occasionally	Sometimes	Fairly often	Very Often

Section 4: On the scale from hardly any to a great deal, how would you describe your work load? Please tick ‘√’ the relevant box:

How much slowdown in the workload do you experience	Hardly Any	A Little	Some	A lot	A great deal
How much time do you have to think and contemplate	Hardly Any	A Little	Some	A lot	A great deal
How much workload do you have	Hardly Any	A Little	Some	A lot	A great deal
What quantity of work do others expect you to do	Hardly Any	A Little	Some	A lot	A great deal
How much time do you have to do all your work	Hardly Any	A Little	Some	A lot	A great deal
How many projects assignments and tasks do you have	Hardly Any	A Little	Some	A lot	A great deal

How many breaks between heavy workload periods do you have	Hardly Any	A Little	Some	A lot	A great deal
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Section 5: ABOUT YOU ... This section of questions asks a little about you ... please ‘✓’ the block which applies to you:

Gender	Male <input type="checkbox"/>	Female <input type="checkbox"/>
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How old are you?	Below 20 <input type="checkbox"/>	21 – 25 <input type="checkbox"/>	26 – 30 <input type="checkbox"/>	31 – 40 <input type="checkbox"/>	41 – 50 <input type="checkbox"/>	Over 50 <input type="checkbox"/>
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Educational Status	High School <input type="checkbox"/>	College/Vocational Training <input type="checkbox"/>	Bachelor’s degree & equivalent <input type="checkbox"/>	Post graduate (Masters , PhD) <input type="checkbox"/>	Other Qualifications (Please state)
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In total how many years have you worked?	0-2years <input type="checkbox"/>	3-5years <input type="checkbox"/>	6-10years <input type="checkbox"/>	11-15years <input type="checkbox"/>	16-20years <input type="checkbox"/>	Over 20years <input type="checkbox"/>
How long have you worked for this organisation?	0-2years <input type="checkbox"/>	3-5years <input type="checkbox"/>	6-10years <input type="checkbox"/>	11-15years <input type="checkbox"/>	16-20years <input type="checkbox"/>	Over 20years <input type="checkbox"/>

Are you:	Married <input type="checkbox"/>	Never married <input type="checkbox"/>	Separated <input type="checkbox"/>	Divorced <input type="checkbox"/>	Widowed <input type="checkbox"/>
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What is your employment status?	Full time <input type="checkbox"/>	Part time <input type="checkbox"/>	Casual <input type="checkbox"/>
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Botswana Citizenship	Citizen <input type="checkbox"/>	Non-citizen <input type="checkbox"/>
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What is your current job position?	Staff <input type="checkbox"/>	Supervisory / First line Manager <input type="checkbox"/>	Middle Level Management <input type="checkbox"/>	Senior Level Management <input type="checkbox"/>
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How many days do you work per week?	1-4 days <input type="checkbox"/>	5 Days <input type="checkbox"/>	More than 5 <input type="checkbox"/>
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What best describes the organization you work for?	Government/ Public service <input type="checkbox"/>	Parastatal (e.g., water utilities, Power, UB) <input type="checkbox"/>	Private Sector(e.g. banks, Private Hospital, Private school, Insurances <input type="checkbox"/>	Not for Profit (NGO’s) <input type="checkbox"/>
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SECTION 6 – ADDITIONAL INFORMATION

Please provide any additional useful comments or suggestions regarding this research:

- What is your organization currently doing to improve employee engagement?

- What do you think needs to be done to improve employee engagement in your organization?

Thank you for taking time to complete this survey. Your help is appreciated. If you have any further comments or concerns please contact one of the following: (1) Ms. Joy Tauetsile (2) Dr Gbola Gbadamosi both at Bournemouth University, United Kingdom

Pilot Study questionnaire

Dear Respondent,

This questionnaire seeks information about employee engagement. I would be grateful if you would give the following questions your serious attention. It should not take more than a few minutes of your time as the questionnaire has been designed to be quickly and easily answered. There is no right or wrong answer, so please put down what you feel is correct for you. Your individual feedback will remain confidential.

If you so wish, you will receive a copy of the summary of the findings from the research upon request at the end of the research project.

If you have any questions regarding the survey or this research project in general, please contact Joy Tauetsile at 3550000.

Thank you in anticipation of your help.

Section 1: On the scale from strongly agree to strongly disagree can you determine how closely you identify with each of the work related attitudes below. Please tick '✓' the relevant box:

Statement	Strongly Disagree	Disagree Slightly	Neutral Feeling	Agree Slightly	Strongly Agree
I focus hard on my work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I concentrate on my work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I pay a lot of attention to my work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I share the same work values as my colleagues	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I share the same work goals as my colleagues	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I share the same work attitude as my colleagues	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I feel positive about my work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I feel energetic in my work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am enthusiastic in my work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I count around here	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am taken seriously around here	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am important around here	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am trusted around here	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
There is faith in me around here	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I can make a difference around here	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am valuable around here	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am helpful around here	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am efficient around here	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am cooperative around here	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I will be able to achieve most of the goals that I have set for myself	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

When facing difficult tasks, I am certain that I will accomplish them	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
In general, I think that I can obtain outcomes that are important to me	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I believe I can succeed at most any endeavour to which I set my mind	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I will be able to successfully overcome many challenges	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am confident that I can perform effectively on many different tasks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Compared to other people, I can do most tasks very well.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Even when things are tough, I can perform quite well	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Most of my job assignments have been fair.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The treatment that I have generally received here has been fair.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I have received fair performance evaluations.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Statement	Strongly Disagree	Disagree Slightly	Neutral Feeling	Agree Slightly	Strongly Agree
I enjoy discussing my organization with people outside it.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I really feel as if this organization's problems are my own.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I think I could easily become attached to another organization as I am to this one.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I do not feel like part of the family at my organization.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I do not feel emotionally attached to this organization.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
This organization has a great deal of personal meaning to me.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I do not feel a strong sense of belonging to my organization.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
During the next year, I will probably look for a new job outside my current employer.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am seriously considering quitting my current employer for an alternative one.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
My work schedule often conflicts with my family life.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
After work I come home too tired to do some of the things I'd like to do.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
On the job, I have so much work that it takes away from some of my other interests.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

My family dislikes how much I am preoccupied with my work while I am at home.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Because my work is demanding, at times I am irritable at home.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The demands of my job make it difficult to be relaxed all the time at home.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
My work takes up time that I'll like to spend with my family.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
My job makes it difficult to be the kind of spouse or parent that I'd Like to be.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
When a co-worker gets a promotion and I don't, I am happy for him or her	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
My co-worker is someone I inform about my personal life	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
My co-workers and I get together outside of work time	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I feel I am really part of the team	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I enjoy above all else to work as part of a team	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I make sacrifices for the good of the team	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I always put the interest of the whole team before my own interests	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Strict time schedules are respected in team meetings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
In the organization all decisions are made by the leader	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The organization provides equal opportunities for all	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
In the organization, ceremonies and personnel parties are organized	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Section 2: On the scale from very little to very much, how much control do you have in your work. Please tick '✓' the relevant box:

	Very Little	Rather Little	Somewhat Little	Rather Much	Very Much
If you look at your job as a whole, how many decisions does it allow you to make?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Can you determine how you do your work?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Can you plan and arrange your work on your own?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How much can you participate in decisions of your superior?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Section 3: On the scale from rarely to very often how would you describe the speed at which you have to do your work? Please tick '✓' the relevant box:

	Rarely	Occasionally	Sometimes	fairly often	Very Often
How often does your job require you to work very fast?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How often does your job require you to work very hard?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How often does your job leave you with little things to get things done?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How often is there a great deal to be done?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Section 4: On the scale from hardly any to a great deal, how would you describe your work load. Please tick '✓' the relevant box:

	Hardly Any	A Little	Some	A lot	A great deal
How much slowdown in the work load do you experience?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How much time do you have to think and contemplate?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How much workload do you have?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
What quantity of work do others expect you to do?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How much time do you have to do all your work?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How many projects, assignments, and tasks do you have?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How many breaks between heavy workload periods do you have?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Section 5:

What is your organization currently doing to improve employee engagement?

