

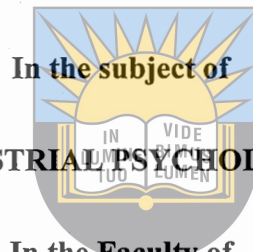
**Job insecurity and Work-family conflict in relation to Job engagement in the Energy
Industry in selected organisations in Amathole District.**

By

SHINGIRAYI FLORENCE CHAMISA

A Mini Dissertation submitted in partial fulfillment of the requirements for the degree of

Master of Commerce in Industrial Psychology



**In the subject of
INDUSTRIAL PSYCHOLOGY**

In the Faculty of

**University of Fort Hare
MANAGEMENT AND COMMERCE**
Together in Excellence

Of the

University of Fort Hare

Supervisor: Prof TQ Mjoli

November 2014

DECLARATION

I, **Shingirayi Florence Chamisa**, vow that this dissertation has not been submitted to any University and that it is my original work. All assistance towards the production of this work and all the references contained herein have been duly accredited.

Shamisa

19/08/15

Shingirayi Florence Chamisa



Date

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DEDICATION

I dedicate this work to my loving parents, Mr and Mrs Madyira-Chitova weGona.



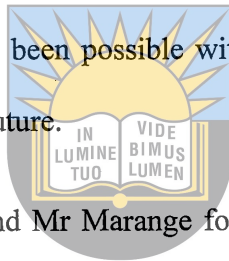
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ACKNOWLEDGEMENTS

The Lord God Almighty for his unending grace love and favour.

I would like to express my sincere gratitude to the following people:

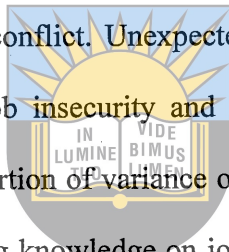
- My supervisor Prof TQ Mjoli, for all his knowledge, advice, hard work, encouragement and commitment throughout this research process. I admire his expertise in the field and dedication. I am truly thankful for his support, challenge and confidence in my writing. This dissertation would not have been possible without him, my sincere thanks. I look forward to working with him in future.
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- I am grateful to my family for their unstinting trust, love and support of my educational endeavors and always pushing me to be my best and never settle which have sustained me in achieving my goal. I know I have made you proud. Patie Mushangwe we made it!



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ABSTRACT

Most employees are failing to meet the competing work related and household strains leading to burnout, absenteeism and loss of the few existing highly skilled employees. The current study utilised the Job Demand-Resources Model to examine the relationship between job insecurity and work-family conflict on the one hand and job engagement on the other hand among technical personnel within selected Eskom depots in the Amathole District Municipality of the Eastern Cape. There is limited research regarding the impact of job insecurity and work-family conflict on job engagement among technicians in the energy industry. A quantitative cross-sectional survey was used. The sample (N= 221) comprised of technicians from Eskom branches. Data was collected through the questionnaire method and SPSS was used for data analysis. The results of the Product Pearson Correlation method indicated that job insecurity negatively predicts job engagement, contrary to work-family conflict. Unexpectedly, results from multiple regression method and chi-square showed that job insecurity and work-family conflict together do not account for a significantly higher proportion of variance on job engagement than any of the two separately. This study argument existing knowledge on job insecurity, work-family conflict and job engagement among technicians in the energy industry that has largely been ignored by previous researchers and validates certain aspects of the Job Demands Resources Model. The energy industry should provide consideration to how the need for shifts and sometimes working long hours is justified. Strategies need to be implemented in improving managerial and co-worker support for technicians through socialization and team building activities. In addition, employers must invest in strategies used in stimulating employee well-being directly such as supportive leadership to reduce feelings of job insecurity and stress from the pressure of competing work and home demands.



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Key words: job insecurity, work-family conflict, job engagement, the Job Demands-Resources

Model, energy industry



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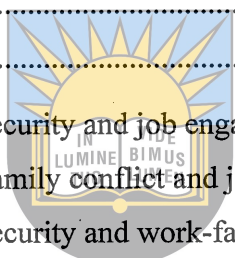
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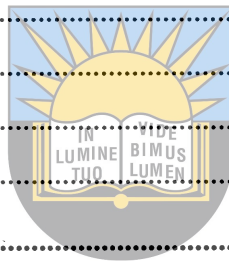
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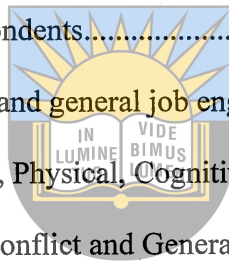
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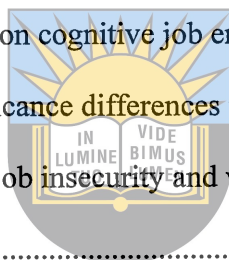
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ACRONYMS

GLM Generalized Linear Model

JDRM Job Demands-Resources Model

JES Job Engagement Scale

JIQ Job Insecurity Questionnaire

SPSS Statistical Package for Social Sciences

WFC Work-family conflict

UFH University of Fort Hare

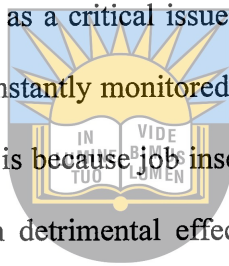


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CHAPTER 1: INTRODUCTION AND BACKGROUND INFORMATION

1.1 Introduction

This study seeks to examine the relationship between job insecurity and work-family conflict on the one hand and job engagement on the other hand among technical personnel within selected Eskom depots in the Amathole District Municipality of the Eastern Cape. Bakker, Albrecht and Leiter (2011) identified job engagement as a critical issue in organisations. Employee personal and environmental factors have to be constantly monitored to reduce stress at home and at work (Rich, Lupine, & Crawford, 2010). This is because job insecurity and work-family conflict have been identified to be work strains with detrimental effects on job engagement (Schaufeli & Bakker, 2004).



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Both job insecurity and work-family conflict have been found to predict low job engagement (Macey & Schneider, 2008). In order to perform effectively, organisations must motivate employees to excel on their jobs and in the process develop a proactive, responsible and committed workforce. According to Bakker and Leiter (2010), energetic and dedicated employees perform better than those who lack these qualities. The presence of such employees is therefore critical in creating a highly efficient and competitive organisation.

The changing South African economy has called for downsizing and layoffs in the country's energy industry, adding to the already existing strain of skills shortages in the industry. Eskom is a designated essential service provider and their staff are prohibited from striking (Staff, 2014; Steyn, 2013). Eskom sustains 98% of the country's economic and domestic activities through the provision of electrical energy and maintenance services in addition to neighbouring countries

like Zimbabwe and Botswana. There is therefore more pressure to perform on the already exhausted employees in the industry leading to possible collisions between the work and family spheres (SAPA, 2014).

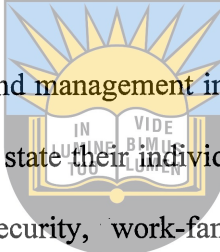
1.2 Problem statement

Trends towards more unpredictable and inflexible labour markets have aroused perceptions of job insecurity among employees in the energy industry. About 900 000 workers lost their jobs between 2011 and 2013 in the energy industry (SAPA, 2014). This has evoked stress in employees, spilling over to the family domain. Many employees are failing to meet the competing work related and household strains leading to burnout, absenteeism and loss of the few existing highly skilled employees (Rantanen, Mauno, Kinnunen & Rantanen, 2011). In addition to that, it has been highlighted that the provision and maintenance of an extended national electric grid to rural areas in provinces such as the Eastern Cape has also added to the inter-role conflict between work and family life in turn posing a threat to job engagement (South Africa Year Book, 2012/2013). The biggest challenge now is to control job demands such as job insecurity and work-family conflict in the South African energy industry.

Few studies have been conducted on these variables specifically for employees in the energy industry in South Africa. The available studies are mostly focused on European, US and a few Asian samples (Raymond, Shuang & Yue, 2012; Rantanen et. al., 2011). Apart from some limited domestic publications (e.g. Stander & Rothmann, 2010; Patel, Govender, Paruk & Ramgoon, 2006) research from the African continent is almost non-existent. There are no known studies related to these variables in the energy sector in the Eastern Cape. In addition to that, most studies on work-family conflict are on women, but of late, men also succumb to the

pressure of balancing family roles and performance at work (Stander & Rothmann, 2010). It is therefore important to measure the extent to which the two variables (job insecurity and work-family conflict) relate to job engagement for both men and women as both gender groups are affected. Against this background, the current study seeks to examine the relationship between job insecurity and work-family conflict on one hand and job engagement on the other using a sample of Eskom employees in the Amathole District Municipality of the Eastern Cape Province.

1.3 Significance of the study



This study will benefit both employees and management in the energy industry. Employees will benefit by being given an opportunity to state their individual perceptions of their work, and to give their feelings regarding job insecurity, work-family conflict and job engagement. Depending on the findings of the study, this may lead to an improvement in working conditions for employees. The findings of this study will be useful to leadership and management in devising strategies for the retention of skilled employees in the sector and possibly improving the work performance of employees. The study will also assist management in their efforts to improve the working conditions of their employees. It will also augment existing knowledge in an area of investigation that has largely been ignored by previous researchers.

1.4 Objectives

The objectives of this study are:

- 1) To explore the relationship between job insecurity and job engagement among technicians at Eskom in the Amathole District of the Eastern Cape.

- 2) To examine the relationship between work-family conflict and job engagement among technicians at Eskom in the Amathole District of the Eastern Cape.
- 3) To investigate the combined effect of job insecurity and work-family conflict on job engagement among technicians at Eskom in the Amathole District of the Eastern Cape.

1.5 Research questions

From the above -stated problem statement, the following research questions can be formulated:

1. Is there a relationship between job insecurity and job engagement among technicians at Eskom in the Amathole District Municipality?
2. Is there a relationship between work-family conflict and job engagement among technicians at Eskom in the Amathole District Municipality?
3. Does job insecurity and work-family conflict have a combined effect that is more predictive of job engagement than any of the two individually among technicians in the Amathole District Municipality?

1.6 Hypothesis

The following hypothesis were formulated to be tested.

1.6.1 The job insecurity/job engagement hypothesis

H₀: Job insecurity is not significantly negatively correlated with job engagement.

H₁: Job insecurity is significantly negatively correlated with job engagement.

1.6.2 The work-family conflict/job engagement hypothesis

H₀: Hypothesis 2: Work-family conflict is not significantly negatively correlated with job engagement.

H₂: Work-family conflict is significantly negatively correlated with job engagement.

1.6.3 The job insecurity/work-family conflict/job engagement hypothesis

H₀: Job insecurity and work-family conflict together do not account for a significantly higher proportion of variance in job engagement than any of the two separately.

H₃: Job insecurity and work-family conflict together account for a significantly higher proportion of variance in job engagement than any of the two separately.



1.7 Layout of Dissertation

Chapter two provides an outline of the literature relevant to the current study. It comprises of the theoretical framework utilised in the study, definitions of variables of interest and lastly findings related to job insecurity and work-family conflict on the one hand and job engagement on the other hand. Chapter three addresses the methodology of the study. The sampling techniques used in the study are outlined. Data collection instruments and their reliability coefficients are also discussed in addition to statistical analysis and ethical considerations. Chapter four presents the results of the study and finally chapter five presents a discussion of the study results in relation to the objectives and hypothesis of study. The chapter further presents the implications of the findings, limitations and recommendations for future studies.

1.8 Conclusion

This chapter provided an introduction and background of the study. The variables of interest were also introduced and discussed briefly. Furthermore the problem statement, objectives of the study and the hypothesis were clearly stated. Lastly the layout of the dissertation was provided. The next chapter is going to discuss literature review of the study.

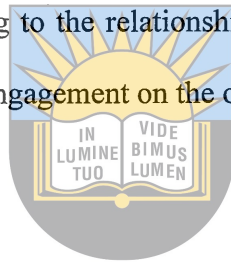


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CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

This chapter will first discuss the Job Demands Resources model. The model will be discussed in the theoretical literature of the study with emphasis on job engagement as the outcome variable. It will then review the literature relating to the three variables of interest in this study. The previous chapter introduced the research problem in addition to providing the background of the study. Previous research findings relating to the relationship between job insecurity and work-family conflict on the one hand and job engagement on the other hand will be presented.



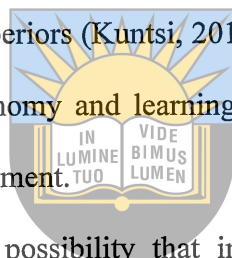
2.2 Theoretical literature

This section will focus on the theoretical framework underpinning this study. This theoretical framework will provide an understanding on the relationship among the three variables of the study. The theory of choice in this regard is the Job Demands Resources Model.

2.2.1 The Job Demands Resources model

The Job Demands Resources (JD-R) Model of Schaufeli and Bakker (2004) underlies the correlation between job insecurity and work-family conflict on the one hand and job engagement on the other that is hypothesised in this study. The model explains how employee well-being may be influenced by employment conditions which are job demands and job resources (Tims & Bakker, 2010). Job demands include the mental, social, effort and structural characteristics of work. Examples of job demands are time pressure (Jourdian & Chenevert, 2010), work overload (Crawford et al., 2010), job uncertainty (Trembley & Messervey, 2011), shift work (Jourdian & Chenevert, 2010) and work-family conflict (Mauno, Kinnunen & Roukolainen, 2007).

Job resources are the physical, mental, shared and structural characteristics of work that can support an employee to realise work objectives. Resources can also ease job strains and the related outlays as well as fuel individual development (Bakker & Demerouti, 2007). Job resources exist at the structural level (e.g. salary, job prospect, employment security); at the social level (e.g. superior and subordinate support, group effort); and at the task level (e.g. skill variety, task significance). Individual resources such as buoyancy, self-efficacy, and flexibility can complement job resources to predict job engagement (Halbesleben, 2010). Job resources such as support from co-workers and superiors (Kunzsi, 2014), innovative climate, social climate (Halbesleben, 2010), skill variety, autonomy and learning opportunities (De Waal & Pienaar, 2013) were found to facilitate job engagement.



