Employee engagement and the work-family conflict relationship: The role of personal and organisational resources

by Okechukwu Ethelbert Amah

Abstract
Organisations in Africa face constant challenges on account of internal operational issues, and the economic and political situation on the continent. Hence, organisations in Africa and indeed all over the world are expected to be continuously efficient and effective in the use of scarce resources in order to survive. Accordingly, studies conducted all over the world, including in Africa, have established that high employee engagement is beneficial to organisations, because engaged employees exhibit discretionary behaviour that achieves superior business results. However, some studies suggest that organisations are also faced with the undesirable situation in which highly engaged employees experience high levels of work-family conflict. This relationship has implications for both productivity and ethical aspects, and past empirical studies have been unable to suggest a way out. This study proposes that, on the basis of the conservation of resources model and job demand and resources model, organisational and personal resources could play a major role in resolving the dilemma. Hierarchical regression analysis confirmed that organisational resources, servant leadership and personal resources were able to provide a solution, so that individuals with high values of these resources experienced less work-family conflict. The study also discussed the practical implications of the results for HRM and sustainability HRM.

Key words: employee engagement, work-family conflict, personal resources, conservation of resources model, job demand and resources

1 Introduction
The nature and management of the interface between work and family has been of concern to employees, organisations and management researchers, as has been demonstrated by studies conducted in Nigeria (Akintayo 2010; Amah 2010; Ugwu & Agbo 2010; Akanbi & Oyewo 2014; Arisi-Nwugballa 2016; Ogbosu & Amah 2016), in South Africa (Wallis & Price 2003; Dancaster & Cohen 2010; Oosthuizen, Mostert & Koekemoer 2011; Steyl & Koekemoer 2011; Mafini & Dlodlo 2014), and in other parts of the world (Hammer, Kossek, Anger, Bodner & Zimmerman 2011; Dahm, Glomb & Manchester 2015; Nohe, Meier, Sonntag & Michael 2015). This concern has arisen from the fact that the interface is the source of interaction between events in the workplace and the family domain. It has been determined that the interface is bi-
directional, with work interfering with family life, causing work-family conflict (WFC), and family obligations interfering with work, causing family-work conflict (FWC) (Frone & Cooper 1992; Akerele, Osamwonyi & Amah 2007; Steyl & Koekemoer 2011). WFC is defined as a situation in which involvement in work makes it difficult for a person to function effectively in the family domain (Greenhaus & Beutell 1985; Akintayo 2010; Arisi-Nwugballa 2016). WFC has been shown to have adverse effects on individual and overall organisational productivity (Akerele, Osamwonyi & Amah 2007; Carr, Boyar & Gregory 2008; Mafini & Dlodlo 2014; Arisi-Nwugballa 2016). Organisations therefore utilise a large portion of their operating budget to provide work-family-friendly policies to help their employees manage work and family demands, so as to increase their loyalty and contributions to the organisation (Amah 2010; Dancaster & Cohen 2010; Downes & Koekemoer 2011). Family-friendly organisations possess a competitive advantage over others in the area of attracting and retaining talent (Groover 1991; Groover & Crooker 1995; Anderson, Coffey & Byerly 2002; Wang & Walumbwa 2007). Successful and ethical organisations would not want to be associated with any issue that make it impossible for employees to manage work and family demands while working productively for the organisation.

Employee engagement, which is defined as the way employees apply their entire selves to their job (Kahn 1990; Brand-Labuschagne, Mostert, Rothmann & Rothmann 2012; Ugwu 2013; Ugwu, Onyishi & Rodriguez-Sanchez 2014; Moshoew & Geldenhuy 2015), has been identified as a major variable in organisations’ attempt to manage turbulent times characterised by scarcity of resources, and downsizing. To survive in a turbulent environment, effective organisations must have an innovative culture, and their employees must be willing to go the extra mile. The contributions of engaged employees are therefore critical in the overall performance of organisations that hope to survive in turbulent environments (Salanova, Agut & Peiro 2005; Bhuvanaiah & Raya 2014). For example, engaged employees are innovative, drive the management, effective allocation and utilisation of scarce resources, and ultimately drive the success of the organisation (Macey, Schneider, Barbera & Young 2009; Rich, LePine & Crawford 2010). EE has been found to correlate significantly with psychological meaningfulness, safety and availability (Kahn 1990; May, Gilson & Harter 2004), age profile of female academics (Bezuiderhout & Colliers 2011), autonomy, performance feedback and various organisation-based supports (Saks 2006; Bakker & Demerouti 2008; Nahrgang, Morgeson & Hofmann 2011), leadership behaviours, organisational climate and individual disposition (Anikan & Oywewole 2014; Dibley, Viviers & Van Zyl 2014; Ugwu et al 2014), restructuring and damage to institutional trust (Marais & Hofmeyr 2013), and job commitment (Coetzee, Schreuder & Tlalinyane 2014). EE correlation with job satisfaction and organisational commitment has not been consistent (Sehunoe, Viviers & Mayer 2015). Highly engaged employees are known to be innovative; they perform discretionary behaviours, are always current in developments in their fields (Saks 2006; Bhuvanaiah & Raya 2014; Christian, Garza & Slaughter 2011), and improve overall organisational productivity (Macey et al 2009; Crawford, LePine & Rich 2010).