What do you think needs to be done to improve employee engagement in your organization?

Section 6: ABOUT YOU ... This section of questions asks a little about you ... please '✓' the block which applies to you:

Gender	Male <input type="checkbox"/>	Female <input type="checkbox"/>
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How old are you?	Below 20 <input type="checkbox"/>	21 – 25 <input type="checkbox"/>	26 – 30 <input type="checkbox"/>	31 – 40 <input type="checkbox"/>	41 – 50 <input type="checkbox"/>	Over 50 <input type="checkbox"/>
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Educational Status	High School <input type="checkbox"/>	College/Vocational Training <input type="checkbox"/>	Bachelor's degree & equivalent <input type="checkbox"/>	Post graduate (Masters , PhD) <input type="checkbox"/>	Other Qualifications (Please state)
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In total how many years have you worked?	0-2years <input type="checkbox"/>	3-5years <input type="checkbox"/>	6-10years <input type="checkbox"/>	11-15years <input type="checkbox"/>	16-20years <input type="checkbox"/>	Over 20years <input type="checkbox"/>
How long have you worked for this organisation?	0-2years <input type="checkbox"/>	3-5years <input type="checkbox"/>	6-10years <input type="checkbox"/>	11-15years <input type="checkbox"/>	16-20years <input type="checkbox"/>	Over 20years <input type="checkbox"/>

Are you:	Married <input type="checkbox"/>	Never married <input type="checkbox"/>	Separated <input type="checkbox"/>	Divorced <input type="checkbox"/>	Widowed <input type="checkbox"/>
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What is your employment status?	Full time <input type="checkbox"/>	Part time <input type="checkbox"/>	Casual <input type="checkbox"/>
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What is your current job position?	Staff <input type="checkbox"/>	Supervisory / First line Manager <input type="checkbox"/>	Middle Level Management <input type="checkbox"/>	Senior Level Management <input type="checkbox"/>
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How many days do you work per week?	1-4 days <input type="checkbox"/>	5 Days <input type="checkbox"/>	More than 5 <input type="checkbox"/>
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What best describes the organization you work for?	Government/ Public service <input type="checkbox"/>	Parastatal (e.g., water utilities, Power, UB) <input type="checkbox"/>	Private Sector(e.g. banks, Private Hospital, Private school, Insurances <input type="checkbox"/>	Not for Profit (NGO's) <input type="checkbox"/>
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Thank you for taking time to complete this survey. Your help is appreciated. If you have any further comments or concerns please contact one of the following: (1) Ms. Joy Tauetsile (2) Dr Gbola Gbadamosi both at Bournemouth University, United Kingdom

Appendix 2: Full regression tables for table 4

Full Regression Table Showing regression analysis for variables predicting employee engagement for all sectors in table 4.

N=438	B	SE (B)	t	sig	VIF
Model 1					
Constant	3.939	0.653	6.028	0.000	
Gender	0.108	0.095	1.140	0.255	1.099
Age	-0.140	0.071	-1.962	0.051	3.667
Education	0.010	0.041	0.248	0.804	1.098
Tenure total	0.034	0.012	2.836	0.005	6.590
Tenure -Org	-0.008	0.010	-0.782	0.435	3.630
Marital Status	-0.176	0.077	-2.290	0.023	1.329
Employment Status	0.168	0.183	0.922	0.357	1.086
Children/Dependants	-0.150	0.111	-1.349	0.178	1.224
Citizenship	-0.595	0.467	-1.276	0.203	1.046
Current job position	0.165	0.057	2.876	0.004	1.495
Days working per week	0.096	0.080	1.197	0.232	1.167
Organization type	0.042	0.053	0.802	0.423	1.368
Monthly income	-0.002	0.031	-0.052	0.958	1.149
Model 2					
Constant	0.430	0.637	0.674	0.501	
Gender	0.154	0.079	1.963	0.051	1.115
Age	-0.216	0.060	-3.567	0.000	3.878
Education	0.010	0.034	0.282	0.778	1.125
Tenure total	0.032	0.010	3.250	0.001	6.831
Tenure -Org	-0.002	0.008	-0.197	0.844	3.657
Marital Status	-0.172	0.063	-2.714	0.007	1.335
Employment Status	0.018	0.152	0.121	0.904	1.104
Children/Dependants	-0.135	0.092	-1.461	0.145	1.247
Citizenship	-0.476	0.389	-1.224	0.222	1.071
Current job position	0.057	0.049	1.173	0.242	1.583
Days working per week	0.054	0.067	0.814	0.416	1.182
Organization type	0.015	0.044	0.332	0.740	1.413
Monthly income	0.024	0.026	0.934	0.351	1.164
OBSE	0.372	0.088	4.242	0.000	1.521
GSE	0.151	0.091	1.657	0.099	1.448
JA	0.082	0.041	2.010	0.045	1.211
DJ	0.261	0.056	4.693	0.000	1.583
CS	0.118	0.061	1.956	0.051	1.538
SS	0.064	0.053	1.203	0.230	1.650

Full Regression Table Showing regression analysis for variables predicting employee engagement for public sector in table 4.

N=120	B	SE (B)	t	sig	VIF
Model 1					
Constant	5.554	1.245	4.461	0.000	
Gender	0.271	0.170	1.593	0.114	1.118
Age	-0.858	0.150	-5.739	0.000	4.803
Education	0.075	0.075	1.002	0.318	1.105
Tenure total	0.097	0.021	4.507	0.000	7.907
Tenure -Org	-0.004	0.014	-0.259	0.796	3.493
Marital Status	-0.212	0.129	-1.645	0.103	1.459
Employment Status	0.265	0.290	0.914	0.363	1.125
Children/Dependants	-0.452	0.236	-1.918	0.058	1.248
Citizenship	0.172	0.925	0.186	0.853	1.100
Current job position	0.135	0.091	1.487	0.140	1.470
Days working per week	-0.079	0.225	-0.351	0.726	1.316
Monthly income	-0.006	0.068	-0.092	0.927	1.079
Model 2					
Constant	0.800	1.241	0.644	0.521	
Gender	0.399	0.140	2.861	0.005	1.201
Age	-0.664	0.122	-5.457	0.000	5.063
Education	0.095	0.060	1.585	0.116	1.125
Tenure total	0.066	0.017	3.781	0.000	8.385
Tenure -Org	0.003	0.012	0.218	0.828	3.650
Marital Status	-0.173	0.103	-1.680	0.096	1.488
Employment Status	0.039	0.239	0.164	0.870	1.217
Children/Dependants	-0.263	0.194	-1.359	0.177	1.341
Citizenship	-0.204	0.739	-0.276	0.783	1.119
Current job position	0.059	0.078	0.762	0.448	1.720
Days working per week	0.025	0.185	0.137	0.891	1.407
Monthly income	-0.051	0.055	-0.929	0.355	1.119
OBSE	0.457	0.194	2.359	0.020	1.983
GSE	0.074	0.173	0.427	0.670	1.783
JA	0.247	0.084	2.937	0.004	1.471
DJ	0.342	0.102	3.353	0.001	1.571
CS	0.009	0.122	0.072	0.943	1.475
SS	0.044	0.092	0.480	0.632	1.692

Full Regression Table Showing regression analysis for variables predicting employee engagement for private sector in table 4.