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A few studies have suggested the possibility that in addition to job factors, the work environment may influence the development of job engagement (Hakanen & Roodt, 2010; Alarcon, Lyons, & Tartaglia, 2010). In their research (Bakker, Van Veldhoven & Xanthopoulou, 2010) work-family conflict and job insecurity were conceptualised as job demands. Similarly in this study, the two variables are also conceptualised as job demands and their relationship to job engagement is investigated.

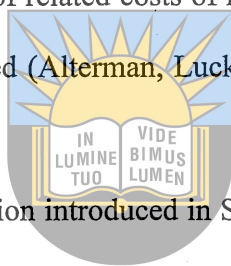
According to Trembley and Messervey (2011), job demands withers the dedication feature of job engagement as a result of the cognitive and physically taxing attributes.

2.3 Conceptual literature

This section will focus on the definition of variables. It will provide a better understanding of the variables as linked with the nature of work that technicians are involved in.

2.3.1 Job insecurity

The South African energy sector reported 20 000 job losses between September 2012 and April 2013 (Statistical Report, 2013). These high figures pose a threat to employees in the industry and have aroused feelings of uncertainty among employees regarding the form and continuity of their employment (Lumley, 2010). The resulting productivity decreases are undermining the economic strength of the sector. The risk of further redundancies is also increased, which in turn, increases the feeling of job insecurity. As a result of related costs of repeated absenteeism stemming from reduced worker welfare are also increased (Alterman, Luckhaupt, Dahlhamer, Ward & Calvert, 2013).



As a result of the new political dispensation introduced in South Africa in 1994, restructuring in most organisations is taking place on a huge scale. As organisations continue to restructure, the level of job insecurity in South Africa continues to rise (Alterman et al. (2013) defined job insecurity as the inability to preserve anticipated stability in a predisposed work state. De Witte (1999) relates job insecurity to individuals in their work context, who fear for the loss of their jobs and unemployment. Hui and Lee (2000) describe job insecurity as the absence of control to retain desired stability in a threatened job situation. According to Borg and Elizur (1992), job insecurity is characterised by two main themes which are (i) cognitive job insecurity, which are thoughts of possible job loss and (ii) affective job insecurity, which is the fear of actual job loss.

According to Hartley et al. (1991), job insecurity has the probable of being more stressful an employee than the actual job loss. Job loss is already known and an employee has to reach an acceptance of the loss and deal with its consequences. In the instance of job insecurity, on the other end, coping may be repressed by the uncertainty of the incident. In a multidimensional interpretation of job insecurity, the perception of job insecurity does not only refer to the extent

of uncertainty individuals feel about the continuity of their jobs, but also about the stability of the certain dimensions of the job, for example, advancement prospects (Eldridge & Nisar, 2011; Rosenblatt & Ruvio, 1996).

The common theme fundamental to the numerous definitions of job insecurity is that it is a subjective phenomenon. It relies on the employee's opinions and interpretations of their immediate work environment (Buitendach, Rothmann, & De Witte, 2005; Sverke, Hellgren, & Naswal, 2002). The authors explained that the emphasis on the individual's subjective experience indicates a distinction between perception and the objective reality, and specifies how analyses form the subjective verity. A similar setting might be viewed differently by diverse employees; some may retain feelings of insecurity when there is no objective reason to, while others may experience feelings of job security when their jobs are actually being threatened. When a threat is considered serious, the level of job insecurity is most likely to be higher. Individuals who feel that losing their job would be very serious would probably be subjected to higher levels of job insecurity than individuals who consider themselves able to handle job loss (Buitendach et al., 2005).

Job insecurity, however, possesses a threat both to the individual employee and the organisation. The effects on the individual employees can erode the effectiveness of the organisation (Hyunkang & Perry, 2013; Greenhalgh & Rosenblatt, 1984). Productivity decreases, lowering or undermining the economic strength of the organization can occur. The threat of further redundancies can then be increased, which in turn, can intensify the feeling of job insecurity (Greenhalgh & Rosenblatt, 1984).

According to Buitendach et al. (2005) employment is a principal factor for the fulfilment of fiscal and shared needs. Employment is a source of earnings, influences how an individual's time is spent, and advances individual growth. The perceived threat of employment leads to the infuriation of these needs and the potential loss of important monetary and social resources (Okurame, 2014; De Witte, 1999).

Studies in the field of job insecurity have intensified mostly because of economic and societal changes. Job insecurity is mainly regarded as a stressor. Stress affects results in the relationship between the employee and the organisation (Hyunkang & Perry, 2013; Cooper, Dewe & O'Driscoll, 2001). It arises when demands exceed the resources available (Lazarus, 1991). Such a situation threatens the well-being of an individual and forces variation in a person's psychological or physiological condition in response to the presented conditions (Siu, 2002). Symptoms of stress can be burnout and job disengagement among others (Mohren, Swaen, Van Amwlvoot, Norm & Galama, 2003).

2.3.2 Work-family conflict

Work-family conflict refers to interrole conflict in which work -related and household demands do not match, and partaking in either role becomes strenuous due to partaking in the other (Kail & Cavanaugh, 2010). An individual's work position in an organisation can arouse a set of emotions that can be transferred to family life and vice-versa (Hammer, et al., 2011). Temple and Gillespie (2009) also added that work-family conflict is a result of cognitive appraisal of the influence of the job domain on the family domain. Thus it results from the process of evaluating a situation with reference to personal wellbeing.

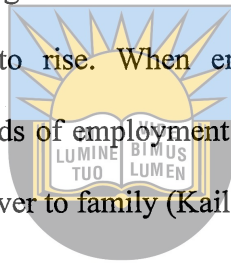
The ecological systems theory depicts work and family as microsystems dependent on each other. Work and family are characterised by patterns of activities and networks of personal and interpersonal relationships (Kail & Cavanaugh, 2010; Bronfenbrenner, 1979). In other words the work and family spheres have an impact on each other in that both characteristics are related to occupational and household incomes (Voydanoff, 2002).

Greenhouse and Beutell (1985) defined work-family conflict as interrole conflict in which demands of work and family do not match and participation of either role is made difficult by participation of the other. Work-family conflict is characterised by poor family role performance, family absence, tardiness, absenteeism from work and poor job performance among others (Shockley & Singla, 2011). An individual's work position in an organisation can arouse a set of emotions that can be transferred to family life (Kanter, 1977). This phenomenon is known as the spill over theory. According to this theory, workers carry on their managers and family relations. Thus work and family life are reciprocal (Amstad, Meier, Fasel, Elfering & Semmer, 2011). For example, if an individual is experiencing job dissatisfaction, this will in turn impart stress on marital and family relations which may in turn induce stress on the job (Amstad et al., 2011).

Lazarus and Folkman (1984) also added that work-family conflict is a result of cognitive appraisal of the impact of the job domain on the family domain. Cognitive appraisal is defined as the process of evaluating a situation in reference to personal wellbeing (Yap & Tong, 2009). Thus a situation can be categorised as a threat, positive, or irrelevant with regard to well-being. The outcome of the evaluation depends on the relationship between an individual's accessible resources and the environment (Verduyn, Mechelen & Tuerlinckx, 2011). For example a threatening evaluation occurs when a relationship between the individual and environment is perceived as taxing their resources and endangering well-being. Thus the perception of work-

family conflict originates from evaluating the extent to which demands and resources available match which in turn, improves or limits performance of work or family roles (Demerouti, Bakker & Voydanoff 2010).

Today's labour market transformations such as a greater sum of dual earner couples, participation of women in the workforce, delayed retirements and single-parent households have resulted in changes in the types of family roles that workers occupy (Peeters, ten Brummelhuis & van Steenbergen, 2013). Equally, as organisations continue to restructure, the level of job insecurity in South Africa continues to rise. When employees are unclear of their job descriptions and specifications and periods of employment are said to be ambiguous. This may lead to stress which will later be passed over to family (Kail & Cavanaugh, 2010).



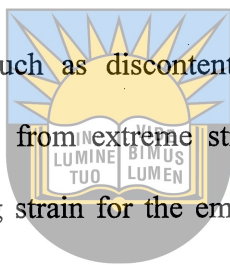
In their article, Kossek, Pichler, Bodner and Hammer (2011) argued that rigidity and flexibility of work assignments determine spill over effects. Eskom technicians perform all their activities in organisations, homes and leisure centres. There is constant regulation, monitoring and maintenance of electrical services, which call for shift work (Staff, 2014). Technicians can just be called whilst they are relaxing with family or in the middle of a family event or even during odd hours when sleeping or resting. In addition to shift work, work overload prompts overtime (Staff, 2014). This is likely to cause interference in family roles among Eskom technicians.

2.3.2.1 Forms of work-family conflict among technicians

Three forms of work-family conflict namely time, strain and behaviour based conflicts have been identified.

Time-based conflict arises when the time strains related with one domain (e.g., work) limit the amount of time that can be dedicated to the other domain (e.g., family) barring one's

performance in the later domain (Murphy, 2011; Greenhaus & Beutell, 1985). Time-based conflict exists in two forms, which are (1) where it is physically impractical to fulfil time demands of one role because of time strain involved with another role; (2) where one is mentally engrossed with one domain regardless of being physically present and striving to meet the demands of another. For example most technicians' always end up being mentally preoccupied with pending work tasks that they will not be able to enjoy quality time with family (Staines & O'Connor 1980). Another example can be overtime or emergency call at work.



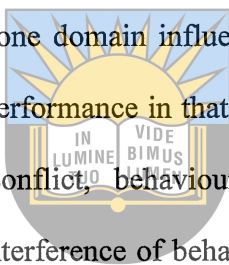
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Strain-based conflict exists in forms such as discontent, pressure, anxiety, and weariness (Edwards & Rothbard, 2000). It results from extreme strain of one role which inhibits the execution of the other role by producing strain for the employee. In analysing Greenhaus and Beutell's (1985) definition of strain-based conflict, Edwards and Rothbard (2000) stresses the exhaustion of personal resources due to physical and psychological demands, which in turn are vital for role performance. Strain-based conflict does not therefore imply direct competing demands but a condition in which involvement in one role results in physical or psychological strain that deters role performance in the other domain (Shockley & Singla, 2011; Edwards & Rothbard, 2000).

Adverse psychological strain results in full-time participation in one role, limiting the time reserved for role performance in the other equally sustaining domain causing conflict. Conflicting time demands can therefore results in both strain-based and time-based conflict (Zhao, Qu & Ghiselli, 2011). Both time-based and strain-based conflicts share a number of sources within the work and family domains regardless of being theoretically distinct (Ryan & Kossek, 2008; Greenhaus & Beutell, 1985).

Behaviour-based conflict is the final form of work-family conflict. It arises when certain forms of in-role behaviour become conflicting with expectations regarding behaviour in another role, (Greenhaus and Beutell, 1985). For example, an hostile, provocative and firm approach to problem solving preferred in a work setting might be unsuitable in a family setting where a sincere, fostering and shared approach is more favourable (Zhao, Qu & Ghiselli, 2011; Greenhaus & Beutell, 1985; Edwards & Rothbard, 2000). Like to strain-based conflict, behaviour-based conflict presents a 'negative spillover' from one domain to another where behaviour anticipated and developed in one domain influences behaviour in the other domain while instantaneously constraining role performance in that later domain (Edwards & Rothbard, 2000). Consistent with strain-based conflict, behaviour-based conflict does not require conflicting role demands per se, rather interference of behaviour developed in one domain with that required the other (Shockley & Singla, 2011).



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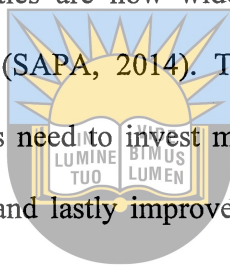
2.3.2.2 Culture and the corresponding situation in the energy industry

The national, industry and individual cultures play a vital role in influencing the relationship between the work and family life of technicians in the energy industry. The responsibilities of work and family are interlinked in South Africa. Careers are important as they sustain the family with fiscal provisions and advance their quality of life (de Klerk & Mostert, 2010). Thus work brings a contribution rather than competition to family. Providing enough family time in the South African culture is very important and at the same time tradition also gives room for commitment and sacrifice of family life for work (Liu & Low, 2011).

The energy industry has a challenging work setting which prompts non-standard work schedules among technicians. To advance work effectiveness and productivity, work can spill over into

evenings, weekends and vacations (de Klerk & Mostert, 2010). Technicians bear significant responsibility for performance in areas such as cost, time, quality and safety (Creamer, 2013).

The rapid developments in the South African economy have called for vast opportunities and challenges for technicians at Eskom. The rural electrification initiative has called for additional provision and maintenance of electricity grids in South Africa in addition to the already existing national and international projects (Prasad, 2013), and this results to a greater workload on the Eskom technicians as their responsibilities are now wider. This necessitates high levels of administration capacity and reputation (SAPA, 2014). To keep abreast with the presented opportunities and challenges, technicians need to invest more time in their work, to meet the pressure of work, get more experience and lastly improve the organisation's competitiveness. The balance between work and family is rarely met by Eskom technicians (Minnihan, 2012).



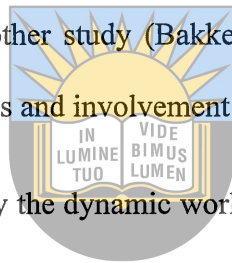
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To make matters worse, there are few effective arrangements relating to human resources who deal with work-family conflict and the resultant significant pressure suffered by technicians (Minnihan, 2012; Creamer, 2013). This may affect workers in the form of reduced job engagement, low efficacy and forced resignations in the long run.

2.3.3 Job engagement

Job engagement refers to a favourable, rewarding and invigorating form of work-related state which is influenced by both personal and environmental factors (Bakker, Albrecht & Leiter, 2011). These environmental factors involve characteristics of the job such as conflicts, job specification and description, relations with co-workers, job demands and organisational support. Personal factors also include personality variables such as efficacy, openness to new experience and agreeableness (Rich, Lupine, & Crawford, 2010).