Despite the advantages of EE, some studies (Halbesleben & Wheeler 2008; Halbesleben, Jaron, & Bolino 2009; Opie & Henn 2013) have found that EE can also have negative consequence for the individual and the organisation. The study by Opie and Henn (2013) was based on a job demand and resources model, while that by Halbesleben, Jaron and Bolino (2009) was based on the conservation of resources model (COR). Hobfoll’s (1989) conservation of resources model postulates that
individuals feel stressed in an environment characterised by “threat of a loss of resources, actual loss of resources, or lack of an expected gain in resources” (Grandey & Cropanzano 1999:352). Studies have determined that highly engaged employees utilise a high level of resources, and experience a high level of WFC (Eckenrode & Gore 1990; Small & Riley 1990; Macey & Schneider 2008; Halbesleben, Jaron & Bolino 2009; Opie & Henn 2013). These research findings indicate the dilemma currently faced by organisations, namely how to handle the undesirable relationship between two variables: the one, EE, is highly desired, and the other, WFC, is highly undesirable. It is therefore a case of whether organisations should abandon the pursuit of managing employee engagement because of its negative consequences for work-family conflict or find a way of managing the negative effects of EE. This is a dilemma that has not been adequately addressed by past studies. Hence, there is a gap in our understanding of whether EE is actually a net positive or net negative contributor to organisations’ productivity.

1.1 Research objectives
The primary objective of this study was to utilise the conservation of resources model and job demand and resources model to establish that organisational and personal resources and leadership will reduce the high work-family conflict level associated with high employee engagement. Organisations require highly engaged employees if they are to keep operating in a challenging business environment. Unless the organisations can help employees manage the high work-family conflict associated with their high engagement, employees will not be very productive. The secondary objective is to confirm the unfavourable relationship between employee engagement and work-family conflict found by studies in other parts of the world, including Africa, using samples from Nigeria.

1.2 Resources considered and model tested
Resources consist of what is valued by individuals, and could take the form of "objects, conditions, personal characteristics, and energies" (Grandey & Cropanzano 1999:352). Resources categorised as conditions are those that exist in either the family or the work domain. Four organisational resources that have been identified as being capable of reducing stress are job resources (JOBRES), organisational responsiveness to work-life balance (ORESP), and relational energy (RE), which is energy derived from interaction between organisational participants (Bakker, Hakanen, Demerouti & Xanthopoulou 2007; Schaufeli & Salanova 2007; Saks & Gruman 2014). Leadership has always played a major role in the management of human resources. This is because leaders create organisational climates that either enhance or reduce employee performance (Anderson 2009; Gill & Gaza 2015). Servant leadership has been known to greatly enhance the performance of employees through empowerment and other means (Dierendonck, Stam, Boersma, Windt & Alkema 2014). Servant leadership has as its primary motive service in order to bring out the best in employees. It is postulated that the behaviours of a servant leader provide resources that employees can utilise in managing stressful situations. Individual differences have the potential to affect how people react to stress (McCrae & Costa 1999; Halbesleben et al 2009; Opie & Henn 2013). The current study explores the role of core self-evaluation (CSE), an individual difference, in the EE and WFC relationship. Figure 1 below is the final model tested in this study.
1.3 Contributions of the research

The current study has made many valuable contributions to the EE literature and the management of WFC by organisations. Firstly, the study confirmed the unfavourable relationship between EE and WFC that had been established by past studies, using samples from Nigeria. Secondly, the current study filled a gap in the EE and WFC literature by identifying the resources that organisations could provide to help employees manage the high WFC they experience when they are highly engaged. In this way, the study provided empirically determined procedures that organisations could follow to help employees achieve work-life balance while they are engaged. The current study postulates that the same COR model that explained the relationship between EE and WFC could explain how this adverse relationship could be reduced. According to the COR model, individuals can avoid the negative effects of stress if they have an adequate and continuous supply of personal and organisational resources. This is the reason why individuals constantly strive to acquire and maintain resources. The current study therefore advocates that when organisations have an adequate stock of resources from which employees can draw while engaged in a role, stressful situations can be ameliorated, allowing employees to maintain their work tempo in the organisation (Bakker et al 2007; Schaufeli & Salanova 2007). This study has in fact demonstrated that EE is actually a net positive contributor to organisations’ productivity, and must be managed.