N=202	B	SE (B)	t	sig	VIF
Model 1					
Constant	3.782	0.683	5.537	0.000	
Gender	-0.108	0.099	-1.085	0.279	1.129
Age	0.237	0.072	3.311	0.001	3.253
Education	0.014	0.042	0.326	0.744	1.157
Tenure total	0.011	0.013	0.824	0.411	5.284
Tenure -Org	-0.019	0.013	-1.480	0.141	3.310
Marital Status	-0.121	0.088	-1.372	0.172	1.335
Employment Status	0.078	0.208	0.373	0.710	1.093
Children/Dependants	0.086	0.106	0.807	0.421	1.247
Citizenship	-1.027	0.460	-2.234	0.027	1.089
Current job position	0.075	0.069	1.079	0.282	1.551
Days working per week	0.053	0.093	0.573	0.567	1.200
Monthly income	-0.006	0.030	-0.191	0.849	1.255
Model 2					
Constant	1.267	0.676	1.874	0.063	
Gender	-0.103	0.085	-1.221	0.224	1.162
Age	0.075	0.064	1.170	0.243	3.662
Education	-0.015	0.036	-0.412	0.681	1.210
Tenure total	0.020	0.011	1.820	0.070	5.569
Tenure -Org	-0.015	0.011	-1.384	0.168	3.353
Marital Status	-0.181	0.075	-2.414	0.017	1.371
Employment Status	-0.031	0.177	-0.177	0.860	1.110
Children/Dependants	0.027	0.091	0.301	0.764	1.291
Citizenship	-0.851	0.400	-2.126	0.035	1.165
Current job position	0.008	0.060	0.143	0.887	1.628
Days working per week	0.061	0.079	0.772	0.441	1.211
Monthly income	0.040	0.026	1.561	0.120	1.310
OBSE	0.359	0.083	4.317	0.000	1.451
GSE	0.107	0.093	1.149	0.252	1.328
JA	0.006	0.040	0.158	0.874	1.146
DJ	0.187	0.058	3.198	0.002	1.741
CS	0.151	0.063	2.408	0.017	1.828
SS	-0.001	0.060	-0.010	0.992	1.922

Appendix 3. Factor analysis results for Harman single factor analysis technique for assessing common method bias.

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.807
Bartlett's Test of Sphericity	Approx. Chi-Square	15077.694
	df	4371
	Sig.	.000

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	14.631	15.565	15.565	14.631	15.565	15.565
2	7.005	7.452	23.016			
3	5.724	6.090	29.106			
4	3.725	3.963	33.069			
5	3.658	3.891	36.960			
6	2.931	3.118	40.079			
7	2.540	2.702	42.781			
8	2.491	2.650	45.431			
9	2.054	2.185	47.616			
10	1.806	1.922	49.537			
11	1.771	1.884	51.421			
12	1.624	1.727	53.148			
13	1.605	1.707	54.856			
14	1.564	1.664	56.520			
15	1.406	1.496	58.016			
16	1.354	1.440	59.456			
17	1.341	1.427	60.883			
18	1.286	1.368	62.251			
19	1.222	1.300	63.551			
20	1.195	1.271	64.822			
21	1.147	1.220	66.042			
22	1.129	1.201	67.243			
23	1.115	1.187	68.429			
24	.999	1.063	69.492			
25	.996	1.060	70.552			
26	.991	1.054	71.606			

27	.938	.997	72.604		
28	.928	.988	73.591		
29	.918	.976	74.567		
30	.865	.920	75.487		
31	.812	.864	76.351		
32	.777	.827	77.178		
33	.765	.814	77.992		
34	.741	.788	78.779		
35	.717	.763	79.542		
36	.711	.757	80.299		
37	.698	.743	81.042		
38	.668	.711	81.753		
39	.654	.696	82.449		
40	.618	.657	83.107		
41	.614	.654	83.760		
42	.595	.632	84.393		
43	.568	.604	84.997		
44	.552	.588	85.584		
45	.547	.582	86.167		
46	.533	.567	86.733		
47	.519	.552	87.285		
48	.508	.540	87.825		
49	.501	.533	88.358		
50	.482	.512	88.871		
51	.468	.498	89.369		
52	.447	.476	89.844		
53	.442	.470	90.314		
54	.399	.424	90.738		
55	.389	.414	91.153		
56	.380	.405	91.557		
57	.372	.396	91.953		
58	.357	.380	92.334		
59	.346	.368	92.702		
60	.338	.360	93.062		
61	.333	.354	93.416		
62	.326	.347	93.764		
63	.302	.322	94.085		
64	.298	.317	94.402		
65	.289	.308	94.710		
66	.281	.299	95.009		
67	.271	.288	95.297		
68	.267	.284	95.580		
69	.260	.277	95.857		

70	.252	.268	96.126			
71	.240	.256	96.381			
72	.236	.251	96.632			
73	.221	.235	96.867			
74	.208	.221	97.088			
75	.199	.211	97.300			
76	.195	.207	97.507			
77	.188	.200	97.707			
78	.183	.195	97.902			
79	.171	.182	98.084			
80	.170	.181	98.265			
81	.160	.170	98.436			
82	.155	.165	98.601			
83	.151	.160	98.761			
84	.143	.152	98.912			
85	.132	.141	99.053			
86	.129	.137	99.190			
87	.124	.132	99.322			
88	.117	.125	99.447			
89	.106	.112	99.559			
90	.097	.103	99.663			
91	.094	.100	99.762			
92	.082	.088	99.850			
93	.073	.077	99.927			
94	.068	.073	100.000			

Extraction Method: Principal Component Analysis.

Appendix 4: Paper on employee engagement measures using pilot study

Measuring Employee Engagement: Utrecht Work Engagement Scale (UWES-9) or Intellectual Social Affective Scale (ISA)? Evidence from Botswana.

Abstract

This study compares and examines two competing employee engagement measures (UWES-9) and (ISA) identified in the literature focusing on the proposed factor structure and predictive validity. Using responses from 157 employees in private and public sector organizations, results revealed significant differences between the two measures. In terms of the operationalization of the construct, principal component analysis (PCA) identified a purported three dimensional structure for the ISA. However the same was not identified for the UWES-9. Regression analysis indicated the UWES-9 performed slightly better compared to the ISA in predicting affective commitment and intention to turnover indicating that, of the two the UWES-9 is a better predictor of work outcomes. The findings support the theoretical argument that employee engagement measured by the ISA is a three - dimensional construct. Compared to the UWES-9, the ISA may provide better insights in terms of the theoretical operationalization of the construct. Nonetheless, the UWES-9 predictive power was superior to that of the ISA. Overall the study concludes both measures are valuable in employee engagement research and would serve different purposes. The choice of the measure should be based on the fit to the study.

Key Words: Employee engagement, UWES, ISA, Botswana

Introduction

Employee engagement research has been promoted in both HR practice and academia given its association with positive organizational behaviour (Macey and Schneider, 2008). As the construct grew in popularity, it has undergone substantial developments on how it is defined, measured and conceptualized resulting in differing perspectives from both practitioner and scholarly literature (Zirgami, Nimon, Houson, Witt, and Diehl, 2009). Whereas the practitioners are concerned with desirable organizational outcomes, the academic perspective is concerned with clear and unambiguous definition of the construct together with its operationalization (Saks, 2006; Schaufeli, 2014). With growing academic interest, a number of measures derived from different theoretical backgrounds have been proposed (Wefald, Mills, Smith, and Downey, 2012). These measures include the UWES developed by Schaufeli and Bakker (2003) and the ISA developed by Soane, Truss, Alfes, Shantz, Rees, and Gatenby (2012). The UWES scale (Schaufeli and Bakker, 2003) is based on Maslach and Leiter (1997) theoretical approach which defines engagement as the antithesis of burnout. The UWES comes both as a 17-item scale and a shortened 9-item version. While various past studies investigated the psychometric properties of the UWES-17 research has not carried out investigation of the shorter nine item UWES-9 version (Mills, Culbertson, and Fulleger, 2012).