Engaged employees are driven to commit themselves and to work hard even when faced with difficulties and threats to their well-being (Khan, 1990). Engagement implies vigour and therefore has a positive valence. There are high demands for employee engagement at Eskom as a result of restructuring and expansion especially in rural areas. Increased demands prompt long working hours (Koekemoer & Mostert, 2010). Khan (1990) states that job engagement refers to the physical, cognitive and emotional energy in accomplishing work goals. Schaufeli and Bakker (2010) defined job engagement as an energetic, favourable work related being characterised by vigor, dedication and absorption. In another study (Bakker et al., 2011) job engagement was defined in term of high motivational levels and involvement in job roles.



Eskom technicians are being pressured by the dynamic world of work and their demanding jobs. Like employees in most parastatal organisations, technicians need to be motivated because job engagement has been shown to be positively associated with performance (Christian, Garza & Slaughter, 2011). Job engagement therefore prompts for participation of both parties in creating and sustaining a motivated workforce.

Many authors have acknowledged the inconsistencies and differing interpretations of the construct “job engagement.” The definitions and measurements of job engagement are poorly understood although it has emerged as an important work-related concept (Simpson, 2008). Macy and Schneider (2008) are of the opinion that it is not only an academic problem but practitioners’ also.

Practitioner literature focuses on job engagement as a positive work-related outcome that an organisation needs to employ in order for them to reap the benefits of decreased turnover, increased commitment and retention and increased productivity (Seijts & Crim, 2006; Ketter,

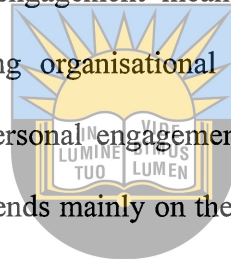
2008). Harter, Schmidt & Hayes (2002) define job engagement as the employee's participation, satisfaction and enthusiasm for work. This definition focuses on the employees' work and uses other related constructs to explain the concept. The model of Harter et al. (2003) of job engagement identifies four antecedents that promote job engagement. These are clarity of expectations and basic resources and equipment that is provided, feelings of contribution to the organisation, feeling a sense of belonging to something other than oneself, and feeling as though there are opportunities to discuss progress and grow (Simpson, 2008).

Khan (1992) derived a three-factor model of job engagement from qualitative and quantitative studies. The model outlines that job engagement varies depending on psychological meaningfulness, safety and availability of jobs. Employees ask themselves three questions in each situation that is, how important is it for employees to bring themselves to performance, how safe is it to do so and lastly how available are employees to do so. Engagement therefore is not only about motivating employees to work harder but also providing the conditions under which they will work more effectively (Sonnetag, Dormann & Demerouti, 2010). Engaged employees are driven to commit themselves and work harder even when faced with difficulties and threats to their well-being (Khan, 1990). Engagement therefore implies vigour and thus has a positive valence (Rich et al., 2010).

Khan (1990) went on to state that employee engagement entails the employment availability and expression of a person's preferred self in task behaviours that promote connections to work and others, personal presence (physical, cognitive and emotional) and operative full role performances. According to Khan, there is a dynamic but negotiable relationship between employee self and employee role. That relationship in turn enables employees to drive their personal energy into their role behaviours, thereby displaying self within the role function

(Bakker & Bal, 2010). Kahn (1992) also introduced the concepts “cognitive, emotional or physical engagement.” Cognitive engagement refers to employees being highly aware of their objectives and duties in the organisation. In contrast, emotional engagement refers to solid relationships with co-workers and feelings such as empathy which come with these relationships. Lastly physical engagement refers to effort exerted by employees in the execution of their tasks (Christian et al., 2011).

Thus, according to Kahn (1992), job engagement means to be psychologically as well as physically involved when accomplishing organisational roles. Kahn (1990) also adds that employees experience dimensions of personal engagement or disengagement when fulfilling organisational roles. Disengagement depends mainly on the social and cognitive withdrawal and reflects incomplete role performance. (Bakker & Leiter, 2010).



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Saks (2006) derived his definition from the model of the antecedents of job engagement by Harter, Schmidt & Hayes (2002) and Khan's (1992) definition of job engagement. The author went on to state that employees have two critical roles namely work and organisational roles. Job engagement is therefore the degree to which one is psychologically present in the work role. On the other hand, organisation engagement refers to the extent to which a worker is psychologically present in their role as a member of their organisation. The social exchange theory was further adopted in an attempt to understand how individuals respond to different forms of job engagement as proposed by Khan (1990). Saks (2006) is of the opinion that employees' job engagement is determined by the resources they receive from the organisation and the social exchange theory offers a theoretical background which explains the varying degrees of both job and organisation engagement. This also supports Robinson, Perryman and Hayday (2004) notion that job engagement is a reciprocal process between employee and employer.

Macey and Schneider (2008) distinguished the three conceptualisations of job engagement as state, trait and behavioural. State engagement refers to extension of self to the role. This involves absorption, contentment, commitment, and empowerment. Behavioural engagement involves organizational citizenship behaviour, proactive/personal initiative, role expansion and adaptation. Trait engagement involves positive views of life and work, proactive personality and conscientiousness. These overlap conceptually with the three dimensions of job engagement according to Khan (1990) that is, vigour-behavioural, dedication-trait and absorption-state.

Dalal, Brummel, Wee and Thomas (2008) suggest that Macey and Schneider's (2008) definition of job engagement may have added more confusion to both scholars and practitioners. Dalal et al. (2008) suggest this is due to their conceptualisation of the psychological state of engagement and their use of the term engagement encompassing disposition and behavioural constructs. The authors went on to state that the definition of state engagement is misleading as it conceals the true state engagement which can be day-to-day or hour-to-hour within person variability in energy and absorption. Dalal et al. (2008) also opposed the measurement of engagement as a trait, focusing on differences between people and lastly measuring it as a state. The authors suggested that Macey and Schneider's (2008) state engagement be better referred to as engagement that has both trait and state-like components as well as engagement being a cognitive-affective construct and not a dispositional or behavioural one.

Schaufeli and Bakker (2008) also tried to define the meaning of job engagement. The authors went on to state that job engagement is a motivational construct involving human behaviours and attitudes such as recognition, feedback and opportunities for growth, satisfaction and commitment. Of most importance is the result of these behaviours or attitudes when evaluating the contribution of job engagement to organisation capability and the upkeep of a very skilled

workforce. Their definition of job engagement was consistent with Macey and Schneider's (2008) definition of job engagement that is 'a positive, fulfilling, affective-motivational state of work related well-being that is the antipode of job burnout' (p.151).

Some recent researchers have adopted and modified these existing definitions of job engagement for example Rich et al.'s (2010) definition of job engagement is based on Kahn's (1990) model. There are, however, common variables in all the different definitions which are organisational commitment, job involvement and organisational citizenship behaviour. This means that these three constructs provide a standing point when defining or justifying job engagement.

For the purposes of this study, Khan's (1992) conceptualization of job engagement will be used.

2.3.3.1 Factors of job engagement

The changing organisational environments and the global economy have prompted organisations to look for alternative ways of survival. Organisations are forced to re-examine costs related to talent, in an effort to accomplish more with less (Adekola, 2011). Whereas innovative approaches are implemented in response to environmental challenges, high workforce performance and organisational success must be maintained. Of significance in insuring this is the introduction of processes that will measure and improve job engagement (Swathi, 2013).

Factors of job engagement refer to antecedents that can help maximize the influence of job engagement. These are divided into two, that is, individual and organisational factors of job engagement (Ologbo & Sofian, 2013). Individual factors of job engagement include communication, development and co-worker support. If employees are included in decision making and if there are clear lines of communication with a clear chain of command, the level of job engagement is reported to be greater (Ologbo & Sofian, 2013; Swathi, 2013). The

availability of opportunities for employee development such as training to acquire new knowledge, abilities and skills to utilize their potential in performing work is also important. Last but not least, highly talented and supportive co-workers are significant in maximizing job engagement. Employee collaboration in accomplishing tasks enables workers to learn new and better ways of doing the job (Sundaray, 2011).

Organisational factors of job engagement include the image of the organisation, rewards and recognition and leadership among others (Shantha, 2012). Image of the organisation relates to the extent workers are motivated to improve services of the organisation to customers. It is the perceptions one has about the organisation's services. Rewards reflect value, recognition and distinguish workers in the organisation (Markos & Sridevi, 2010). Certain benefits (both financial and non-financial) influence job engagement. Leadership is reflected in an organisation's policies and how things are done in the organisation. Employees need to have faith and feel secure in the organisation regardless of their job levels (Swathi, 2013).

Work outcome of job engagement involves job satisfaction, organisational commitment, intention to quit and organisational citizenship behaviour (Swathi, 2013). These are favourable outcomes that organisations derive after fostering a good working environment which promotes job engagement. These positive work outcomes enhance a worker's attitude towards performing their jobs (Ologbo & Sofian, 2013).

Job satisfaction refers to a pleasant state derived from a judgment of an employee's work (Zhu, 2013). Job commitment is defined as the degree and employee identifies with the organisation and feels obliged to stay committed to the goals of such an organization (Dixit & Bhati, 2012). Intention to quit refers to the extent an employee is willing to stay with or leave the organisation

in view of opportunities that may be offered by other organisations (Krishnan & Singh, 2010). Organisation citizenship behaviour refers to flexible behaviours which are beyond official obligations (Robertson, Birch & Cooper, 2012). It reduces resistance to change and fuels efficiency. Employees with high levels of job engagement display these behaviours and are therefore vital assets to the organisation (Rich et al., 2010).

2.4 Empirical Literature

This section will review previous research relating to the relationships between or among the variables that are hypothesized in the present study.

2.4.1 The relationship between job insecurity and job engagement

Job insecurity is mainly viewed as a stressor whose symptoms can be burnout and job disengagement among others (Mohren, Swaen, Van Amelvoort, Borm & Galama, 2003).

Empirical evidence shows that South African organisations with high levels of job insecurity have low levels of employee engagement (Elst, Bosman, De Cuyper, Stouten & De Witte, 2012).

In another study using a sample of employees in small businesses, job insecurity was negatively correlated with job engagement (Hu & Schaufeli, 2011). Job insecurity was also associated with low levels of job engagement and emotional energy at work in another study by Cheng, Mauno and Lee (2012) using samples of employees in health, social care and social services.

Perceptions of job insecurity might hold negative effects for employees' attitudes such as satisfaction, engagement and commitment (Gruman & Saks, 2011). In another South African study by Stander and Rothmann (2010), high job insecurity predicted low job engagement. Also to support this, in another study by De Cuyper, Bernhard-Oettel, Bernstone, De Witte and Alarco

(2008), the results showed that, job insecurity has a negative influence on personnel job engagement.

These results were further supported by research in Europe, which found that job insecurity is a work stressor that has adverse effects on employees' functioning (Jiang & Probst, 2013). In another South African study by Viljoen (2004), high job insecurity led to decreased job engagement and poorer health.

In a study by Everitt and Heathcock (2014), results showed that job insecurity have a negative impact on job engagement. The perceived threat of becoming unemployed caused employees to feel negatively about the organisation, search for employment elsewhere and exert minimum effort on their jobs because they thought they do not have a future there. Also in their study, Kinnunen, Mauno and Siltalopi (2014) results from regression analysis showed that the pressure, anxiety and worry related to job insecurity reduces the vigor and dedication of employees. This is because insecure settings characterised by downsizing, work overload and overtime to exceed employer's performance expectations reduces the energy levels of employees (Marques, 2013).

In another South African study (Coetzee & De Villiers, 2010) using a sample of employees in financial institutions, job insecurity was also identified as a stressor with detrimental effects to job engagement. In their study, Nahrgang, Morgeson and Hofmann (2011) job insecurity was further identified as a job demand. All job demands were found to obstruct employees with negative relationships to job engagement. Schreursa, van Emmerikb and De Witte (2010) in their study based on a sample of Balgian employees, uncertainty was also found to be negatively associated with job engagement.

A study from Asia (Cheng & Chan, 2008) also supports the notion that job insecurity results to low job engagement. In their Meta analytic study, results revealed that job insecurity was negatively related to job satisfaction, organisational commitment, psychological health, physical health, job engagement, and job involvement and was positively related to turnover intention (Cheng & Chan, 2008). In addition, in another study by (Malta, 2009), a statistically significant negative association was recorded between job insecurity and job engagement.

In contrast to the above findings, results from a study by Moshoeu (2011) showed that when employees perceive uncertainty regarding the future existence of their jobs, they in turn, feel an attachment to their organisation with high levels of job engagement. In another study by Van Schalkwyk, Du Toit, Rothmann and Rothmann (2010) using a sample of employees in a petrochemical plant, results showed no relationship between job insecurity and job engagement. This is also supported by the studies of De Cuyper and De Witte (2005). In their study of temporary and permanent employees, the results showed that temporary employees had higher levels of job insecurity compared to permanent employees. Job insecurity influences on job engagement were not stronger for temporary employees than for permanent employees.

This literature review shows that though many studies of the correlations among job insecurity and job engagement have found a significant negative correlation to exist between these two variables, some other studies have had different results. These conflicting research findings indicate that there is a need for further research relating to the relationship between these two variables; hence, the present study.

2.4.2 The relationship between work-family conflict and job engagement

Individuals with low work-family conflict exert more effort on the job than their counterparts with high work-family conflict (Trout, 2010). This could indicate high levels of job engagement. Empirical evidence has shown a significant negative correlation amongst work-family conflict and job engagement. In a study of teachers for example, greater levels of work-family conflict resulted in low job engagement (Trout, 2010).

A study by Lawrence (2011) supports the above relationship between work-family conflict and job engagement. In their study using samples of different employee groups, work-family conflict was reported to result in low job engagement. These results are also supported by the study of Wilczek-Ruzyczka, Basinska, and Daderman (2012). In their study using a sample of nurses, work-family conflict resulted in low job engagement. A recent meta analytic study by (Amstad et al., 2011) have also reported that high levels of work-family conflict lead to low job engagement.