Thirdly, this is the only study that has utilised COR in exploring how best to manage the unexpected negative outcome of EE. This study has therefore shown that it is possible for a theory to explain a problem while at the same time proffering a solution to the problem. Fourthly, corporate social responsibility and ethical issues have been expanded to include the way organisations treat their employees, who are major stakeholders (Ehnert, Parsa, Roper, Wagner & Muller-Camen 2016). Ethical considerations dictate that organisations should not remain neutral while engaged employees suffer negative consequences for being engaged for high organisational productivity. The current study therefore provides information on how organisations can operate ethically by helping employees manage the negative effects of the qualities the organisation values.
2 Literature, theory, and hypothesis

2.1 Work-family conflict, and employee engagement

Work-family conflict arises in a situation in which involvement in one role makes it difficult for the individual to function effectively in another role owing to the scarcity of resources (Greenhaus & Beutell 1985; Akintayo 2010; Arisi-Nwugballa 2016). What happens in the interface between work and family has been explained by past stress studies using both the scarcity model, and the expansion model. (Greenhaus & Beutell 1985; Harenstam & Bejerot 2001; Wayne, Musisca & Fleeson 2004). For example, when an employee is highly involved in work assignments, that employee will spend a lot of time and energy on work activities (these are not infinite but scarce resources). The excessive use of these resources makes it difficult for the employee to function in the family domain. Current research on the work-family interface is governed by the job demand and resources model (JD-R), the expansion model, and the conservation of resources model (COR). The JD-R model stipulates that stress is minimised when an individual has an adequate supply of resources and exacerbated when there is high job demand and a shortage of resources (Opie & Henn 2013). COR advocates that people will experience WFC only if they have insufficient resources to handle the demands made on them in the work and family domains simultaneously.

Employee engagement is defined as “the harnessing of organisation members’ selves to their work roles; in engagement, people employ and express themselves physically, cognitively, and emotionally during role performances” (Kahn 1990:694). Schaufeli, Bakker & Salanova (2002:74) identify the components of EE as “vigour, dedication, and absorption”. Vigour refers to the level of energy applied in performing a role; dedication refers to involvement during role performance, and absorption refers to how engrossed one is in performing a role. The authors also state that EE is not momentary but “is a more persistent and pervasive affective cognitive state that is not focused on any particular object, event, individual, or behaviour” (p. 74). Research on employee engagement (EE) has passed through various stages. The first stage involved the articulation of the theory of engagement, in which the factor structure for EE was developed and validated (Kahn 1990; Maslach, Schaufeli & Liter 2001; Schaufeli et al 2002; May et al 2004). For example, after detailed study Schaufeli et al (2002) identified three components of EE. The second stage was directed at determining the antecedents and outcomes of EE. COR postulates that stress arises in situations of threat or actual loss of resources or lack of expected gain in resources, and that individuals therefore strive to acquire and maintain resources (Hobfoll 1988; Grandey & Cropanzano 1999). For example, highly engaged employees utilise high amounts of resources by way of physical energy and the energy required to meet emotional and cognitive demands (Kahn 1990; Schaufeli et al 2002). Consequently, highly engaged employees will experience high work-family conflict due to loss of resources (Greenhaus & Beutell 1985; Eckenrode & Gore 1990; Small & Riley 1990; Macey & Schneider 2008; Halbesleben et al 2009). The JD-R model also postulates that in situations of low resources and high job demand, individuals experience high levels of stress (Opie & Henn 2013). Based on these findings, the following hypothesis was formulated:

\[ H1: \text{Employee engagement is positively related to work-family conflict.} \]
2.2 Conservation of resources model, and the moderating roles of resources

Two aspects of the COR that can be used to explain possible moderating roles of resources are the fact that stress occurs when there is a lack of expected gain in resources, and the principle of resource bundle acquired through “gain spiral” (Ten Brummelhuis & Bakker 2012:547). Gain spiral occurs when gain in resources leads to an increase in the stock of resources and an increase in the likelihood that additional resources can be acquired (Llorens, Schaufeli, Bakker & Salanova 2007). It is likely that if employees are able to build resource bundle through “gain spiral”, they will be able to avoid the negative consequences of EE, and also maintain their level of engagement. An individual’s resource bundle could consist of objects, personal characteristics, organisational resources and relationships. Those who possess large and varied resources, and are in a social or societal setting with rich resources, are able to sustain work engagement and avoid stressful situations, are better positioned to handle stress and are less affected when they experience a loss in resources (Ten Brummelhuis & Bakker 2012). According to the COR (Ten Brummelhuis & Bakker 2012), when an individual faces environmental demands that require more resources, the effect of stressors can be attenuated if the individual has an adequate stock of resources to draw on. The JD-R model also supports the postulation that when individuals have an adequate supply of resources, they are able to handle stressful situations even when they utilise high levels of resources, since the depleted resources are constantly replenished.