The debate regarding the most appropriate employee engagement measure remains topical. Employee engagement in the workplace is not well known in developing countries (Ahanhanzo, Kittel, Paraiso, 2014). For example, no empirical information regarding employee engagement and its measures in Botswana has been published.

Kim, Kolb and Kim (2013) documented the reliability of the UWES measure in studies across several countries. They realised a majority of these studies were conducted in Europe. Based on this, they recommended expanding the use of the UWES and in particular the 9-item version to different cultural contexts which will increase inference from the research and build a stronger foundation of theory. In a similar vein, the ISA measure has not received much research attention especially in non-Western samples and exploring it in this context will be beneficial to employee engagement research. Very little effort have been made in scientifically testing Western management concepts into a body of knowledge for the purpose of guiding management practices in an African context (Gbadamosi, 2003). Exploring these concepts in non-Western settings is essential to theory building because of distinct cultural features between the settings (Barthelomew and Brown, 2012). For example, the communalistic nature of the African society.

Although there have been efforts to investigate the UWES measure, in particular the 17 item version in South African samples (Barkhuizen and Rothmann, 2006; DeBruin, Heill, Henn, and Muller, 2013; Coetzer and Rothmann, 2007; Storm and Rothmann, 2003), investigation of both the 9 item UWES measure and the newly constructed ISA measure still lack empirical evidence in an African sample. To date no study has examined these two measures side by side hence no evidence to determine which operationalizes the construct better or whether each captures different aspects of engagement. By investigating these two measures using a Botswana sample, this study provides a unique contribution to the employee engagement literature and provides insights for cross-cultural comparative research. It is important to ascertain how well

Western developed models are applicable to non-Western samples in particular Africa, where workplace social attitudes are different from the West.

Theoretical Background

Definitions of employee engagement

The first definition of engagement to appear in the academic literature was Kahn's (1990) who defined engagement as "the harnessing of organization members' selves to their work roles; in engagement people express themselves physically, cognitively and emotionally during role performances"(p.694). Kahn (1990) outlined three psychological conditions to engagement influenced by individual differences as well as work context. First, individuals must sense meaningfulness in their work role (*psychological meaningfulness*). Secondly, they must feel safe to express themselves without fear (*psychological safety*). Lastly, they must feel they have personal resources necessary to engage (*psychological availability*). Building on Kahn's (1990) definition and prior engagement research (Macey and Schneider, 2008; May, Gilson, Harter, 2004; Rich, Lepine and Crawford, 2010), Soane et al. (2012) developed a model of engagement that has three requirements; *a work role focus, activation and positive affect*. They developed the ISA measure comprising of three facets, Intellectual, Social and Affective components. According to this model, intellectual engagement is defined as "the extent to which one is intellectually absorbed in work", affective engagement as "the extent to which one experiences a state of positive affect relating to one's work role and social engagement as "the extent to which one is socially

connected with the working environment and shares common values with colleagues” (Soane et al., 2012, p.532). By taking account of the social component of engagement this model recognises one of the features of Kahn (1990, p.700) original conceptualization of engagement as an expression of behaviours that “promote connections to work and others” and “people become physically involved in tasks, whether alone or with others.” People experience psychological meaningfulness when their task performances include rewarding interpersonal interactions with co-workers and clients. Such connections are invaluable source in people’s lives because they meet relatedness needs and allow people to feel known and appreciated thus sharing the journey with others (Kahn, 1990). Unlike the UWES, the ISA measure has however been the subject of very little empirical research. There were three studies identified which used the ISA measure: Soane et al. (2012); Alfes, Truss, Soane, Rees and Gatenby (2013); Rees, Alfes and Gatenby (2013). All the studies used UK based data sets and were conducted by its developers.

A second influential definition has its basis in the burnout literature which defines engagement as the antithesis of burnout (Maslach and Leiter, 1997). According to Maslach and Leiter engagement is characterised by energy, involvement and efficacy which are direct opposites of burnout dimensions of exhaustion, cynicism and inefficacy and can be measured by calculating the opposite scores on the Maslach Burnout Inventory (MBI) scale. Schaufeli, Salanova, Gonzalez-Roma and Bakker (2002a) argued that engagement should be measured in its own right while still maintaining it is the opposite of burnout. They proposed that engagement is a multidimensional construct consisting of three dimensions: vigour, dedication and absorption. According to Schaufeli et al. (2002a), vigour refers to high levels of energy and mental resilience while working, that is the willingness to invest effort in

one's work, and persistence even in the face of difficulties; dedication refers to being strongly involved in one's work and experiencing a sense of significance, enthusiasm, inspiration, pride and challenge and absorption refers to being fully concentrated and happily engrossed in one's work whereby time passes quickly and one has difficulties with detaching oneself from work. They developed and provided validity support for employee engagement measure (UWES-17) that incorporated this dimensionality (vigor-6 items, dedication-5 items and absorption-6 items). Using a large international database, Schaufeli, Bakker and Salanova (2006) shortened the 17 item version to a 9 item version in order to enhance participation and decrease likelihood of attrition. In terms of development and research, this scale, relative to the ISA, has received the most attention.

A number of empirical studies mostly based on the Job Demands Resource (JD-R) model have used the UWES as a measure of engagement (Bakker, Hakanen, Demerouti and Xanthopoulou, 2007; Brough, Timms, Siu, Kaliath, O'Driscoll and Cit, 2013; Xanthopoulou, Bakker, Demerouti and Schaufeli, 2009). Research findings have indicated a positive relationship between engagement and job resources (Bakker et al. 2007), while personal resources similarly relate positively to engagement (Xanthopoulou et al., 2009). Engagement has been associated with positive organizational outcomes such as organizational commitment and intention to turnover (Harter, Schmidt and Hayes 2002; Schaufeli and Bakker, 2004; Saks, 2006). Given these results, there are concerns in the literature that engagement is similar to earlier researched organizational behaviour constructs such as organizational commitment and evidence have been provided to support this view (Cole, Bedeian and O'Boyle, 2012; Newman, Joseph and Hulin, 2010; Weisald and Downey, 2009). This suggests engagement may be a redundant concept. Many scholars have however reported

evidence that engagement is distinct from other similar constructs such as organizational commitment (Saks, 2006), job involvement (May et al. 2004), flow (Christian et al. 2011), job satisfaction (Wefald and Downey, 2009) and job embeddedness (Halbesleben and Wheeler, 2008). Research in this area however remains inconclusive and open to scientific scrutiny (Fletcher and Robinson, 2014).

Measures of employee engagement

The two scales (UWES and ISA) have been developed based on proposed definitions on employee engagement described above. The psychometric properties of the UWES have been investigated among diverse samples in different countries. For example, Finland (Seppala, Mauno, Feldt, Hakanen, Kinnunen, Tolvanen and Schaufeli, 2009), United States (Mills, Culbertson and Fullegar 2012), Spain, Italy and Netherlands (Balducci, Fraccaroli and Schaufeli, 2010; Schaufeli and Bakker, 2003; Schaufeli et al., 2006), Japan (Shimazu, Schaufeli, Miyanaka and Iwata, 2010), Norway (Nerstad, Richardsen and Martinussen, 2010) and South Africa (Barkhuizen and Rothmann, 2006; Coetzer and Rothmann, 2007; DeBruin, Hill, Hen and Muller, 2013; Storm and Rothmann, 2003). Most of these studies revealed that the three factor structure of the UWES remained the same across samples. For example, Balducci et al. (2010) investigated the psychometric properties of the Italian version of the UWES-9, by using two samples Italian (n= 668) and Dutch (n=2213). Their results revealed the three factor structure of the UWES-9 was invariant across the two samples. Results from psychometric analysis with the UWES-17 identified the three factor structure fits well into the data of various samples from Netherlands (Schaufeli and Bakker, 2003; Schaufeli et al., 2002a), Spain (Schaufeli, Martinez, Marques-Pinto, Salanova and Bakker, 2002b), and South Africa (Storm and Rothmann, 2003). A student version of the UWES has also been developed based on the UWES-17 and was reported to be

invariant across different countries (Schaufeli et al., 2002b). Shimazu et al. (2010) investigated the measurement accuracy of the Japanese (n=2339) and original Dutch (n=13, 406) versions of the UWES-9 and its comparability between both countries. On the whole, the UWES measure has been extensively validated. Schaufeli and Bakker (2010) states that the UWES engagement scale is available in 21 languages and an international data base exists that currently include engagement records of over 60 000 employees across the world. The accumulation of research findings has shown that this measure is reliable, stable and valid.