A study by Martin (2014) using a sample of professionals from 46 different countries in Europe through a web based questionnaire confirmed that work-family conflict have negative influence on job engagement. In another study on work-family conflict and job engagement using a sample of single parents, the two variables were found to be negatively correlated (Future of Children, 2011). These results were also supported by studies of Cabrera (2013). In their online survey using a sample of women in different industries work-family conflict was found to directly negatively impact on job engagement.

Additional studies suggest that work-family conflict leads to emotional exhaustion with negative effects to job engagement (Karatepe, 2013; Ilies, De Peter Lim & Binnewies, 2012; Fairhurst & O'Connor, 2010). This further leads to low job commitment and poor performance. Yardley

(2012) also found that work-family conflict have a significant negative relationship with job engagement. These results are also supported by the studies of (Gourlay et al., 2012; Robertson & Birch, 2010) who found negative associations between work-family conflict and job engagement.

Leineweber et al. (2014), in their study using a sample of nurses, work-family conflict was found to be statistically negatively correlated to job engagement. The researchers edify that work and family interaction has both direct and indirect influence on employee motivation, absenteeism and voluntary turnover. In another study using employees from a petrochemical plant, the results also showed that work-family conflict have a significant negative relationship with job engagement and job commitment (Pirhayati, Nessi, & Naami, 2012). These results were further supported by research in Iran which classified work-family conflict as a job demand with a negative relationship to job engagement (Sharafi & Shahrokh, 2012).

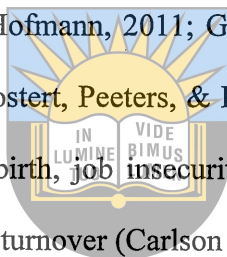
A study by Hasbesleben (2010) failed to establish correlations between work-family conflict and job engagement. Rantanen et al. (2011) in their study based on a Finnish sample, found no significant relationship between the two variables. Another study on the antecedents of job engagement showed that, compared to some other job characteristics, the predictive role of work-family conflict on job engagement is not significant (Mauno, Kinnunen, Makikangas & Feldtet, 2010).

While the empirical research reviewed above clearly shows that in most preceding research, high levels of work-family conflict lead to low job engagement, it also shows that some studies have found no relationship between the two variables. These conflicting research findings clearly

indicate a need for further research on the correlations amongst work-family conflict and job engagement; hence the present study.

2.4.3 The relationship between job insecurity and work-family conflict on the one hand and job engagement on the other

In some studies linked to the Job Demands Resources Model, job insecurity and work-family conflict were classified as job demands and were found to have a negative relationship to job engagement (Nahrgang, Morgeson, & Hofmann, 2011; Garrosa, Moreno-Jimenez, Rodriguez-Munoz, & Rodriguez-Carvajal, 2011; Mostert, Peeters, & Rost, 2011). In another study using a sample of working mothers after child birth, job insecurity and work family were negatively related to job engagement and influenced turnover (Carlson et al., 2011).



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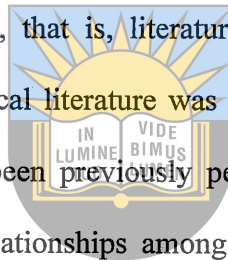
In a meta-analysis study by Alarcon (2011), job insecurity and work-family conflict were negatively associated with burnout with further adverse effects to employee job engagement. These results were also supported by the results from a study by Crawford, LePine and Rich (2010), job insecurity and work-family conflict lead to low job engagement. This is because employees evaluate them as limitations in the work environment. Gorter and Freeman (2011) in their study based on a sample of dental officers, job insecurity and work-family conflict were found to be negatively related with job engagement.

Although there are a few direct studies on the association between job insecurity and work-family conflict on the one hand and job engagement on the other hand in the literature, on logical grounds, however, it can be assumed that if job insecurity is significantly negatively related to job engagement, the two variables put together, (that is job insecurity and work-family conflict)

should be even more highly related to job engagement than each of the two separately; hence this part of the present study.

2.5 Conclusion

This chapter provided an overview of current literature associated with job insecurity, work-family conflict and job engagement. The Job Demands resource model was discussed as the theory that underpins the hypothesized inter- correlations among these variables. Some conceptual literature was then reviewed, that is, literature that has attempted to define the variables of interest. Lastly some empirical literature was also reviewed, that is literature that deals with empirical studies that have been previously performed in an attempt to establish whether or not the hypothesized interrelationships among variables exist, and if so, to what extent. The next chapter will deal with the methodology of the study.



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CHAPTER 3: METHODOLOGY

3.1 Introduction

In the previous chapter, relevant literature on work- family conflict, job insecurity and job engagement was reviewed for this study was reviewed. The present chapter describes the research methodology that was followed to carry out this study. The chapter further describes the analysis results from descriptive analysis.

3.2 Research methodology

Research methodology refers to the worldview assumptions brought by researcher to the study, strategies and particular methods of data gathering, analysis and reporting (Creswell, 2012). Mahommad (2013) defines research methodology as an outline of steps on how, where and when information is to be collected and analysed.



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3.3 Research design

The overall research in this study follows the quantitative approach. This research design meets the requirements of a descriptive study as it describes the relationship among job insecurity, work-family conflict and job engagement. A cross-sectional survey was used. Babbie (2010) describes cross-sectional studies as those in which a given phenomenon is studied at a specific point in time.

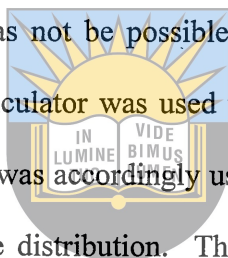
3.4 Population of the study

According to Creswell (2012), a study population is the total number of the study elements from which the sample is selected. In the present study the entire population of interest is all technical

staff at selected Eskom depots in Amathole District. These are the East London, King William's Town and Alice depots. It has been confirmed that there are approximately 510 technicians in a staff compliment of 2700 employees in the selected depots. These 510 technicians therefore constituted the population of the study.

3.5 Sample

A sample is simply the units or elements that are included in a study (Babbie, 2010). Owing to the constraints of time and money it was not possible to collect information from all the technicians. The Raosoft sample size calculator was used to calculate the sample size. On the basis of this instrument, a sample of 221 was accordingly used to obtain a 5% margin of error, a 95% confidence level and 50% response distribution. The selected sample consisted of only male and female technical staff at selected Eskom depots in the Amathole district.



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3.6 Sampling procedure

The research at hand used the probability sampling procedure and more specifically random sampling. Simple random sampling was used in such a way that every unit of the population will have an equal chance of being selected into the sample. All the respondents therefore had known and equal chances of being included in the sample. The sampling frame consisted of a list of all technicians in the selected depots. This list was obtained from the Human Resources Department of each depot.

3.7 Data collection.

Data collection will be explained under data collection instruments.

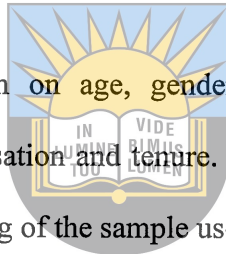
3.7.1 Data collection instruments

A questionnaire was used to collect data and was divided as follows:

Section A consisted of questions concerning biographical and occupational data relating to the subjects; Section B consisted of the job insecurity questionnaire; Section C consisted of the work-family conflict questionnaire; and Section D consisted of the job engagement scale.

3.7.2 The Biographical and occupational data questionnaire

This questionnaire includes information on age, gender, marital status, race, educational qualification, position held in the organisation and tenure. This data was extracted with a view towards obtaining a detailed understanding of the sample used in the study.



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3.7.3 The Job insecurity questionnaire

Job insecurity was measured using the Job Insecurity Questionnaire (JIQ) (De Witte, 2000). The JIQ is an eleven item questionnaire which measures the perceptive and emotional extent of job insecurity. The items constitute a Likert type scale varying from 1 (strongly disagree) to 5 (strongly agree). There are six items measuring perceptive job insecurity (e.g. 'I think that I will be able to continue working here') and five items of emotional job insecurity (e.g. 'I feel uncertain about the future of my job'). The questionnaire reported a reliability coefficient of 0,92 and is therefore highly reliable (De Witte, 2000).

3.7.4 The Work-family conflict Questionnaire

The five item Work-family conflict scale by Netemeyer, Boles and McMurrian (1996) was used to assess work-family conflict. It assesses the degree to which work related strains influence

family life on a five point Likert scale varying from 1 (never) to 5 (always). A sample item is, 'The demands of my work interfere with my home and family life.' The reliability coefficient of the questionnaire is 0, 86 (Netemeyer et al., 2006). In one South African study using a sample of working mothers, the questionnaire displayed a Cronbach alpha coefficient of 0, 96 (Opie, 2011). In another study using a random sample of both male and female psychologists, the questionnaire displayed a Cronbach alpha coefficient of 0, 88 (Oscharoff, 2011).

3.7.5 Job Engagement Scale (JES)

Job engagement was measured using the 18 item Job Engagement questionnaire of Rich, et al. (2010). The questionnaire measures dimensions that are closely related to Kahn's (1990) conceptualisation of the physical, cognitive and emotional energies individuals invest into their role performance. It is a five point Likert scale varying from 1 (Strongly disagree) to 5 (Strongly agree). Each of the three (physical, cognitive and emotional) dimensions' is represented by six questions. Sample items include, 'I exert my full effort to my work, 'I am enthusiastic about my job, and 'At work I am absorbed in my job.' The Cronbach coefficient of the questionnaire is 0.95 (Rich et al, 2010). In a study using a sample of full time workers in Europe, the questionnaire displayed a Cronbach alpha coefficient of 0, 84 (Schmitt, 2011).

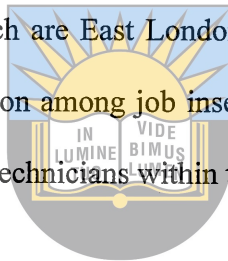
3.8 Data analysis

Information from the data collection instrument was analysed with the use of the Statistical Package for the Social Sciences (SPSS). Descriptive statistics (e.g. means and standard deviations) will be used to describe the data in summary form.

The reliability of the questionnaire was determined by the Cronbach alpha coefficient. The associations amongst variables were investigated using the Pearson product-moment correlation coefficient. The combined effect of job insecurity and work-family conflict was determined through multiple regression analysis and chi-square tests.

3.9 Delimitation of the study

Owing to the resource constraints such as time and money, the study focused only on three selected depots in Amathole district which are East London, King William's Town and Alice. The study narrowed its focus to the relation among job insecurity and work-family conflict on the one hand and job engagement among technicians within the selected Eskom depots.



3.10 Ethical considerations

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Approval to conduct the study was sought from the University of Fort Hare (UFH) Ethics Committee. In conducting this research, the researcher ensured that anonymity; confidentiality and voluntary consent were adhered to at all times. A covering letter was attached to the questionnaire detailing this information. Permission to conduct the study was sought from the senior managers of the selected depots. All questionnaires received were stored, used, and disposed of with due regard to their confidentiality. The research findings were reported honestly and there was no manipulation of data or the findings.

3.11 Biographical and occupational information

The purpose of this subsection is mainly to provide and present the biographical and occupational information of the respondents which entail the age, gender, race, period of employment, marital status, work status and highest qualification of respondents as recorded in

the Section A of the research questionnaire. Descriptive statistics were used to analyse demographic data. Specifically, measures of central tendency and dispersion such as means, standard deviations and confidence intervals were used. The results are presented below.

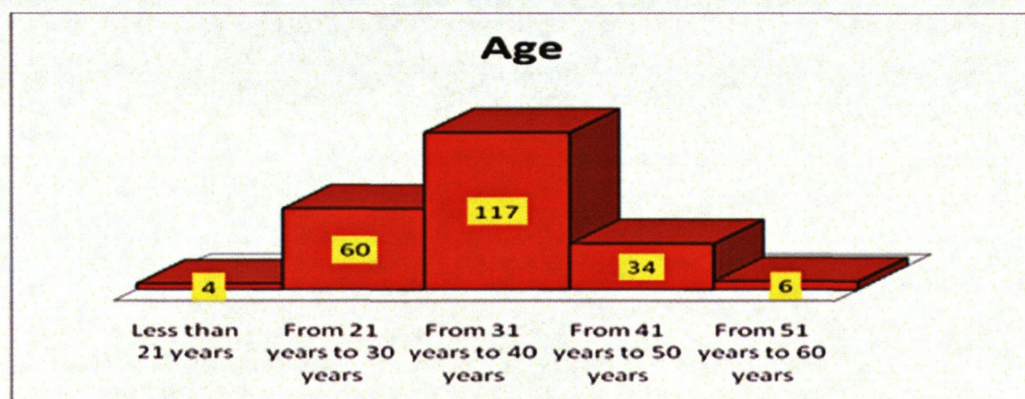
3.11.1 Age

Table 3.1: Age of respondents

Category	Frequency	Percent	Valid Percent	Cumulative Percent
<21 years	4	1.8	1.8	1.8
21 -30 years	60	27.1	27.1	29.0
31 - 40 years	117	52.9	52.9	81.9
41 - 50 years	34	15.4	15.4	97.3
Total	221	100.0	100.0	

The table above or the graph below illustrates the age categories of the people who participated in the study. The illustrations shows that 117 people (52.9%) who participated were from 31 to 40 years old, 60 (27.1%) were from 21 to 30 years old, 34 (15.4%) were from 41 to 50 years old, 6 (2.7%) were from 51 to 60 years old and only 4 people (1.8%) were below 21 years old.

Figure 1: Age of respondents



3.11.2 Gender

Table 3.2: Gender of respondents

Category	Frequency	Percent	Valid Percent	Cumulative Percent
Male	107	48.4	48.4	48.4
Female	114	51.6	51.6	100.0
Total	221	100.0	100.0	

The table above or the graph below illustrates the categories of gender of the people who participated to the data collection of the study. The table or the graph shows that 48.4% of the people (107) who participated were male and the rest of 51.6% (114) were female.