2.2.1 Job resources (JOBRES)

This has three components, namely, work autonomy, training, and technology. Work autonomy enables employees to effectively juggle demands in the work and family domains so as to avoid experiencing WFC. When employees play an active role in selecting the types of training to embark on, they acquire relevant skills, and are also motivated during the training sessions. When employees possess the relevant skills for their assigned roles, they minimise wastage of resources during role enactment. Technology ensures that employees keep up to date with the developments in their roles. This tends to minimise the amount of time required to carry out a job. Hence, job resources as a bundle can be utilised by highly engaged employees in roles that make a high demand on resources. (Bakker & Demerouti 2007; Crawford et al 2010) Janse van Rensburg, Boonzaier & Boonzaier 2013). Almeida et al (2016) confirm that supervisor support, an organisational resource, buffers the positive relationship between negative affect and WFC in such a way that with high supervisor support the relationship was weaker. Although the studies by Glavin and Schieman (2012) and Bakker, Emmerik and Euwema (2006) did not include EE, the moderating role of job resources in the work-family conflict model was demonstrated. Based on these finding and the postulation of COR and JD-R models, the following hypothesis was formulated:

H2: JOBRES moderates the positive relationship between employee engagement and work-family conflict in such a way that the relationship is weaker when JOBRES are high and stronger when they are low.

2.2.2 Organisational responsiveness to work-family balance (ORESP)

This is explained as awareness by the organisation of the demands made on employees in the workplace that influence their effectiveness in the family domain. Organisations that are responsive to the work-life balance of employees consciously establish various family-friendly policies to enable employees to manage their work and family demands (Anderson et al 2002; Downes & Koekemoer 2011). Thus, family-
responsive organisations provide these policies as a resource bank which employees can draw on so as to manage work-family conflict, and still be highly engaged in their job. For example, flexible work arrangements allow employees to schedule work and family responsibilities in such a way that the level of conflict is minimised. According to the COR, organisations that are responsive to the work-life balance of their employees would ensure that their employees have the prospect of a gain in resources when necessary. Hence, the following hypothesis was postulated:

**H3: ORESP will moderate the positive relationship between employee engagement and work-family conflict in such a way that the relationship is weaker when ORESP is high and stronger when it is low.**

### 2.2.3 Relational energy (RE)

Energy supplies the motivation and drive needed for the achievement of goals (Quinn, Spreitzer & Lam 2012). Relational energy is defined by Owens, Baker, Sumpter and Cameron (2016:3) "as a heightened level of psychological resourcefulness generated from interpersonal interactions that enhances one’s capacity to do work”. The interaction is either between peers or between managers and subordinates. In this study, RE is considered from the point of view of the receiver of the energy. Two theories underlie the transference of RE in social interactions. Interactional ritual theory postulates that during social interaction those involved develop mutual focus and deep-rooted involvement in each other’s emotions and behaviour. It assumes that individuals are motivated to pursue social interaction that raises their level of RE and enlarges their resource bank (Collins 2004). Social contagion theory describes how positive energy develops and is transmitted from one participant to another (Owens et al 2016). It states that emotions and behaviours in social interaction are contagious and spread from the giver to the receiver (Hartfield, Cacioppo & Rapson 1994; Owens et al 2016). Thus, RE generated during social interaction is moved from one participant to the other through the process of social contagion. According to COR, employees involved in social interaction will strive to acquire and maintain RE through the process of social contagion, so as to build resources that can be used in situations of high demand. In this way, individuals will maintain high levels of engagement without experiencing high work-family conflict. Owens et al (2016) found that RE enhanced EE. Barsade (2002) also found that the energy spread from one person to another minimised the conflict experienced by the receiving participant. Hence the following hypothesis:

**H4: RE will moderate the positive relationship between employee engagement and work-family conflict in such a way that the relationship is weaker when RE is high and stronger when it is low.**