While the UWES has received the most attention in terms of development and research, there are challenges and limitations highlighted in the literature regarding its use suggesting further evaluation and revalidation of its appropriateness. Mills et al. (2012) argue that the methodology of its original scale development is flawed and has compromised its integrity and appropriateness from the outset. Shirom (2003) expressed concern with the high inter correlations among the three dimensions in particular between vigor and absorption. Recognizing those high correlations, Schaufeli et al. (2002b) explored a two factor dimensionality of engagement by collapsing the vigor and absorption dimensions into a single dimension and their solution provided a small but statistically significant goodness of fit indices compared to the three factor conceptualization. They maintained that a three factor structure is more appropriate and a high correlation between the two dimensions should be expected because of the nature of their relationship. Nonetheless, a number of empirical studies fail to support the three factor structure of the UWES-9. For example, Wefald et al. (2012) failed to support either a multi or uni dimensional factor structure for the UWES-9. Viljevac, Cooper-Thomas and Saks (2012) similarly found a weak support for a three dimensional structure of the UWES-9. Perhaps more significant is

the work of Christian and Slaughter (2007) whose meta-analytic review of engagement research revealed the three factor engagement dimensions were highly correlated with correlations ranging from 0.88 to 0.95, suggesting possible multicollinearity between the dimensions.

With the competing ISA measure, Soane et al. (2012) examined its three factor structure. Principal Component Analysis showed that all items loaded strongly on the intended facets with standardized factor loadings of 0.73 for intellectual engagement, 0.60 for social engagement and 0.98 for affective engagement. The reliability of their engagement measure was strong for the overall construct ($\alpha=0.91$) as well as for each dimension with alpha values of 0.90 for intellectual engagement, 0.92 for social engagement and 0.94 for affective engagement. Overall, there was substantial empirical support for the ISA. The ISA reliability and validity were further examined by considering the association between engagement and three organizationally important outcomes; task performance, organizational citizenship behaviour and turnover intentions. Their findings revealed that all the three dimensions were significant.

However, the ISA is still relatively new and therefore no other studies on its validity were identified. This lack of empirical research limits its approval as a reliable, stable and valid employee engagement measure. The table below presents the dimension of both measures with their individual items.

[Insert Table 1 around here]

Hypothesis 1:

- a). A three factor structure will be confirmed for the ISA measure.
- b). A three factor structure will be confirmed for the UWES-9 measure.

Affective Commitment

Researchers have shown engagement to be a predictor of different forms of commitment in the workplace. For example, organizational commitment (Christian and Slaughter, 2007; Saks, 2006; Yalabik, Rossenberg, Kinnie and Swart, 2014), client, team and professional commitment (Yalabik et al. 2014). Extant studies have also clarified that employee engagement is theoretically distinct from commitment (Christian et al., 2011; Hallberg and Schaufeli, 2006). Meyer and Allen (1997) identified three forms of organizational commitment; *affective, continuance and normative*. A majority of research however concentrated on the affective commitment dimension because it has the largest impact on a number of vital organizational behaviour outcomes such as organizational citizenship behaviour, employee turnover and absenteeism and more stable over time (Gbadamosi, Ndaba and Oni, 2006).

Affective commitment reflects an employees' emotional attachment to, identification with and involvement with the organization, the idea being that employees with high affective commitment stay with the organization because they want to (Meyer and Allen, 1997). The relationship between commitment and engagement has been well researched and evidence suggests the two constructs are positively related (Saks, 2006; Yalabik et al., 2014). These studies used different engagement measures, for example Saks (2006) used a job engagement measure he developed whereas Yalabik et al. (2014) employed the UWES-9 measure. Both studies used the Meyer and Allen (1997) commitment measure. The findings from these studies revealed work engagement is a significant positive predictor of commitment and that the three work engagement dimensions have distinct and independent effects on commitment. To date no study has assessed how the ISA measure contributes to the prediction of important organizational behaviour outcomes such as commitment.

Intention to turnover

In this study, we use Saks (2006) definition of turnover intention which is an employee's voluntary intention to leave. Harter et al. (2002) found out intention to turnover is related to employee engagement. Intention to turnover is an important HR outcome and many interventions are made based on it. Employees may decide to leave the organization due to a number of reasons. Some may leave due to reasons beyond the control of the organization whereas some may leave due to circumstances that can be controlled by the organization such as job fit, difficult supervisors, poor work climate. A number of research findings suggest a negative relationship between intention to turnover and employee engagement (Schaufeli and Bakker, 2004; Saks, 2006). Harter et al. (2002) found that engaged employees are less likely to leave the organization whilst Saks (2006) showed employee engagement is negatively related to intention to turnover. These studies used three different measures of engagement with Saks (2006) using the job engagement measure; Harter et al. (2002) use the Gallup 12 and Schaufeli and Bakker (2004) use the UWES scale. There is currently no evidence in the literature comparing the predictive validity of the UWES-9 measure with the ISA for important organizational behaviour outcomes hence the following hypothesis.

Hypothesis 2:

Compared with the UWES, the dimensions of the ISA will show a stronger relationship to a) affective commitment b) intention to turnover

Method

Participants and Procedure

Participants (N=157) were employed in five different professions from the fields of healthcare, teaching, banking, government ministry and hospitality resulting in five different organizations. The organizations were identified by personal contacts. Human Resource managers were approached and informed about the study. After managers expressed consent to participate 568 surveys were distributed to a segment of employees across the five organizations with 157 usable surveys returned resulting in 27.6% response rate. Information about the research was provided and voluntariness, anonymity and confidentiality of responses were emphasized. The number of participants in public and private sector organizations were 84 (54.5%) and 70 (39%) respectively. Three participants (6.5%) did not disclose the type of organization they work for. To encourage participation findings of the study was promised to the participating organizations and interested individual respondents. Ages ranged from 20 to over 50 years. The average tenure with the organizations was 3 years. A total of 119 (75.8%) of the employees had basic university degree and above. Female respondents were 101 (64.3%) and a majority were full time employees 144 (91.7%).

Measures

Employee engagement: Two employee engagement measures: the Utrecht Work Engagement Scale (UWES - 9), a three dimensional 9 item scale developed by Schaufeli et al. (2006) and ISA measure developed by Soane et al. (2012) were used to measure employee engagement. A sample item from vigour dimension of the UWES is '*at my work I feel like I am bursting with energy*', dedication '*I am enthusiastic about my job*' and absorption '*I am immersed in my work*'. For the ISA the three dimensions are intellectual, social and affective engagement and each dimension has three items. A sample item from Intellectual engagement is, '*I focus hard on my work*', for social engagement is, '*I share the same work values as my colleagues*' and for affective engagement, and '*I feel positive about my job*'. A five item scale where participants responded along a 5 point Likert interval 1 (*strongly agree*) to 5 (*strongly disagree*) was used. The English version of both scales was used and no translation was performed.