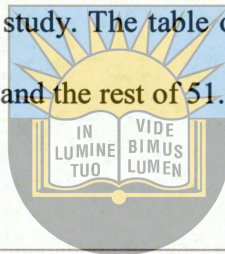
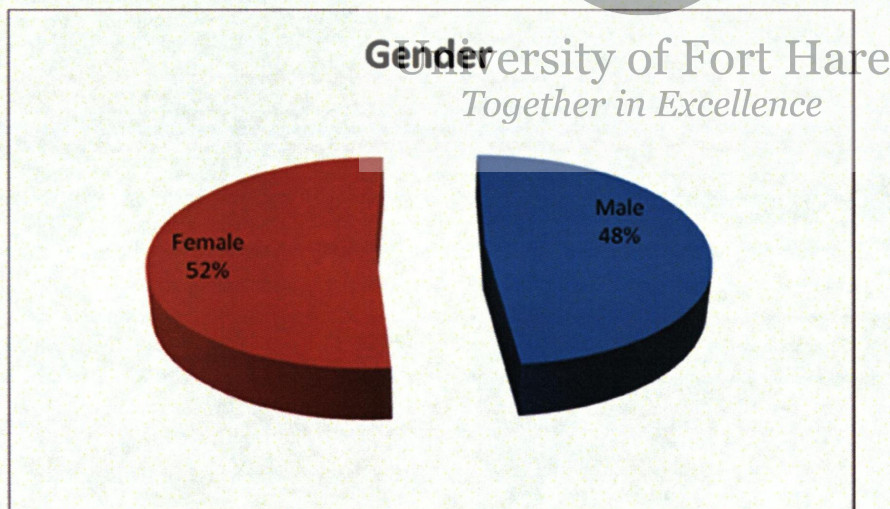


Figure 2: Gender of respondents



3.11.3 Race

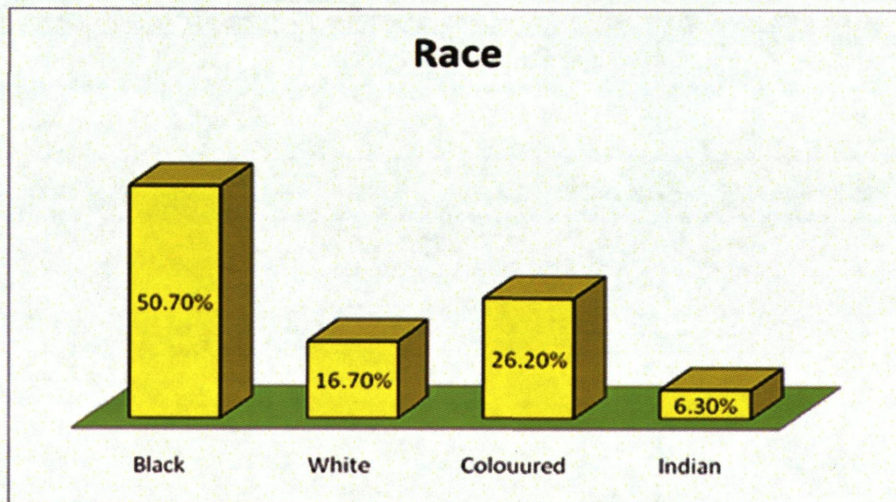
Table 3.3: Race of respondents

Category	Frequency	Percent	Valid Percent	Cumulative Percent
Black	112	50.7	50.7	50.7
White	37	16.7	16.7	67.4
Coloured	58	26.2	26.2	93.7
Indian	14	6.3	6.3	100.0
Total	221	100.0	100.0	

The table above or the graph below illustrates the categories of race participants to the data collection of the study. The table or the graph shows that 50.7% (112) of participants were black, 26.2% (58 people) were coloured, and 16.7% (37 people) of participants were white and only 6.3% (14 people) were Indian.

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Figure 3: Race of respondents



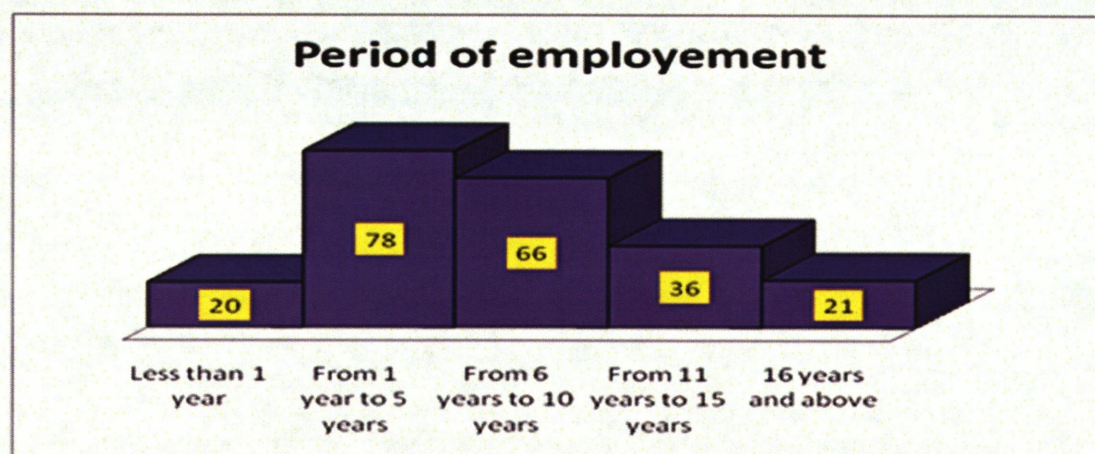
3.11.4 Tenure

Table 3.4: Period of employment in present job of respondents

Category	Frequency	Percent	Valid Percent	Cumulative Percent
<1 year	20	9.0	9.0	9.0
1 - 5 years	78	35.3	35.3	44.3
6 - 10 years	66	29.9	29.9	74.2
11 - 15 years	36	16.3	16.3	90.5
16 >	21	9.5	9.5	100.0
Total	221	100.0	100.0	

The table above or the graph below illustrates the level of period of employment in present job of the people who participated to the data collection of the study. The table or the graph shows that 35.3% (78) of the people who participated were from 1 to 5 years in their present job, 29.9% (66) were from 6 to 10 years in their present job, 16.3% (36) were from 11 to 15 years in their current job, 9.5% (21) were 16 years or above in their current job and only 9.0% (20) were in their present job for less than a year.

Figure 4: Period of employment in present job of respondents



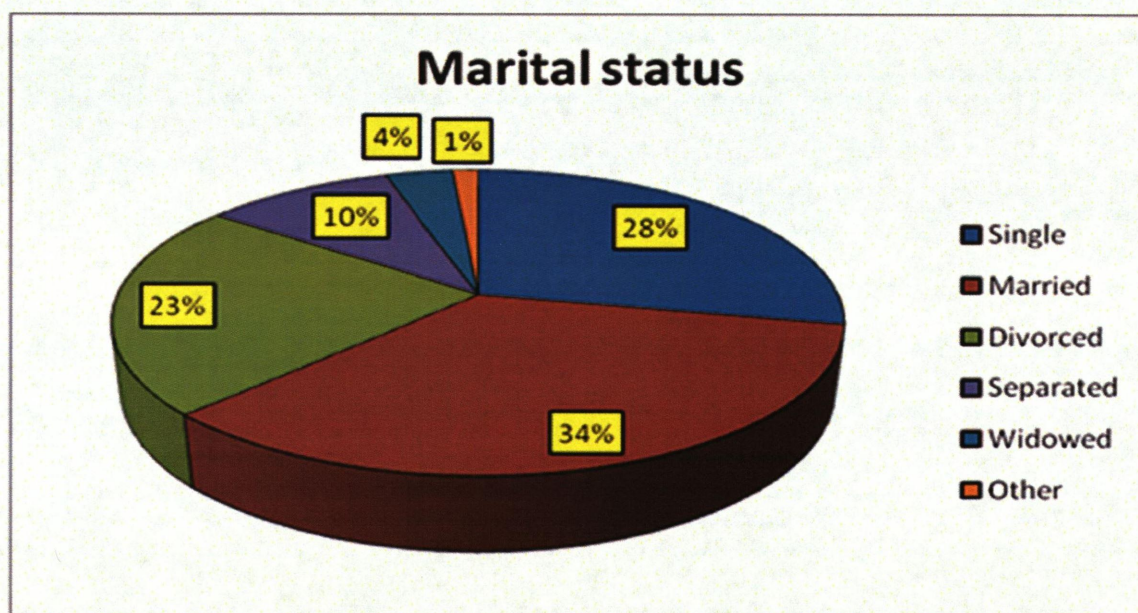
3.11.5 Marital status

Table 3.5: Marital status of respondents

Category	Frequency	Percent	Valid Percent	Cumulative Percent
Single	62	28.1	28.1	28.1
Married	76	34.4	34.4	62.4
Divorced	50	22.6	22.6	85.1
Separated	22	10.0	10.0	95.0
Widowed	8	3.6	3.6	98.6
Other	3	1.4	1.4	100.0
Total	221	100.0	100.0	

The table above or the graph below illustrates the categories of marital status of the people who participated to the data collection of the study. The table or the graph shows that 76 people who participated (34.4%) were married, 62 people (28.1%) were single, 50 people (22.6%) were divorced, 22 people (10%) were separated, 8 people (3.6%) were widowed and only 3 people (1.4%) were under a marital status which was not considered into the study.

Figure 5: Marital status of respondents



3.11.6 Work status

Table 3.6: Work status of respondents

Category	Frequency	Percent	Valid Percent	Cumulative Percent
Full time	207	93.7	93.7	93.7
Part time	14	6.3	6.3	100.0
Total	221	100.0	100.0	

The table above or the graph below illustrates the categories of work status of the people who participated to the data collection of the study. The table or the graph shows that 93.7% who participated (207) were under full time category of work status and only 6.3% of participants (14) were under part time category.

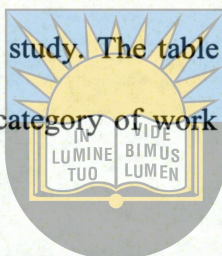
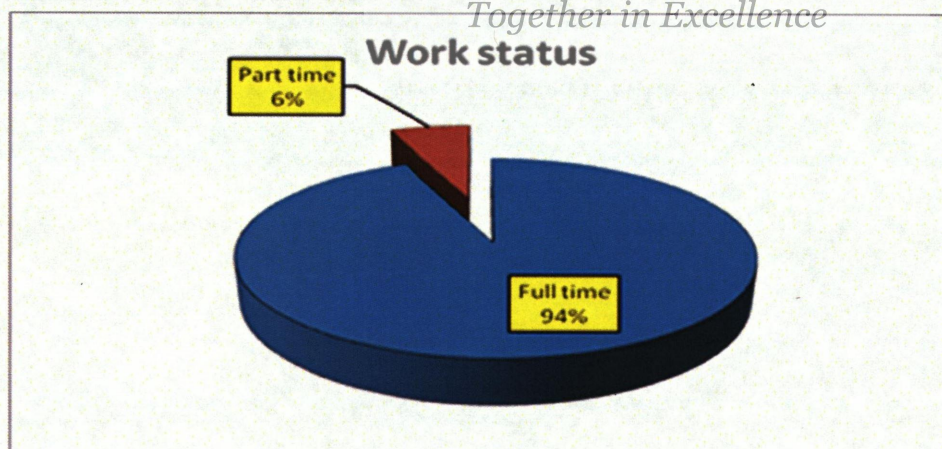


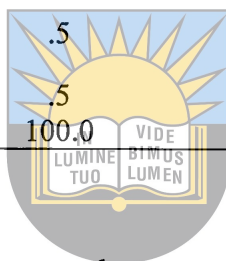
Figure 6: Work status of respondents



3.11.7 Highest qualification

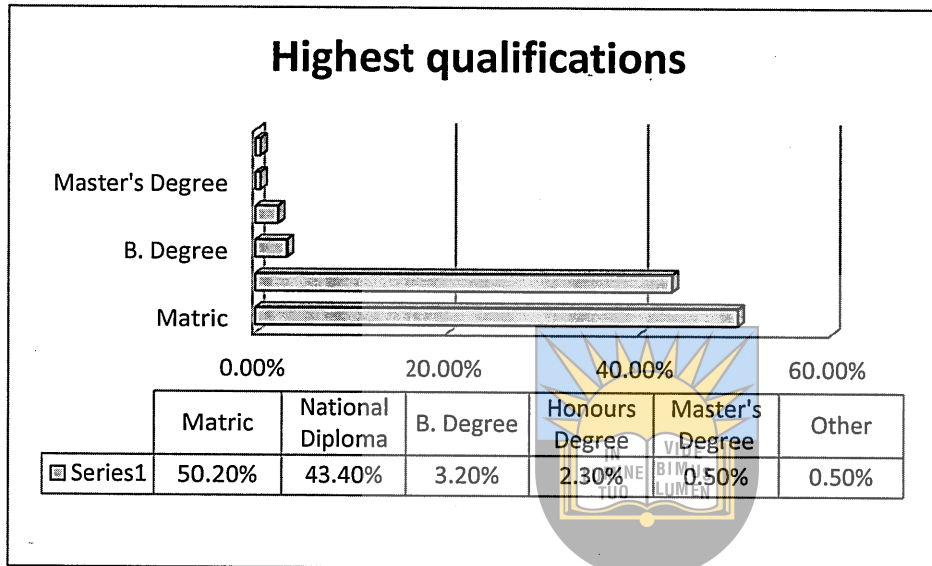
Table 3.7: Highest qualifications of respondents

Category	Frequency	Percent	Valid Percent	Cumulative Percent
Matric	111	50.2	50.2	50.2
National Diploma	96	43.4	43.4	93.7
B. Degree	7	3.2	3.2	96.8
Honours Degree	5	2.3	2.3	99.1
Master's Degree	1	.5	.5	99.5
Other	1	.5	.5	100.0
Total	221	100.0	100.0	



The table above or the graph below illustrates the categories of highest qualification held by people who participated to the data collection of the study. The table or the graph shows that 50.2% (111) of the participants were holding a Matric, 43.4% (96) were having a National Diploma, 3.2% (7) were having a B. Degree, 2.3% (5) were holding a Honours Degree and only 0.5% (1) was holding a Master's Degree and other highest qualification not considered into the study.