### 2.2.4 Core self-evaluation (CSE)

CSE is a dispositional variable that serves as a personal resource, and is a combination of self-esteem, generalised self-efficacy, locus of control and emotional stability (Judge et al 2005). Employees with positive CSE “appraise themselves in a consistently positive manner across situations; such individuals see themselves as capable, worthy, and in control of their lives” (Judge, Van Vianen & De Pater 2004). Such individuals develop resilience in the face of challenging situations. It has been established that CSE has a direct effect on job satisfaction and life satisfaction, and moderates the relationship between stressors and outcomes (Harris, Harvey & Kacmar 2009; Crawford et al 2010). Conscientiousness, also a dispositional variable, has been found to moderate the relationship between organisational citizenship behaviour and work-family conflict (Halbesleben et al 2009), and between EE and work-family conflict.
Self-esteem, which is also a component of CSE, has been found to moderate the relationship between work stressors and work-family conflict (Grandey & Cropanzano 1999). De Waal and Pienaar (2013) established that psychological capital, which is made up of the components of CSE, enhanced EE. Since CSE is a personal resource, and considering the postulation of COR regarding the availability of resources and stress reduction, employees with positive CSE have resilient spirits and are highly skillful at coping with stressful situations while maintaining their level of work output (Witt & Carlson 2006; Karatepe & Azar 2013). Hence, the following hypothesis was postulated:

H5: CSE moderates the positive relationship between employee engagement and work-family conflict in such a way that the relationship is weaker when CSE is high and stronger when it is low.

2.2.5 Servant leadership (SL)

Leadership is a source of competitive advantage for organisations since it creates climates which affect on-the-job and out-of-job performance of employees (Luthans 2002; Ng, Koh & Goh 2008; Anderson 2009; Macil-Frey, Quick & Cooper 2009; Dierendonck 2011; Gill & Gaza 2015). SL originates from the leader’s “natural desire to serve first and then to lead” (Greenleaf 1977:7). A servant leader empowers subordinates, holds them responsible for performance within their control, and offers psychological and other resources needed to enhance employees’ performance. Dierendonck (2011:1232) states that “servant leaders empower and develop people; they show humility, are authentic, accept people for who they are, provide direction, and are stewards who work for the good of the whole”. An SL is always positive about employees. Hence, the interaction between the SL and employees provides tangible resources and also enhances psychological resources. The positive interactions involved transfer RE through the process of social contagion (Owens et al 2016). Furthermore, through positive reinforcement employees develop positive CSE. These are resources which employees can fall back on in times of high engagement so as to achieve work-life balance. The postulation supports the principle of COR that perception of the availability of a resource bank will reduce the effect of stressors on individuals (Hobfoll 1989). Hence, the following hypothesis was postulated:

H6: SL moderates the positive relationship between employee engagement and work-family conflict in such a way that the relationship is weaker when SL is high and stronger when it is low.

3 Methods

3.1 Sample and procedure

The researcher asked employees who were attending an executive management programme to participate in the research. Four members of the class agreed to act as contact points in their respective companies. The contact points scheduled a meeting between the HR managers of their respective companies and the researcher. At the meeting, the researcher was given permission to select the participants in each organisation. All the companies are located in the city of Lagos in Nigeria. Four industries, namely, oil, manufacturing, finance, and supply chain services, were covered in the research. The employees located in the Lagos offices of the companies numbered between 500 and 750. Using the telephone directory of the companies, 250 random samples were selected from each company. The questionnaire was in two
3.2 Measures
All the study variables were measured with the aid of a Likert-type scale ranging from 1=strongly disagree to 7=strongly agree. The Cronbach’s alpha for all the study variables fell within the range .87 to .92. The organisational resources included in the study are job resources (JOBRES), organisational responsiveness to work-family balance (ORESP) and relational energy (RE). Job resources were measured with the aid of ten items taken from the work of Salanova, Agut and Peiro (2005). These items measured individuals’ perception that they have autonomy, have adequate training and are involved in training decisions, and have adequate technology to perform their assigned jobs. An example of the items is “Learning in the organization helps to overcome work obstacles.” Organisational responsiveness to work-family balance was measured with the aid of eight items taken from the work of Magnini (2009). They measured the perception of employees that organisations establish policies as a sign that they care about the work-life balance of their employees. An example of these items is “Work/family is a legitimate issue of the organization, relevant to its mission.” RE was measured with the aid of nine items taken from the work of Owens et al (2016). They measured the perception of employees that relationships developed in the workplace generated positive energy that enhanced their work performance. An example of these items is “I feel invigorated when I interact with my supervisor/manager.” CSE was measured with the aid of six items taken from the work of Karatepe and Azar (2013). It measured individuals’ perception that they are capable, worthy, and have control over the events in their lives. An example of these items is “I am confident I get the success I deserve in life.” SL was measured with the aid of seven items taken from the work of Liden et al (2015). It measured employees’ perception that their leaders demonstrate servant leadership behaviours when managing them. EE conceptualised the way employees harness themselves to their work as reflected in their vigour, dedication and absorption. It was measured on a short scale taken from the work of Schaufeli, Bakker and Salanova (2002), and validated by means of a Nigerian sample by Ugwu (2013). Ugwu (2013) obtained a Cronbach’s alpha of .91, while this study obtained a value of .92. An example of these items is “My manager encourages me to use my talents.” WFC was measured with the aid of four items taken from the work of Karatepe and Azar (2013). It measured individuals’ perception that involvement in work negatively affects their effectiveness in family activities. An example of these items is “My job reduces the efforts I can give to activities at home.”