Affective commitment: An eight item scale developed by Meyer and Allen (1997) was used to measure affective commitment. A five point Likert interval response scale from 1(*strongly agree*) to 5(*strongly disagree*) was used. A sample item is, '*I think I could easily become attached to another organization as I am to this one*'.

Intention to turnover: A two item scale developed by Boroff and Lewin (1997) was used to measure intention to turnover. A five point Likert interval response scale from 1(*strongly agree*) to 5(*strongly disagree*) was used. A sample item is, '*during the next year I will probably look for a job outside this organization.*'

Results

[Insert Table 2 about here]

Table 1 presents the means, standard deviations and inter-correlations of the study variables. The correlation coefficient of the two engagement measures was 0.73 indicating significant overlap in what the two scales measure. As expected the six dimensions (three each from UWES and ISA) were positively correlated with coefficients ranging from 0.19 to 0.79. The correlations among the three dimensions of the UWES ranged from (0.48 to 0.79) while those among the three dimensions of the ISA ranged from (0.35 to 0.59) suggesting the UWES dimensions are more highly correlated among themselves compared to the ISA. There was weak evidence for a relationship between the ISA social dimension and all the UWES dimensions vigor ($r = 0.39$), dedication ($r = 0.39$) and absorption ($r = 0.19$) confirming the social dimension of the ISA does not correlate strongly with any of the UWES dimensions. It would seem the dedication and vigor dimensions of the UWES are highly correlated ($r = 0.79$) indicating the two dimensions could possibly be measuring the same thing. Between the two measures, the affective component of the ISA and the dedication component are also highly correlated ($r = 0.77$) indicating employees with high affective engagement are likely to be absorbed in their work. There is also a strong correlation between the UWES dedication dimension and the ISA affective dimension ($r = 0.77$) suggesting employees who are dedicated to their work roles are likely to have an emotional attachment to their jobs. A further inspection of the items reveals some overlap in the two dimensions. For example, an item in the dedication dimension of the UWES “I am enthusiastic with my job” is similar to an item in the affective dimension of the ISA “I am enthusiastic in my work”. A frequency analysis of the two

questions revealed similarity in response as shown in table 2 below. Some respondents identified and communicated this similarity.

[Insert Table 3 about here]

Hypotheses testing

Based on the theoretical conceptualization of engagement and the empirical evidence it was expected the three factor model of engagement for both measures would be confirmed by the results of this study as suggested by Hypothesis 1. Principal Component Analysis (PCA) was used to extract the factors. PCA was used because it reduces data in such a way that a minimum number of factors account for the maximum proportion of the total variance represented in the set of items. Also it mathematically provides a concrete solution and follows psychometrically sound procedure (Tabachnick and Fidell, 1996). This was followed by Oblique rotation of factors using Oblimin rotation. Oblimin rotation is used in order to discriminate between factors since it effectively rotates factors such that items are loaded maximally to only one factor (Field 2013). The number of factors to be retained was guided by two decision rules. Kaiser's criterion (Eigen values >1) and inspection of the scree plot. Only factors with Eigen values greater than 1 were retained.

Hypothesis 1a: A three factor structure will be confirmed for the UWES-9 measure of engagement.

[Insert Table 4 about here]

[Insert Figure 1 about here]

The Kaiser-Meyer-Olkin (KMO) value is 0.88 and Barlett Test of Sphericity value is significant at ($p=0.000$), therefore factor analysis is appropriate. Principal component analysis revealed two Eigen values exceeding 1, 5.304 and 1.224 respectively. The items resulted in a two factor solution explaining 58.94 % and 13.60 % of the variance respectively. They explained a total of 72.54 % of the variance. The point of inflexion on the scree plot tails off after two factors justifying a two factor structure for the UWES-9. However, this two factor solution is not good since the second factor has a relatively poor loading indicating that the one dimensional structure could possibly be a good fit for UWES-9 for this data set. Overall these results from our dataset did not support the three factor structure of the UWES-9 proposed by Schaufeli et al. (2006). Some earlier studies had also failed to replicate the three factor structure (Shimazu, Schaufeli, Kosugi, Suzuki, Nashiwa, Kato, Sakamoto, Irimajiri, Amano, Hirohata and Goto 2008; Sonnentag, 2003). Bakker et al. (2007) suggests this could be attributed to translation problems. Schaufeli et al. (2006) argue the overall score of engagement may be more useful in empirical research than the scores on the three separate dimensions of the UWES-9. The UWES measure however remains the mainstay of empirical work on engagement and has been validated across countries and cultures. The results for its factorial validity have been largely consistent with exception of a few studies (Shimazu et al., 2009; Viljevac et al., 2012; Wefald et al. 2012). Although Storm and Rothman (2003) confirmed a three factor model in a South African police sample the three factor model fitted their data only after removing two items ‘At my work I feel strong and vigorous’ and ‘I get carried away when I am working’, the three factor structure proposed by Schaufeli et al. (2002b) was not self-evident in their sample.

Hypothesis 1b: A three factor structure will be confirmed for the ISA measure of engagement.

[Insert Table 5 around here]

[Insert Figure 2 around here]

The KMO value is 0.84 and Barlett Test of Sphericity value is significant at ($p=0.000$), therefore factor analysis is again appropriate. The first three factors extracted recorded Eigen values of 4.69, 1.66 and 1.03 respectively. The items resulted in a three factor solution explaining 52.21%, 18.49% and 11.42% of the variance respectively. They explained a total of 82.12% of the variance. The scree plot further supported the three factor structure of the ISA engagement measure since the point of inflexion tails off at the fourth factor. Overall the three factor structure of the ISA proposed by Soane et al. (2012) was supported. The internal consistencies were computed and findings revealed the dimensions were internally consistent with the alpha coefficients of 0.88, 0.87 and 0.90 for Intellectual, Social and Affective dimensions respectively. The internal consistency for the ISA one model factor was 0.88 which is comparably similar to that of the dimensions.

Ordinary Least Squares (OLS) regression was used to examine the relative importance of all the dimensions of engagement towards predicting affective commitment and turnover intentions. In addition to the regression coefficients, R^2 (coefficient of determination) were computed to give the proportional variance of the overall composite measures for both the UWES-9 and ISA in explaining the outcome variables

[Insert Table 6 around here]

Table 6 shows the OLS results using affective commitment as the dependent variable. If the ISA greater predictive power argument is correct then the dimensions of the ISA measure should result in greater accounted for variance (R^2) than the UWES measure. Compared to the ISA dimension, the UWES-9 dimensions explain more variance in predicting affective commitment with R^2 values of 20% (vigor), 22% (dedication) and 14% (dedication) compared to the R^2 of the ISA dimensions with 10% (intellectual), 7% (social) and 14% affective commitment. For the overall composite measure the UWES-9 explains 23% of the variance in affective commitment whereas the ISA measure explains 16% showing that the UWES has a greater predictive power over the ISA in predicting affective commitment. Among the three ISA dimensions, the affective dimension appears to have more predictive power for affective commitment compared to intellectual and social dimensions.

[Insert table 7 around here]

Table 7 shows the OLS results using intention to turnover as the dependent variable. Similarly the results show compared to the ISA dimensions, the UWES-9 dimensions explain more variance in predicting intention to turnover with R^2 values of 27% (vigor), 22% (dedication) and 13% (absorption) compared to ISA dimensions with 10% (intellectual), 6% (social) and 19% (affective). For the composite overall measures, the UWES-9 still explains more variance than the ISA with $R^2 = 27\%$ compared to 16% for the ISA.

These results suggest the predictive power of the UWES is higher than that of the ISA for this study thereby rejecting H2. This finding contradicts Soane et al. (2012) contention that the ISA measure has strong explanatory power in predicting outcomes compared to the UWES-9. The opposite seems to hold true in the present study and sample.