Figure 7: Highest qualification of respondents



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3.12 Conclusion

This chapter focused on the research design of the study. The research approach and the study population, sample and sampling strategy were also mentioned. The instruments for data collection were also discussed as well as their reliabilities and statistical analysis. The ethical considerations of the study were also discussed. The chapter further described the analysis results from descriptive analysis. The next chapter will dwell on the results from the hypothesis testing.

CHAPTER 4: RESULTS

4. Introduction

The study seeks to examine the relationship between job insecurity and work family conflict on the one hand, and job engagement, on the other hand, among technical employees within selected Eskom depots in the Amathole District Municipality of the Eastern Cape. The present chapter presents the results of data analysis. The research utilised quantitative techniques of data analysis. The Statistical Package for the Social Sciences (SPSS) software was used to test the hypotheses, and the results are shown below.

4.1 Coefficient Alpha

Cronbach's alpha coefficient for the Job Insecurity Questionnaire (JIQ) (De Witte, 2000), the Work Family Conflict scale by Netemeyer et al. (1996), and the Job Engagement Scale (Rich et al., 2010) are $\alpha = .70$, $\alpha = .84$ & $\alpha = .88$ respectively. This means that the measuring scales are reliable.

4.2 Descriptive statistics

The descriptive statistics for the three scales in the form of the arithmetic means and standard deviations were computed. Table 4.1 shows the descriptive statistics, which also include minimum and maximum individual scores for each variable and the sample size in addition to standard deviations and means.

Table 4.1: Mean standard deviation, minimum and maximum individual score and sample size in relation to job insecurity, work-family conflict and job engagement

	N	Maximum	Minimum	Sum	Mean	Std. Deviation
Job Insecurity	221	1	5	678	3.07	.738
Work-family conflict	221	2	5	900	4.07	.481
General job engagement	221	2	5	1066	4.82	.826
Physical job engagement	221	2	5	1070	4.84	.943
Emotional job engagement	221	2	6	1042	4.71	.902
Cognitive job engagement	221	1	7	1134	5.13	.989



4.3 Inferential statistics

The results of inferential statistics are presented below.

4.3.1 Hypothesis testing

A number of hypotheses were proposed for this study. The hypotheses are presented below together with the results of the statistical analysis conducted in testing them.

4.3.1 Hypothesis one

H₀: Job insecurity is not significantly negatively correlated with job engagement.

H₁: Job insecurity is significantly negatively correlated to with engagement.

The associations among variables were investigated using the Pearson Product Moment

Correlation Coefficient and the results were: $r = -.14$; $p < .02$ as shown on Table 4.2. This shows that there was a significantly negative correlation of $-.14$ between job insecurity and general job engagement, and that this correlation was significant at $p < .02$, which means that there is a 2% chance of a correlation of this magnitude occurring by chance. We therefore reject the null hypothesis with regard to general job engagement and accept the alternative hypothesis.

Table 4.2: Correlation of Job insecurity and General Job Engagement

		Job Insecurity	General Job Engagement
Job Insecurity	Pearson Correlation	1	-.144*
	Sig. (1-tailed)		.016
	N	221	221
General Job Engagement	Pearson Correlation	-.144*	1
	Sig. (1-tailed)	.016	
	N	221	221

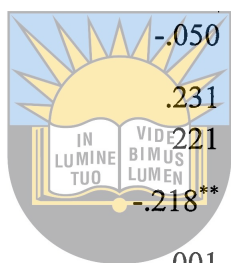
*. Correlation is significant at the 0.05 level (1-tailed).

When the relationship between job insecurity and the three separate components of job engagement (i.e. physical, cognitive and emotional) is tested for each one separately, only cognitive job engagement is significantly related to job insecurity. The results of the Pearson Product Moment Correlation Coefficient are shown on Table 4.3. This shows that there is a negative correlation of $-.22$ between job insecurity and cognitive job engagement, and that this correlation was significant at $p < .001$, which means that there is a 0.1% chance of a correlation of this magnitude to occur by chance.

Table 4.3: Correlations of Job insecurity, Physical, Cognitive and Emotional Job

Engagement

		Job Insecurity	Physical Job Engagement	Cognitiv e	Emotional
Job Insecurity	Pearson	1	-.050	-.218**	-.012
	Correlation				
	Sig. (1-tailed)		.231	.001	.431
	N	221	221	221	221
Physical Job Engagement	Pearson	-.050	1	.622**	.572**
	Correlation				
	Sig. (1-tailed)	.231		.000	.000
	N	221	221	221	221
Cognitive	Pearson	-.218**	.622**	1	.526**
	Correlation				
	Sig. (1-tailed)	.001	.000		.000
	N	221	221	221	221
Emotional	Pearson	-.012	.572**	.526**	1
	Correlation				
	Sig. (1-tailed)	.431	.000	.000	
	N	221	221	221	221



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** . Correlation is significant at the 0.01 level (1-tailed).

4.3.2 Hypothesis two

H₀: Work-family conflict is not significantly negatively correlated with job engagement.

H₂: Work-family conflict is significantly negatively correlated with job engagement.

The associations among variables were investigated using the Pearson Product Moment Correlation Coefficient for the three separate components of job engagement as well as for general job engagement. The results for the correlation between work-family conflict and general job engagement were $r = .14$; $p < .02$ as shown in Table 4.4. This shows that there was a significant positive correlation of .14 between work-family conflict and job engagement, and that

this correlation was significant at $p < .02$, which means that there is a 2% chance of a correlation of this magnitude occurring by chance. We therefore accept the null hypothesis as this relationship is not in the direction predicted by the alternative hypothesis.

Table 4.4: Correlations of Work Family Conflict and General Job Engagement

	General Job Engagement	Work Family Conflict
General Job Engagement		
Pearson Correlation	1	.135*
Sig. (1-tailed)		.022
N	221	221
Work Family Conflict		
Pearson Correlation	.135*	1
Sig. (1-tailed)	.022	
N	221	221

*. Correlation is significant at the 0.05 level (1-tailed).

When the relationship between work-family conflict and the three separate components of job engagement (i.e. physical, cognitive and emotional) is tested for each one separately, there are no correlations as their p-values were greater or equal to .05. The relationship between work-family conflict and emotional job engagement closely approached significance, however as the p value was exactly .05 ($r = .11$; $p = .05$).

Table 4.5 Correlations of Work Family Conflict, Physical, Cognitive and Emotional Job

Engagement

		Work Family Conflict	Physical Job Engagement	Cognitive	Emotional
Work Family Conflict	Pearson	1	.025	.066	.111
	Correlation				
	Sig. (1-tailed)		.354	.164	.050
	N	221	221	221	221
Physical Job Engagement	Pearson	.025	1	.622**	.572**
	Correlation				
	Sig. (1-tailed)	.354		.000	.000
	N	221	221	221	221
Cognitive	Pearson	.066	.622**	1	.526**
	Correlation				
	Sig. (1-tailed)	.164	.000		.000
	N	221	221	221	221
Emotional	Pearson	.111	.572**	.526**	1
	Correlation				
	Sig. (1-tailed)	.050	.000	.000	
	N	221	221	221	221

** . Correlation is significant at the 0.01 level (1-tailed).

4.3.3 Hypothesis three

H₀: Job insecurity and work-family conflict together do not account for a significantly higher proportion of variance in job engagement than any of the two separately.

H₁: Job insecurity and work-family conflict together account for a significantly higher proportion of variance in job engagement than any of the two separately.

To determine if job insecurity and work family conflict have a significantly higher proportion of variance in job engagement than any of the two separately, job insecurity and work family conflict were first modeled separately and jointly as explanatory variables on job engagement using the Generalized Linear Model (GLM) of regression analysis and chi-squared tests.

4.3.3.1 Hypothesis 3a

H₀: Job insecurity and work-family conflict together do not account for a significantly higher proportion of variance in general job engagement than any of the two separately.

H₁: Job insecurity and work-family conflict together account for a significantly higher proportion of variance in general job engagement than any of the two separately.

Tables 4.6a, b and c show that the combined effect of the explanatory variables explains 5.6% of the variation in general job engagement while job insecurity and work-family conflict separately explain a smaller variation (3.7% and 1.0% respectively) in general job engagement as compared to their joint effect.



Table 4.6: Summary of the R-Square of the Generalized Linear Model (GLM) for proportion of variance of job insecurity and work-family conflict in general job engagement

Table 4.6a: Combined effect of job insecurity and work-family conflict in general job engagement

Dimension	R-square	Coefficient Variance	Root MSE	JE_ Scale Mean
Job security and Work Family conflict	0.055653	16.15866	0.776278	4.804099

Table 4.6b: Job insecurity alone in general job engagement

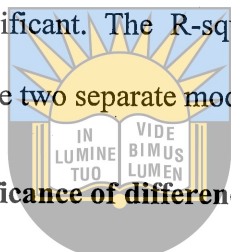
Dimension	R-square	Coefficient Variance	Root MSE	JE_ Scale Mean
Job security	0.036824	16.28165	0.782187	4.804099

Table 4.6c: Work-family conflict alone in general job engagement

Dimension	R-square	Coefficient Variance	Root MSE	JE_ Scale Mean
Work family conflict	0.015002	16.46506	0.790998	4.804099

A Chi-Square test for the significance of differences in proportions was carried out so as to determine if these differences are significant. The R-square for the combined model was compared with the R-Square values for the two separate models.

Table 4.7: Chi-square test for the significance of differences in the proportions of variance in general job engagement explained by job insecurity and work-family conflict jointly and separately.



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Pearson Chi-Square Test

Chi-Square	2.0833
DF	2
Asymptotic Pr > ChiSq	0.3529
Exact Pr >= ChiSq	0.4094

The Chi-Square results ($\chi^2 = 2.08$; $df=2$; $p \leq .35$) show that as far as general job engagement is concerned, the R-square value of the combined model does not differ significantly from the R-square values of the two separate models. We thus accept the null hypothesis over the alternative hypothesis and conclude that job insecurity and work-family conflict together do not account for a significantly higher proportion of variance in general job engagement than any of the two separately.

Job insecurity and work-family conflict were further modeled as explanatory variables on three separate components of job engagement (i.e. physical, cognitive and emotional).

4.3.3.3 Hypothesis 3b

H₀: Job insecurity and work-family conflict together do not account for a significantly higher proportion of variance in physical job engagement than any of the two separately.

H₁: Job insecurity and work-family conflict together account for a significantly higher proportion of variance in physical job engagement than any of the two separately.

Tables 4.8a, b and c show that the combined effect of the explanatory variables explains 1.7% of the variation in physical job engagement while job insecurity and work-family conflict explain a smaller variation separately (1.0% and 0.64% respectively) in physical job engagement as compared to their combined effect.

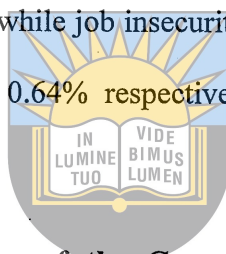


Table 4.8: Summary of the R-Square of the Generalized Linear Model (GLM) for proportion of variance of job insecurity and work-family conflict in physical job engagement.

Table 4.8a: Combined effect of job insecurity and work-family conflict in physical job engagement

Dimension	R-square	Coefficient Variance	Root MSE	Physical Job Engagement Mean
Job security and Work Family conflict	0.017423	19.44412	0.919710	4.730015

Table 4.8b: Job insecurity alone in physical job engagement

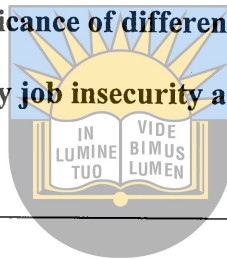
Dimension	R-square	Coefficient Variance	Root MSE	Physical Job Engagement Mean
Job security	0.009792	19.47487	0.921164	4.730015

Table 4.8c: Work-family conflict alone in physical job engagement

Dimension	R-square	Coefficient Variance	Root MSE	Physical Job Engagement Mean
Work family conflict	0.006354	19.50865	0.922762	4.730015

A Chi-Square test for the significance of differences in proportions was carried out so as to determine if these differences are significant. The R-square for the combined model was compared with the R-Square values for the two separate models.

Table 4.9: Chi-square test for the significance of differences in the proportions of variance in physical job engagement explained by job insecurity and work-family conflict jointly and separately.



Pearson Chi-Square Test

Chi-Square	University of Fort Hare	0.5068
DF	Together in Excellence	2
Asymptotic Pr > ChiSq		0.6403
Exact Pr >= ChiSq		0.4083

The Chi-Square results ($\chi^2 = 0.51$; $df=2$; $p \leq .64$) shows that as far as physical job engagement is concerned, the R-square value of the combined model does not differ significantly from the R-square values of the two separate models. We thus accept the null hypothesis over the alternative hypothesis and conclude that job insecurity and work-family conflict together do not account for a significantly higher proportion of variance in physical job engagement than any of the two separately.

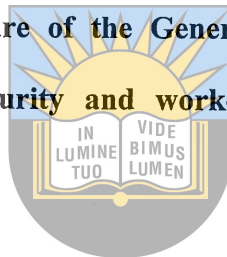
4.3.3.5 Hypothesis 3c

H₀: Job insecurity and work-family conflict together do not account for a significantly higher proportion of variance in cognitive job engagement than any of the two separately.

H₁: Job insecurity and work-family conflict together account for a significantly higher proportion of variance in cognitive job engagement than any of the two separately.