4 Analysis and results
Two hundred samples were randomly selected to perform the exploratory factor analysis (EFA), while 225 were used for the confirmatory factor analysis (CFA). Unrotated exploratory factor analysis extracted seven factors, with the first factor
extracting only 25% of the variance and the remaining factors extracting 50% of the variance. This is an indication that common method variance was not an issue in the study (Podsakoff & Organ 1986; Owens et al 2016). The job resources items loaded on two factors. A rotated EFA was done with the number of factors to be extracted set at seven. The seven factors extracted 77% of the variance in the items, and factor loadings were between .59 and .83. As a result of the high correlation between the study variables, confirmatory factor analysis (CFA) tested four, three, two, and one factor models. The four-factor model has ORESP, two JOBRES factors, and RE. The three-factor model combined the JOBRES and left ORESP and RE as separate factors. The two-factor model has a factor for JOBRES and combined ORESP and RE in another factor. The one-factor model combined all the variables in a factor. Model fit was determined using the goodness-of-fit index (GFI), the comparative-fit index (CFI), and root-mean-error-of approximation (RMSEA). The values for models that displayed a good fit were 0.9, 0.9, and <.08 respectively (Amah 2010; Owens et al 2016). As indicated in Table 1, a three-factor model made up of a single JOBRES factor and separate factors for ORESP and RE showed the best fit, and a chi-square difference test confirmed this. All the items had an accepted Cronbach’s alpha, as indicated in Table 2 (Cronbach 1951). The square of the correlation between any two factors is lower than the variance extracted by each factor, which is an indication of discriminant validity (Koufteros, Vonderembse & Doll 2002; Amah 2010). The mean, SD, correlation and Cronbach’s alpha for the study variables are given in Table 2.

Table 1  
Confirmatory factor analysis for RE, ORESP and JOBRES

<table>
<thead>
<tr>
<th>Factor structure</th>
<th>GFI</th>
<th>CFI</th>
<th>χ²</th>
<th>Df</th>
<th>Δχ²</th>
<th>χ²/df</th>
<th>RMSEA</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 factor</td>
<td>.90</td>
<td>.97</td>
<td>283.54</td>
<td>133</td>
<td>0</td>
<td>2.13</td>
<td>.065</td>
</tr>
<tr>
<td>3 factor</td>
<td>.90</td>
<td>.97</td>
<td>287.56</td>
<td>135</td>
<td>4.02</td>
<td>2.13</td>
<td>.066</td>
</tr>
<tr>
<td>2 factor</td>
<td>.50</td>
<td>.91</td>
<td>591.04</td>
<td>132</td>
<td>196.46**</td>
<td>4.48</td>
<td>.11</td>
</tr>
<tr>
<td>1 factor</td>
<td>.68</td>
<td>.83</td>
<td>975.32</td>
<td>134</td>
<td>384.28**</td>
<td>7.29</td>
<td>.15</td>
</tr>
</tbody>
</table>

GFI- goodness-of-fit index; CFI- comparative-fit-index; RE- relational energy; JOBRES- job resources; ORESP- organisational responsiveness, N=200

Table 2  
Means, standard deviations, correlations and reliabilities of the study variables

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Standard deviation</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. RE</td>
<td>4.15</td>
<td>1.60</td>
<td>0.91</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>2. EE</td>
<td>4.42</td>
<td>1.50</td>
<td>0.71**</td>
<td>0.92</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. JOBRES</td>
<td>4.77</td>
<td>1.40</td>
<td>0.62**</td>
<td>0.67**</td>
<td>0.87</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>4. CSE</td>
<td>5.01</td>
<td>1.23</td>
<td>0.51**</td>
<td>0.69**</td>
<td>0.72**</td>
<td>0.89</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. SL</td>
<td>4.30</td>
<td>1.58</td>
<td>0.70**</td>
<td>0.74**</td>
<td>0.71**</td>
<td>0.66**</td>
<td>0.88</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. WFC</td>
<td>4.41</td>
<td>1.53</td>
<td>0.22**</td>
<td>0.16**</td>
<td>0.16**</td>
<td>0.13*</td>
<td>0.20**</td>
<td>0.87</td>
<td></td>
</tr>
<tr>
<td>8. ORESP</td>
<td>4.02</td>
<td>1.44</td>
<td>0.70**</td>
<td>0.70**</td>
<td>0.69**</td>
<td>0.59**</td>
<td>0.78**</td>
<td>0.22**</td>
<td>0.090</td>
</tr>
</tbody>
</table>

The numbers on the diagonal are scale reliabilities

RE – relational energy; EE – employee engagement; JOBRES – job resources; ORESP – organisational responsiveness; CSE – core self-evaluation; SL – servant leadership; WFC – work family conflict; WFF – work family facilitation.