The UWES-9 measure on the other hand demonstrated comparably stronger predictive power but its three factor structure was not supported.

Discussion

Due to its association with improving business results employee engagement has been regarded as a critical issue by both academics and practitioners (Harter et al. 2002; Kular, Gatenby, Rees, Soane, and Truss, 2008). As the interest in the construct grew, so has the need to measure and evaluate its levels in organizations. A number of measures have been developed based on different theoretical approaches. This study assessed and compared the psychometric properties of two popular measures of employee engagement (Schaufeli et al., 2006: UWES-9) and (Soane et al., 2012: ISA) emerging in the academic literature in terms of proposed factor structure and predictive validity. Findings for this study indicated that similar to Storm and Rothmann (2003) a one dimensional structure for the UWES-9 better fits the data. The high internal reliabilities of the UWES-9 dimensions, vigor (0.87), dedication (0.9) and absorption (0.72) confirm the overall reliability of the UWES-9 dimensions. This is consistent with other studies (Schaufeli and Bakker, 2010; Schaufeli et al., 2002b; Storm and Rothmann, 2003). However, the internal reliability for the composite UWES-9 measure was 0.91 which is considerably higher than that of the ISA at 0.88 for this data set. This is similar to Alok (2013) findings study conducted in an Indian sample

which revealed that the three factor structure did not fit for the UWES-9 did it may be more appropriate to consider engagement as a single factor construct. Failure to support the UWES-9 three factor structure suggests there is little to be gained by interpreting individual dimensions when using the UWES-9, indicating that a single composite score across the items is preferable. On the other hand, the ISA measure demonstrates a three factor model suggested by Soane et al. (2012). It is however difficult to conclude on its legitimacy as there are few empirical studies testing its psychometric properties and critical examination of its dimensions and none from samples outside of the UK and originators in the literature. However, these findings may be significant for engagement theory as the study showed dimensions of the ISA appear to behave according to the theory. While this is a promising finding, until further studies show factorial validity of the ISA, it may be more appropriate to be cautious of its use in predicting antecedents and consequences of employee engagement. The results further show although the predictive power for the ISA appears to be lower for affective commitment and intention to turnover, its three factor structure was supported. The UWES-9 measure on the other hand demonstrated comparably stronger predictive power but its three factor structure was not supported. Both measures demonstrate a unique strength and therefore are valid to measure the construct even though the overwhelming evidence in academic research employs the UWES-9 measure. Although the UWES-9 measure has a stronger predictive power, scholars have raised concerns about its independence from measures of burnout (Cole et al., 2012). Cole et al. (2012) meta-analytic findings revealed dimensions of burnout and engagement are highly correlated suggesting that the two constructs are not independent constructs. On the basis of their results, they advised researchers to avoid treating the UWES as if it were measuring a distinct phenomenon. Furthermore, the

UWES-9 measure fails to operationalize Kahn's (1990) original conceptualization of engagement given that its origin and foundation rests within the burnout literature (Cole et al., 2012). Kahn (1990) conceptualization of engagement was developed out of research procedures which lead to the emergence of a theory and not founded from any existing construct. On the other hand the ISA measure builds onto Kahn's (1990) theorizing and based on their findings Soane et al. (2012) suggested that the ISA could be more useful in relation to predicting individual level behavioural outcomes. Soane et al. (2012) further identified the social component of engagement suggested by Kahn (1990) as the perceived social connectedness between the individual and their coworkers.

Limitations

First, this study used cross sectional and self-report data limiting the conclusions that can be made about causality. Longitudinal studies are required to reach stronger conclusions about causal effects. Second, the sample is heavily skewed with respect to high education level with 78.5% possessing basic university education or higher. However, given the nature of the measuring items translations to include a sample with lower education would have been problematic hence this sample was appropriate.

Conclusion

In conclusion, the present study concurs with Saks and Gruman (2014) suggestion that engagement research moves away from reliance on the UWES-9 and begin to use measures that are more in line with Kahn's (1990) original conceptualization. Added to the ISA, May et al. (2004) engagement measure and Rich et al. (2010) job engagement measures map onto Kahn's (1990) conceptualization. To researchers

exploring engagement in organizational contexts, the ISA measure could be superior to the UWES-9. Its superiority lies in the fact that it emphasizes meaningful connection to other employees which is remarkable since team work play a crucial role in employee wellbeing (Torrente, Salanova, Llorens, and Schaufeli, 2012). In most organizations, performance is the result of the combined effort of individual employees in groups or teams in the form of department or units. It is therefore important that connection to other employees is critical. When teams work badly, they can affect even the most engaged employee from realizing their potential. Therefore the extent to which one is socially connected with the working environment and share common values with colleagues becomes imperative. The ISA measure is therefore recommended as an alternative to the UWES-9, especially in organizational settings. Although the three factor structure of the UWES-9 was not confirmed, it was a better predictor of work outcomes compared to the ISA suggesting that the UWES-9 is a stronger measure in predicting affective commitment and intention to turnover.

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Table 1. The UWES-9 and ISA measures dimensions and items

UWES-9 (Schaufeli et al. 2006)		ISA (Soane et al. 2012)	
Vigor		Intellectual	
<ul style="list-style-type: none"> At my job I feel strong and vigorous When I get up in the morning I feel like going to work At work I feel bursting with energy 		<ul style="list-style-type: none"> I focus hard on my work I concentrate on my work I pay a lot of attention to my work 	
Dedication		Social	
<ul style="list-style-type: none"> I am enthusiastic about my job My job inspires me I am proud of the work that I do 		<ul style="list-style-type: none"> I share the same work values as my colleagues I share the same work attitudes as my colleagues I share the same work goals as my colleagues 	
Absorption		Affective	
<ul style="list-style-type: none"> I feel happy when I am working intensely I am immersed in my job I get carried away when I am working 		<ul style="list-style-type: none"> I am enthusiastic in my work I feel energetic in my work I feel positive about my work 	

Table 2: Pearson correlations and descriptive statistics

Study Variables	Mean	SD	1	2	3	4	5	6	7	8	9	10
1 UWES measure	2.24	0.86	(0.91)									
2 ISA measure	18.38	6.43	0.73	(0.88)								
3 Vigour (UWES)	2.32	1.01	0.89	0.64	(0.87)							
4 Dedication (UWES)	2.13	1.07	0.93	0.71	0.79	(0.90)						
5 Absorption (UWES)	2.27	0.88	0.77	0.52	0.48	0.58	(0.72)					
6 Intellectual (ISA)	1.66	0.75	0.58	0.77	0.47	0.54	0.49	(0.88)				
7 Social (ISA)	2.48	1.00	0.38	0.77	0.39	0.39	0.19	0.35	(0.87)			
8 Affective (ISA)	2.00	0.94	0.78	0.84	0.67	0.77	0.56	0.59	0.41	(0.90)		
9 Affective Commitment	2.88	0.70	0.48	0.41	0.45	0.43	0.36	0.31	0.27	0.37	(0.84)	
10 Intention to turnover	2.77	1.43	-0.52	-0.42	-0.52	-0.47	-0.35	-0.32	-0.24	-0.44	-0.59	(0.3)

Notes: All coefficients significant at $p < 0.01$. Cronbach's reliabilities are along the diagonal in bold and parentheses

Table 3 Frequency table of the UWES (vigor) item “I am enthusiastic with my job” and the ISA (affective) item “I am enthusiastic in my work”

	<i>I am enthusiastic about my job</i>		<i>I am enthusiastic in my work</i>	
	Frequency	Percent	Frequency	Percent
strongly agree	56	35.7	58	36.9
agree slightly	43	27.4	50	31.8
neutral feeling	36	22.9	34	21.7
disagree slightly	13	8.3	11	7.0
strongly disagree	8	5.1	3	1.9
Total	156	99.4	156	99.4
Missing	1	0.6	1	0.6
Total		100.0	157	100.0

Table 4. Principal Component Analysis for the UWES measure

Rotated Component matrix	Component	
	1	2
I am enthusiastic about my job	0.909	
My job inspires me	0.851	
At my job I feel strong and vigorous	0.840	
I am proud of the work that I do	0.819	
When I get up in the morning I feel like going to work	0.817	
At work, I feel bursting with energy	0.783	
I feel happy when I am working intensely	0.743	
I am immersed in my job	0.610	0.590
I get carried away when I am working	0.415	0.771

Note: Extraction Method: Principal Component Analysis.