Tables 4.10a,b and c show that the combined effect of the explanatory variables explains 4.8% of the variation in cognitive job engagement while job insecurity and work-family conflict explain a smaller variation separately (4.2% and 0.4% respectively) in cognitive job engagement as compared to their combined effect.

Table 4.10: Summary of the R-Square of the Generalized Linear Model (GLM) for proportion of variance of job insecurity and work-family conflict in cognitive job engagement.



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Table 4.10a: Combined effect of job insecurity and work-family conflict in cognitive job engagement

Dimension	R-square	Coefficient Variance	Root MSE	Cognitive Job Engagement Mean
Job security and Work Family conflict	0.047759	18.58819	0.949764	5.109502

Table 4.10b: Job insecurity alone in cognitive job engagement

Dimension	R-square	Coefficient Variance	Root MSE	Cognitive Job Engagement Mean
Job security	0.042125	18.60049	0.950393	5.109502

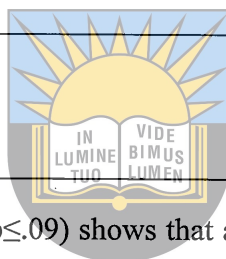
Table 4.10c: Work-family conflict alone in cognitive job engagement

Dimension	R-square	Coefficient Variance	Root MSE	Cognitive Job Engagement Mean
Work family conflict	0.003540	18.97142	0.969345	5.109502

A Chi-Square test for proportions was carried so as to determine if these differences are significant. The R-square for the combined model was tested with the R-Square values for the two separate models.

Table 4.11: Chi-square test for the significance of differences in the proportions of variance in cognitive job engagement explained by job insecurity and work-family conflict jointly and separately.

Pearson Chi-Square Test		
Chi-Square		4.8110
DF		2
Asymptotic Pr > ChiSq		0.0902
Exact Pr >= ChiSq		0.1569



The Chi-Square results ($\chi^2= 4.81$; $df=2$; $p\leq.09$) shows that as far as cognitive job engagement is concerned, the R-square value of the combined model does not differ significantly from the R-square values of the two separate models. Thus there is sufficient evidence at 5% significance level to accept the null hypothesis over the alternative hypothesis and conclude that job insecurity and work-family conflict together do not account for a significantly higher proportion of variance in cognitive job engagement than any of the two separately.

4.3.3.7 Hypothesis 3d

H₀: Job insecurity and work-family conflict together do not account for a significantly higher proportion of variance in emotional job engagement than any of the two separately.

H₁: Job insecurity and work-family conflict together account for a significantly higher proportion of variance in emotional job engagement than any of the two separately.

Tables 4.12a, b and c show that the combined effect of the explanatory variables explains 8.4% of the variation in emotional job engagement while job insecurity and work-family conflict

explain a smaller variation separately (4.4% and 3.4% respectively) in emotional job engagement as compared to their combined effect.

Table 4.12: Summary of the R-Square of the Generalized Linear Model (GLM) for proportion of variance of job insecurity and work-family conflict in emotional job engagement.

Table 4.12a: Combined effect of job insecurity and work-family conflict in emotional job engagement

Dimension	R-square	Coefficient Variance	Root MSE	Emotional Job Engagement Mean
Job security and Work Family conflict	0.084036	17.40725	0.804856	4.623680

Table 4.12b: Job insecurity alone in emotional job engagement

Dimension	R-square	Coefficient Variance	Root MSE	Emotional Job Engagement Mean
Job security	0.043822	17.74461	0.820454	4.623680

Table 4.12c: Work-family conflict alone in emotional job engagement

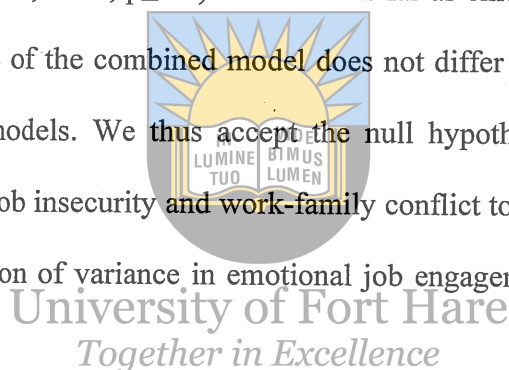
Dimension	R-square	Coefficient Variance	Root MSE	Emotional Job Engagement Mean
Work family conflict	0.033971	17.83578	0.824669	4.623680

A Chi-Square test for the significance of differences in proportions was carried out so as to determine if these differences are significant. The R-square for the combined model was compared with the R-Square values for the two separate models.

Table 4.13: Chi-square test for the significance of differences in the proportions of variance in emotional job engagement explained by job insecurity and work-family conflict jointly and separately.

Pearson Chi-Square Test	
Chi-Square	2.9474
DF	2
Asymptotic Pr > ChiSq	0.2291
Exact Pr >= ChiSq	0.3320

The Chi-Square results ($\chi^2 = 2.95$; $df=2$; $p \leq .23$) show that as far as emotional job engagement is concerned, the R-square value of the combined model does not differ significantly from the R-square of the two separate models. We thus accept the null hypothesis over the alternative hypothesis and conclude that job insecurity and work-family conflict together do not account for a significantly higher proportion of variance in emotional job engagement than any of the two separately.



5. Conclusion

This chapter provides the data analysis results from descriptive and inferential statistics. Cronbach alpha coefficients for job insecurity, work-family conflict and job engagement were established and all the scales were reliable. The associations among variables were investigated using the Pearson Product-moment Correlation coefficient. The combined and separate effects of job insecurity and work-family conflict were determined through the generalised linear model of regression analysis. In addition chi-square tests were used to determine the significance of the differences in the proportions of variance in various components of job engagement explained by job insecurity and work-family conflict jointly and separately. Research hypothesis 1 (Job insecurity is significantly negatively correlated with job engagement) was accepted as far as general job engagement and cognitive job engagement is concerned. No other research

hypotheses were accepted. There was a significant correlation between work-family conflict and cognitive job engagement but not in the hypothesized direction.



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CHAPTER 5: DISCUSSION

5.1 Introduction

The previous chapter presented the results of data analysis. The present chapter discusses these. The study is based on the following research hypotheses: (1) job insecurity is significantly negatively correlated with job engagement, (2), work-family conflict is significantly negatively correlated with job engagement and (3) job insecurity and work-family conflict together account for a significantly higher proportion of variance in job engagement than any of the two separately.



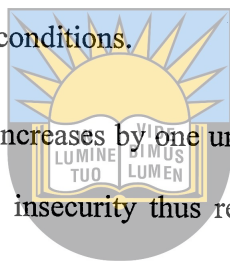
5.2 Discussion of tested hypotheses

The hypotheses of the study were tested using the Pearson Correlation method and Regression analysis. Part of only one hypothesis was accepted by the results of the study.

5.2.1 Hypothesis 1: Job insecurity is significantly negatively correlated with job engagement

The results of the Pearson Product Moment Correlation method showed that there is a significant negative relationship between job insecurity and general job engagement. These results are consistent with the study by Elst et al. (2014) and (Kinnunen et al. (2014). Job insecurity is involuntary and uncontrollable, and it influences employees' work relations (Cheng & Chan, 2008). In turn, job insecurity evokes feelings of frustration of the basic needs for competency and belongingness (Van den Broeck et al., 2014). This may lead employees to engage in counterproductive behaviour such as absenteeism and lateness for work.

The highest qualification of most technicians is Matric which means that they have no professional qualifications and are thus susceptible to high job insecurity and low job engagement (Zhao et al., 2013; Jung and Yoon, 2012). According to Schaufeli and Bakker (2010), job security has been considered an important determinant of the physical, cognitive and emotional aspects of an individual's work. When technicians are exposed to job insecurity, they must firstly deal with its negative influence and at the same time create a way to manage in performing their work roles (Marques, 2013). Burnout and low job engagement therefore results from these enduring and uncertain sets of conditions.

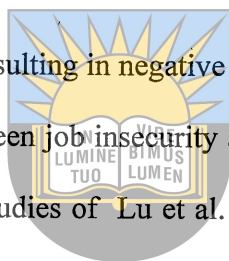


In addition, if the value of job insecurity increases by one unit then the value of job engagement will decrease by .14 and *vice versa*. Job insecurity thus results in reduced well-being due to increased levels of emotional exhaustion. This aligns with the results of the study by Cheng, Mauno and Lee (2012) which found that insecure employees have no control over the threatened work situation. These results are also consistent with the appraisal theory (Folkman & Lazarus, 1985) in job insecurity research, which states that, employees who perceive a threat in their job situation (primary appraisal) will assess their resources to address the work situation at hand as inadequate over time (secondary appraisal). This is because most employees do not know the outcome of job insecurity, e.g., whether or not they will still be employed in future as this may result from uncontrolled external factors such as globalisation (Huang, et al., 2010).

Most of the technicians in the present study have been employed for six years or more in their respective organisations but are still experiencing feelings of job insecurity with reduced job engagement. This is contrary to the Human Capital Model by Becker (1993), which states that, employees improve their range of skills and competencies to carry out their work with experience. In turn, employees are able to add value to the organisation in a way reducing their

chances of layoffs. Thus, long-tenured employees are perceived to be having high levels of job engagement as a result of lower levels of job insecurity. Peiro, Sora and Caballer (2012) in their study also identified unemployability in the labour market and underemployment as determining variables of perceived job insecurity. Employability is an alternative to a worker in the labour market to reduce their experience of job insecurity. According to the authors, most skilled workers are eligible for better jobs with better working conditions and this reduces job insecurity (Peiro et al., 2012).

Job insecurity is a severe work stressor resulting in negative employee outcomes as illustrated by the significant negative relationship between job insecurity and cognitive job engagement in the present study. This is supported by the studies of Lu et al. (2014) and Cheng (2013) who state that uncertainty makes it difficult for employees to be proactive and to take initiative in role performance.



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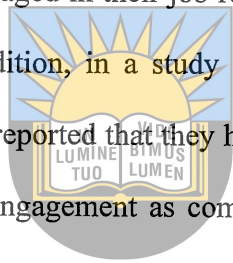
The findings of this study are also consistent with the results of the study of Isaksson et al. (2010) who found that permanent workers had higher levels of job engagement as a result of low job insecurity.

5.2.2 Hypothesis 2: Work-family conflict is significantly negatively correlated to job engagement

The results of the Pearson Correlation method showed that there is a significant positive relationship between work-family conflict and job engagement ($r = .14$; $p < .02$). Like Casper, Harris, Taylor-Bianco and Wayne (2011), this study failed to support this particular hypothesis. Casper et al. (2011), however, merely found that work-family conflict does not have a negative effect on job engagement while the present study found a positive effect. This might be because

competition between roles may be less salient for workers in the present study and there may be greater integration between work and family. It can therefore be assumed that work-family conflict does not hold the same negative meaning for technicians as it does for other professionals, and it is less likely to have negative consequences.

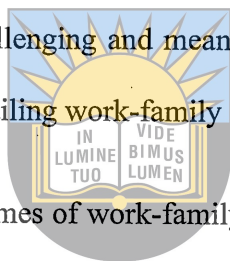
According to Webster, Beehr & Love (2011), research has also repeatedly shown that work-family conflict does not always result in low job engagement. Employees may experience work-family conflict and yet remain highly engaged in their job roles as also supported by the studies of Hakanen and Peeters (2012). In addition, in a study by Beutell (2010), employees who worked rotating and split shift schedules reported that they had work-family conflict but this did not have a negative effect on their job engagement as compared to employees who worked a regular day time shift.



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Haar, Roche and Taylor (2012) undertook a study on the relationship between the time and strain dimensions of work-family conflict on the one hand and employee well-being on the other. Employees reported positive well-being when family-work strain increased. This may be because the employees were highly experienced in their jobs to such an extent that they did not succumb to work-family conflict. Also the employees may have had family support from their partners and extended families, a strategy that may reduce the influence of work-family conflict on job engagement. This is also supported by Lung (2010) in a study of immigrant workers where the results showed that immigrant workers are more likely to work longer hours with increased job engagement. Expatriates value and prioritise their jobs more since it is difficult to secure employment as an immigrant worker in most host countries.

The results of the present study might be explained by person-environment congruence. A study by Bercovitzs, Frish-Burstein and Benjamin (2012) revealed that person-environment congruence reduces the negative influence of work-family conflict on job engagement. Person environment congruence reduces burnout and weakens the extent of work-family conflict among employees. This is also supported by the study by Hopkins and Gardner (2014) using a sample of lawyers. Work-family conflict was positively related to job engagement because it was perceived as a positive challenge. Lawyers perceived their job roles as maximising their skills and potential and as being positively challenging and meaningful. They reported high levels of job engagement despite the reported prevailing work-family conflict.



In addition, the sources, levels, and outcomes of work-family conflict and job engagement differ depending on the life role values held by workers when expressed in terms of work centrality and importance. In a study by Blancero, Delcampo and Taylor (2014), work-family conflict had the potential to create high job engagement. The results show that when a role is valued, employees indicate positive spill-over into other roles. This has been further evidenced by Lobel (1991) through the discussion on Stryker's (1987) social identity theory in which employees are found to hierarchically prioritise different life roles according to the relative importance of each role to the individual. The authors argue that the greater the salience of a particular role, the greater the job engagement and time and energy invested in that role by an individual. Employees, in other words, value their jobs and experience and hence respond quickly to emergency calls.

It is also important to note that there are many ways in which work-family conflict may influence people's wellbeing. Every stressful situation faced by workers is different, and they must choose to activate the resilience response mechanisms in conjunction with a reliable resource reservoir. According to Luecken and Gress (2010), employees may show resilience in some spheres but not

others at different times. Lazarus and Folkman's (1984) transactional model of stress and coping suggests that people have a choice about how to respond to stressful events, and this choice depends on the outcome of the response.

The expectancy theory by Vroom (1965), maintains that the outcomes of a cognitive appraisal vary with each experience and depend on employees' motivational strategy and the availability and support of their resource reservoir (Hobfoll, 2011); therefore, the resource reservoir acts as a driver towards the resilience response. Different motivational strategies offered to technicians may have affected the results in the present study.