*p<0.05; **p<0.01 (two-tailed tests), N= 425.
To avoid multicollinearity, the variables in the interaction terms were centred in line with the recommendation of Aiken and West (1991). The final hierarchical regression analysis contains only the demographic variable, age, since it was the only control variable that significantly predicted WFC. The demographic variables were included in the first stage of the hierarchical regression analysis; EE was included in the second stage, the moderator variables in the third stage, and the interaction terms were included in the fourth stage. As indicated in Table 3, after controlling for the demographic variables, EE significantly predicted WFC ($\beta=.13$). The result supported hypothesis 1. None of the moderator variables predicted WFC. The interaction terms, EE*JOBRES, EE*RE, EE*CSE, and EE*SL, predicted WFC with $\beta$ values of -0.25, -0.53, -0.2 and -0.43 respectively. Hypotheses 2, 4, 5, and 6 were therefore supported. The interaction term EE*ORESP was not significant ($\beta=.01$). Thus, hypothesis 3 was not supported.

To graph the significant interaction terms, two groups were created from each interaction variable using the mean of the variable. For example, the two groups for the JOBRES variable were: low JOBRES group, made up of participants with a JOBRES value of mean minus 1SD, and the high JOBRES group, with values equal to mean plus 1SD. A separate regression analysis was run for each group with EE as the independent variable and WFC as the dependent variable (Aiken & West 1991). The graphs are displayed in Figures 2 to 5. All the figures indicated that the effects of EE on WFC were reduced at high values of the moderating variables. EE explained 2% of the

### Table 3

<table>
<thead>
<tr>
<th>Results of hierarchical regression analysis on work-family conflict</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step 1: Control variables:</strong></td>
</tr>
<tr>
<td>Age</td>
</tr>
<tr>
<td>-0.27**</td>
</tr>
<tr>
<td><strong>Step 2: Independent variable:</strong></td>
</tr>
<tr>
<td>Employee engagement</td>
</tr>
<tr>
<td>0.13**</td>
</tr>
<tr>
<td><strong>Step 3: Resources (moderators):</strong></td>
</tr>
<tr>
<td>RE</td>
</tr>
<tr>
<td>JOBRES</td>
</tr>
<tr>
<td>CSE</td>
</tr>
<tr>
<td>SL</td>
</tr>
<tr>
<td>ORESP</td>
</tr>
<tr>
<td><strong>Step 4: Interactions:</strong></td>
</tr>
<tr>
<td>EE*RE</td>
</tr>
<tr>
<td>EE*JOBRES</td>
</tr>
<tr>
<td>EE*CSE</td>
</tr>
<tr>
<td>EE*SL</td>
</tr>
<tr>
<td>EE*ORESP</td>
</tr>
<tr>
<td><strong>Change in $R^2$</strong></td>
</tr>
<tr>
<td>0.13**</td>
</tr>
<tr>
<td><strong>Final $R^2$</strong></td>
</tr>
<tr>
<td>0.22</td>
</tr>
</tbody>
</table>

RE = relational energy; EE = employee engagement; JOBRES = job resources; ORESP = organisational responsiveness; CSE = core self-evaluation; SL = servant leadership; WFC = work-family conflict.
variance in WFC, while the interaction terms jointly explained 13% of the variance in WFC.

**Figure 2**
Interaction of job resources (JOBRES) and employee engagement in predicting work-family conflict

**Figure 3**
Interaction of relational energy (RE) and employee engagement in predicting work-family conflict
Figure 4
Interaction of core self-evaluation (CSE) and employee engagement in predicting work-family conflict

Figure 5
Interaction of servant leadership (SL) and employee engagement in predicting work-family conflict

5 Discussions and conclusions

5.1 Theoretical Implications
The study was designed to investigate how organisations can avoid disregarding EE because of its negative consequences for WFC. The study confirmed the negative effect of EE on WFC identified earlier by Halbesleben et al. (2009) and Opie and Henn
employees and at the same time help them to manage the negative effects of that could be acted on by manage the negative outcome of engagement. The results obtained here provide items should not put result obtained here indicated that it increased the of resources, organisational productivity. The result obtained in this study confirms the moderating effect, and it was postulated that organisations can do something to enable employees to manage the undesirable consequences of EE. The current study also contains more resources than the study by Halsbesleben et al 2009. Consequently, this study stands out as the only known study to explore the moderating effects of resources in the EE and WFC relationship. The current study actually explored an area recommended by Halsbesleben et al (2009) as a possible area of future research.