Rotation Method: Oblimin with Kaiser Normalization

Table 5. Principal Component analysis for the ISA measure

Rotated component matrix	Component		
	1	2	3
I focus hard on my work	0.952		
I concentrate on my work	0.916		
I pay a lot of attention to my work	0.760		
I share the same work values as my colleagues		0.897	
I share the same work attitude as my colleagues		0.889	
I share the same work goals as my colleagues		0.873	
I am enthusiastic in my work			-0.950
I feel energetic in my work			-0.905
I feel positive about my work			-0.856

Note: Extraction Method: Principal Component Analysis.

Rotation Method: Oblimin with Kaiser Normalization.

Table 6: OLS regression results for UWES engagement measure using affective commitment as dependent variable

DV: Affective Commitment					
IV	β	SE(β)	R ²	Adj R ²	F
Uwes-9overall	0.586	0.087	0.23	0.22	45.399
Vigor	0.641	0.107	0.19	0.18	30.028
Dedication	0.753	0.114	0.22	0.21	43.969
Absorption	0.481	0.091	0.14	0.13	23.860
ISA overall	0.404	0.075	0.16	0.15	28.692
Intellectual	0.336	0.083	0.10	0.09	16.397
Social	0.382	0.111	0.07	0.06	11.760
Affective	0.051	0.101	0.14	0.13	24.823

All coefficients significant at P<0.001 Note: IV is independent variable and DV is dependent variable.

Table 7: OLS regression results for UWES engagement measure intention to turnover as dependent variable

DV : Intention to turnover					
IV	β	SE(β)	R ²	Adj R ²	F
UWES-9 overall	-0.312	0.041	0.27	0.26	57.127
Vigour	-0.367	0.049	0.27	0.26	55.761
Dedication	-0.351	0.054	0.22	0.21	42.813
Absorption	-0.219	0.047	0.13	0.12	22.105
ISA overall	-0.205	0.037	0.17	0.16	31.628
Intellectual	-0.167	0.040	0.10	0.09	16.984
Social	-0.167	0.054	0.06	0.05	9.499
Affective	-0.285	0.048	0.19	0.18	35.926

All coefficients significant at P<0.005 Note: IV is independent variable and DV is dependent variable.

Figure 1. Scree plot for the PCA for the UWES scales

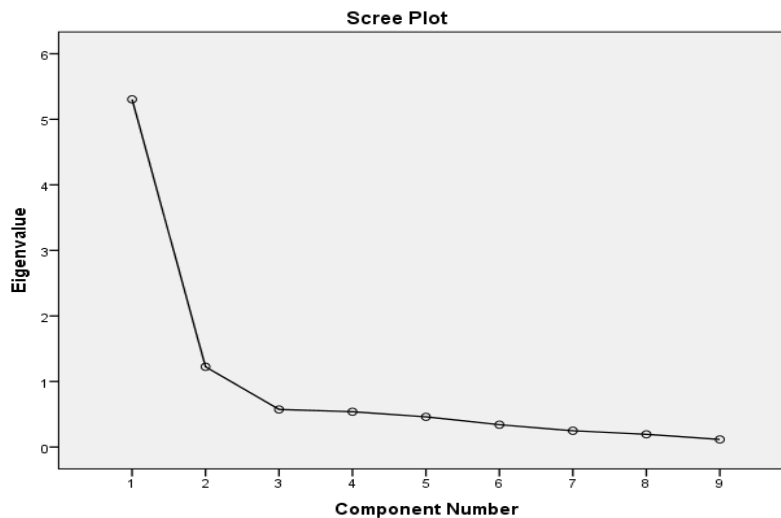
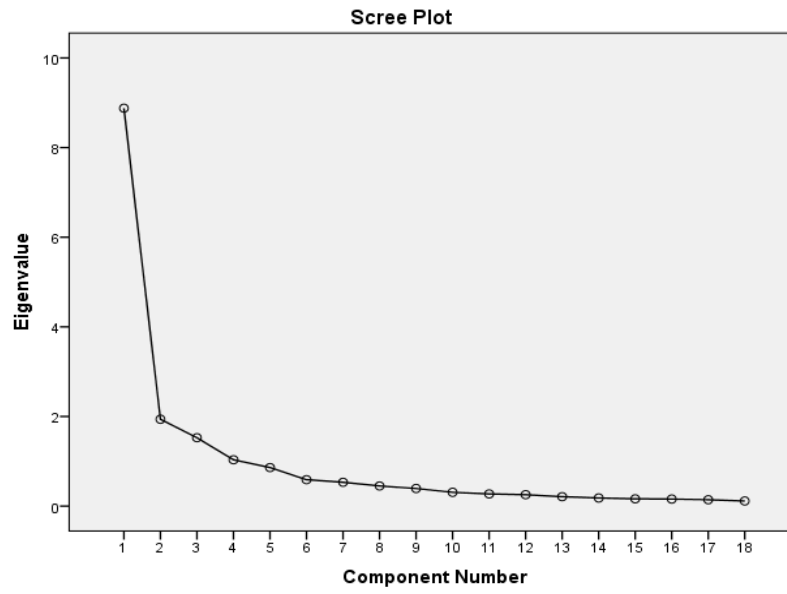


Figure 2. Scree plot for the PCA for the ISA scales



Appendix 5: List of conference and summer schools paper presentations

1. J. Tauetsile and G. Gbadamosi. "Employee Engagement: A comparison of antecedent variables between private and public sector employees in Botswana. British Academy of Management conference. Portsmouth, England 8-10 September 2015.
2. J. Tauetsile, G. Gbadamosi and L. Farquharson. "Measuring Employee Engagement: Utrecht Work Engagement Scale (UWES-9) or Intellectual Social Affective Scale (ISA)? Evidence from Botswana." European Academy of Management conference, Warsaw, Poland 17-20 June 2015.
3. J. Tauetsile. "Employee Engagement: An investigation of antecedents and outcome variables among private and public sector employees in Botswana". Oslo Summer School in Comparative Social Science studies: Positive Psychology and the challenges of diversity in well-being promotion. Oslo, Norway, 21-25 July 2014. [10 ECTS points]
4. J. Tauetsile. "Analysis of the antecedents of employee engagement among public and private sector employees in Botswana: A mixed Methods Design research proposal". Oslo Summer School in Comparative Social Science studies: Mixed Methods: Integrating Qualitative and Quantitative research. Oslo, Norway, 28 July to 1 August 2014. [10 ECTS points]
5. J. Tauetsile. "Employee Engagement: An investigation of antecedents and outcome variables in private and public sector organizations in Botswana. British Academy of Management Doctoral Symposium. Research conversation paper. Belfast, Ireland, 8 September 2014.
6. Utrecht Summer School. Applied Multivariate Analysis. University of Utrecht, Utrecht, Netherlands, 18-29 August 2014.[3ECTS points]
7. Prague Summer School on Crime, Law and Psychology. SCHOLA EMPIRICA. Prague, Czech Republic, 3-14 July 2014.