Servant leadership is based on the natural desire of the leader to serve followers so as to enhance their individual growth and productivity as a way of enhancing organisational productivity. The result obtained in this study confirms the finding of DeGraaf, Tilley and Neal (2004), namely that servant leadership encourages growth in followers, a caring attitude in organisations, personal involvement in decision making, and ethical and caring behaviours which are viewed by followers as resources that can be utilised in managing work demands.

The interaction term EE*ORESP did not predict work-family conflict. The result is not surprising in view of the finding of Amah (2010) that the availability of ORESP did not reduce work-family conflict when employees were afraid to use it. It is likely that the effectiveness of ORESP is enhanced when the culture prevailing in the organisation does not punish those who take advantage of the policy.

5.2 Practical implications
The results obtained have practical implications for HR managers as they seek to improve productivity in an environment characterised by low employee morale, scarcity of resources, organisational downsizing, mergers and acquisitions. EE has been identified as a major source of increased organisational productivity. However, the result obtained here indicated that it increased the WFC of employees. HR managers should not put measures in place to enhance EE, and then leave the employees to manage the negative outcome of engagement. The results obtained here provide items that could be acted on by HR managers who want to get the best out of their employees and at the same time help them to manage the negative effects of their
work engagement. The items included in the organisational resources in this study contain a lot of suggestions for HR managers. JOBRES includes work autonomy, training and the provision of technology. HR managers could redesign work so as to offer greater autonomy to employees. In this way they would be able to juggle the demands of work and family so as to avoid work-family conflict. Training should be made more strategic so that individuals can make a valuable contribution to the type and nature of the training they receive. Organisations should also encourage the use of technology in the workplace, and provide external sources for enhancing technological development. The result obtained for RE shows that there is a potential advantage in the transference of positive energy during social interactions in the organisation. The positive energy in one interacting individual is experienced by another individual through the process of social contagion (Hatfield, Cacioppo & Rapson 1994). According to Owens et al (2016:11), RE affects behaviour and attitudes by providing “psychological resources that can be allocated toward the doing of work”. When such interaction involves the leader, it is the climate created by such leader and the emotional space enabled by the leader that jointly provide the positive energy that becomes contagious. HR managers therefore have the opportunity to train managers to become positive energy transferors through the positive interaction they create in the workplace. Combining the results of RE and servant leadership justifies HR managers in investing in leadership training that will result in leaders’ basis for action being motivated by the desire to serve followers.

Leaders also play a significant role in developing the CSE of followers through the positive relationship they encourage. CSE is a combination of self-esteem, self-efficacy and locus of control. Employees are able to enhance their level of CSE through the positive feedback received and the positive relationships developed in interacting with leaders. ORESP did not make a valuable contribution to the reduction of WFC. Past studies have demonstrated that for the policies provided by responsive organisations to be effective in reducing WFC, they must operate in a culture that encourages their use (Amah 2010). Employees develop a fear of using the organisational resources in their interaction with leaders. For example, when a leader allows the use of the resources, but makes a habit of referring to this when organisational opportunities are to be distributed, employees become sceptical about permission to use the resources. HR managers will have to institute policies that provide the various resources, and train managers to create a climate that encourages their use.

The sustainability HRM concept advocates that organisations should control “unintended side effects and negative feedbacks” (Ehnert et al 2016:90) in their operations. The results obtained in this study will help organisations in formulating HRM practices that minimise harm to employees, and help organisations provide favourable reports on sustainability and HRM.

5.3 Strengths and weaknesses

The study is based on cross-sectional data in which information was provided on a single occasion, using self-report. Thus, common method variance cannot be completely removed. However, the statistical analysis carried out indicated that common method variance was minimal. A further limitation is that causality cannot be inferred in this study. Participants came from four industries, and it is therefore necessary to be cautious about making generalisations. However, the variables used in this study are not industry-specific variables so it is still possible to make generalisations.
5.4 **Direction for future research**

Future studies should attempt to use the longitudinal method of data gathering. This would make it possible to discern the relationship between resources at one point in time and WFC at another. The study contains many resources taken from many different sources. Future studies should try to include more resources and expand the sources so as to obtain a better picture of the role of the conservation of resources model in the engagement literature. Since organisational resources generated by the actions of leaders have been shown to be effective in the management of WFC, future studies should look into the levels of resources generated by different leadership styles. In this way, organisations will train their leaders to exhibit the leadership styles that enhance organisational resources.

**List of references**