5.2.3 Hypothesis 3: Job insecurity and work-family conflict together account for a significantly higher proportion of variance in job engagement than any of the two separately



The logo of the University of Fort Hare features a sun with rays rising over an open book. The book has the Latin motto 'IN LUMINE VIDE BIMUS' written on it. The entire emblem is set against a blue and grey background.

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The results from the General Linear Model of Regression Analysis and the chi square test showed that job insecurity and work-family conflict together do not account for a significantly higher proportion of variance in job engagement than any of the two separately. This is in line with the results of the study by Inoue et al. (2014) where the relationship between job insecurity and work-family conflict combined, on the one hand, and job engagement, on the other, was negligible.

De Braine and Roodt (2011) in their study, also found that job insecurity and work-family conflict did not account for a higher proportion of variance in job engagement than the two separately. This result contradicts the general postulate that job demands are negatively related to job engagement.

The results from the hypothesis tests contradict stress theories such as the Conservation of Resources (COR) Model (Hobfoll, 1989). These theories maintain that job security is a valued resource and when it is threatened, it influences more resource losses and affects the physical, emotional and cognitive well-being of employees (Jiang & Probst, 2014). Employees will therefore strive to reduce further job losses through other employment alternatives which precede the core of turnover intentions. Equally, work-family conflict results in stress when resources such as time and energy are lost in the process of trying to balance the demands of both work and family roles which might lead to burnout, dissatisfaction, demotivation and intention to quit (Crain et al., 2014).



5.3 Implications of the findings

The implication of the findings will be discussed under the headings, theoretical and practical implications.

5.3.1 Theoretical implications

The significant negative correlations between job insecurity and general job engagement as well as between job insecurity and cognitive job engagement among technical personnel confirm the potential of job demands' effect on employee well-being. This study confirms the applicability of the Job Demands Resources (JD-R) Model. Job demands are taxing to individual employees leading to low job engagement. In contrast, job resources are motivational and therefore reduce the stress related to job insecurity and work-family conflict in turn providing a stimulating working environment thus leading to high job engagement. The significant positive correlations between work-family conflict and general job engagement among technical personnel, on the other hand, confirm the applicability of the social identity theory in addition to other stress

theories, in which employees are found to hierarchically prioritise different life roles according to the relative importance of each role to the individual. It is therefore important for interventions to be introduced to address the negative consequences of job insecurity and work-family conflict where they exist as they do not only affect individual employees but the whole organisation at large. In addition, organisations must provide tailor made job resources to individual employees for their unique needs and refrain from the one size fits all approach.

5.3.2 Practical implications

The findings of this study are useful to both private and governmental organisations. In line with the relationships found among job insecurity, work-family conflict and job engagement, the following initiatives are recommended:



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The energy industry should give consideration to how the need for shifts and sometimes long working hours are justified. Strategies need to be implemented to improve managerial and coworker support for technicians through socialization and team building activities (Mahapatro, 2010).

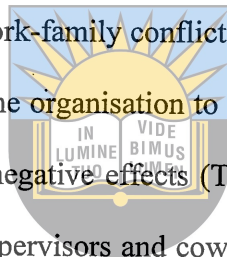
To overcome feelings of job insecurity and their effects on well-being, employers should provide adequate information on any changes in the organisation and the assurance of continued employment to individual employees where possible (Riley, 2012). This helps reduce qualitative job insecurity.

Employees must also be involved in the change process, for example, through the provision of feedback on potential results of the change process so as to fuel competence and satisfaction

through support services to satisfy the need for belongingness (Itika, 2011). This also calls for investments in organisational communication and participation at all levels.

To reduce job insecurity, the hiring and dismissal policies must be clearly communicated and employees must be encouraged to participate in the decision making process so as to build trust (Riley, 2012). Strategies must also be put in place to monitor the organisational climate continuously and to provide counselling where necessary (Riley, 2012).

To minimize overall job insecurity and work-family conflict, employees must be advised to build or join a support networks in or outside the organisation to cope with symptoms before they are transformed out of proportion and have negative effects (Tilakdharee, Ramidial, & Parumasur, 2010). In addition, social support from supervisors and coworkers must be provided as a coping strategy to promote rapport in the workplace.



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Organisations must provide support services to employees with different family roles. They can make use of role models to show that it is possible to achieve a balance between the family and work roles and also to show the ways to achieve such balance (Bosch, Ribeiro, & Becker, 2012). In addition, coaching employees planning to start a family can also add value to both individual employees and the organisation effects. Employees are made aware of changes that differing family roles may bring to the workplace. Training can also be provided to supervisors to make them understand how to manage the dynamics resulting from different family roles and how to accommodate the employees (Tilakdharee, Ramidial, & Parumasur, 2010).

The use of flexible working hours is an important job resource and helps create arrangements suitable to employees. Employees can be presented with an option of freeing up time to spend on

other activities with reduced pay and *vice versa* (Bosch et al. 2012). This helps to attract and retain a skilled workforce.

Organisational polices must consider benefits like contribution towards employee dependent costs, for example, child care facilities covering over time or extended hours to address work-family conflict ((Tilakdharee, Ramidial, & Parumasur, 2010).

Employers must invest in strategies used in stimulating employee well-being directly such as supportive leadership to reduce feelings of job insecurity and stress from the pressure of competing work and home demands (Cheng, 2013).



5.4 Limitations of the study

This study adopted a positivistic approach implemented through a cross-sectional survey which does not allow for the measurement of variables over time and thereby limiting the generalisability of the results. Questionnaires, as used in the study, might impact on the validity and reliability of the research through the phenomenon known as common method variance. Further, no attempt was made to determine the impact of demographical factors on job insecurity, work-family conflict and job engagement.

5.5 Recommendations for future research

There is a need for future research to focus more deeply on the energy industry, especially on specific job demand factors, and to explore why some professionals appear to experience equal stress despite their different family roles (Inoue et al., 2014). The aim should be to develop strategies to address reduced job engagement early in the energy industry (Bosch et al., 2012).

Future research should also use methodological triangulation in data collection in order to improve the generalisability of the results and also to enhance the validity and reliability of the findings. Furthermore, longitudinal studies are necessary in order to gain a long-term perspective of job insecurity, work-family conflict and job engagement while documenting both environmental and employee changes and trends.

5.6 Chapter conclusion

This chapter presented a discussion on the findings of the study. The results showed that job insecurity has a significant negative relationship with general job engagement and cognitive job engagement. The results also, unexpectedly found that work-family conflict is positively correlated with job engagement. In addition, the results of the study found that job insecurity and work-family conflict together do not account for a significantly higher proportion of variance in job engagement than any of the two separately. The theoretical and practical implications of the findings were also discussed. So also were the limitations of the study. Furthermore, recommendations for future research were provided.

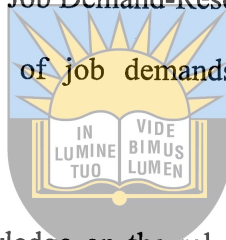
5.7 Study conclusion

The present study makes important contributions to the job insecurity, work-family conflict and job engagement. It does this by highlighting how these interrelate among technical employees.

More specifically, the present study unexpectedly found, inter alia that work-family conflict may contribute positively to job engagement. Job insecurity was found to relate negatively to general job engagement and cognitive job engagement. The results of the study found that job insecurity and work-family conflict together do not account for a significantly higher proportion of

variance in job engagement than any of the two separately. While the results of the study add to the existing knowledge about job insecurity, work-family conflict and job engagement, there is still however the need for empirical research using the same variables in other industries with different professionals to integrate the applicability of the findings across industries in South Africa.

This study has also provided a further base for exploring job insecurity, work-family conflict and job engagement using theories such as the Job Demand-Resources Model and findings suggested that strategies to overcome the effects of job demands increase the job engagement of technicians.



In conclusion, this study adds new knowledge on the relationship between job insecurity and work-family conflict, on the one hand, and job engagement on the other hand, among technical personnel in the South African context. The results of the study show that some Western and Asian findings are not entirely applicable to the South African context because of a unique mix of traditional and acquired South African values in conjunction with the contemporary social, political and economic environments. It is apparent from this study that more research is needed that examines why some professionals appear to experience equal stress despite their different family roles and organisational settings (Inoue et al., 2014).

Since the variables are measured directly, it is also suggested that future research should examine demographic influences upon these variables so as to advance theory and practice. The results of this study provide information that is useful to organisations, personnel researchers, behavioural scientists, and management practitioners.

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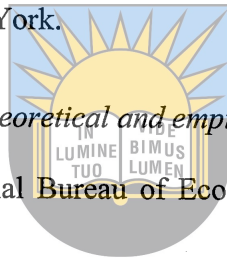


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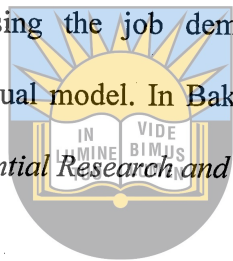
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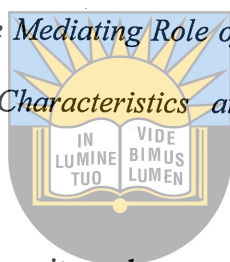
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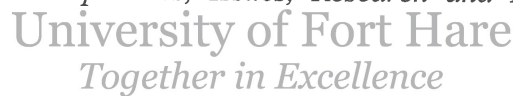
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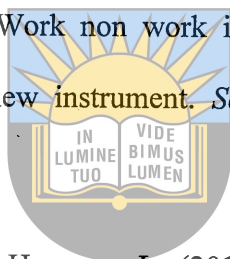
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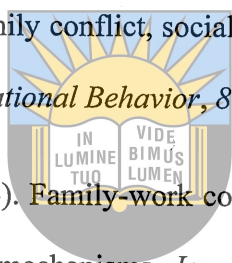
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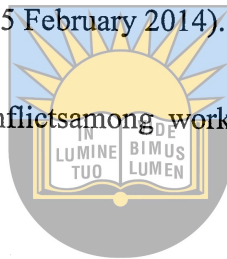
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Appendix A: Research Questionnaire



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DEPARTMENT OF INDUSTRIAL PSYCHOLOGY

RESEARCH QUESTIONNAIRE

My name is Shingirayi F. Chamisa. I am a student in the Department of Industrial Psychology, Faculty of Management and Commerce, at the University Of Fort Hare. This questionnaire is designed to inquire the influence of job insecurity and work-family conflict on job engagement amongst Eskom employees in Amathole Municipality. The research is done as part of the fulfilment of the Master’s degree requirements in Industrial Psychology. The research is done strictly for academic purposes only. The information solicited will be kept confidential and anonymity is assured. You are cordially requested to complete the questions that follow.

Section A: Biographical and occupational information

Please mark with an (X) where appropriate

1. Age

Less than 21years	21-30 years	31-40 years	41-50 years	51-60years	61years and above

2. What is your gender?

Male		Female	
------	--	--------	--

3. Race:

Black		White		Coloured		Indian	
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4. Period of employment in your present job

Less than 1 year	1-5 years	6-10 years	11-15 years	16 years and above

5. Marital status

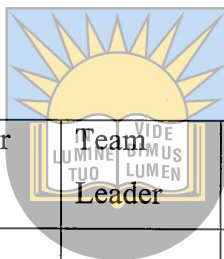
Single	Married	Divorced	Separated	Widowed	Other
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6. Work status

Full time	Part time
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7. Occupational level

Professor	Lecturer	Administrator	Manager	Team Leader	Clerks	Other (state)



8. What is your highest qualification?

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Matric	
National Diploma	
B. Degree	
Honours Degree	
Master's Degree	
Doctoral Degree	
Other	

If your response to the above question is other, please specify.....

Job Insecurity- Questionnaire

Please read carefully through the statement and answer them as honestly as possible, using the following scale:

1 = Disagree strongly. 2 = Disagree. 3 = Neither disagree nor agree.

4 = Agree. 5 = Agree strongly

1	I think I will be able to continue working here	1	2	3	4	5
2	There is only a small chance that I will become unemployed.	1	2	3	4	5
3	I am certain/sure of my job environment.	1	2	3	4	5
4	I am very sure that I will be able to keep my job.	1	2	3	4	5
5	It makes me anxious that I might become unemployed.	1	2	3	4	5
6	I feel uncertain about the future of my job.	1	2	3	4	5
7	I worry about the continuation of my career.	1	2	3	4	5
8	I fear that I might lose my job.	1	2	3	4	5
9	I fear that I might get fired.	1	2	3	4	5
10	There is a possibility that I might lose my job in the near future.	1	2	3	4	5
11	I think that I might be dismissed in the future.	1	2	3	4	5

Work-family conflict scale

With respect to your own feelings about the relationship between your work-life and your personal life please indicate the degree of your agreement or disagreement with each statement by circling **one** of the five alternatives beside each statement using the scale below.

Please read carefully through the statement and answer them as honest as possible, using the following scale:

1 = Disagree strongly. 2 = Disagree. 3 = Neither disagree nor agree.

4 = Agree. 5 = Agree Strongly

1	The demands of my work interfere with my home and family life.	1	2	3	4	5
2	The amount of time my job takes up makes it difficult to fulfill family responsibilities.	1	2	3	4	5
3	Things I want to do at home do not get done because of the demands my job puts on me.	1	2	3	4	5
4	My job produces strain that makes it difficult to fulfill family duties.	1	2	3	4	5
5	Due to work-related duties, I have to make changes to my plans for family activities.	1	2	3	4	5

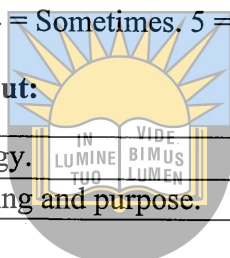
Utrecht Work Engagement Scale

The following 17 statements are about how you feel at work. Please read each statement carefully and decide if you ever feel this way about your job. If you have never had this feeling, cross the "1" (one) in the space after the statement. If you have had this feeling, indicate how often you felt it by crossing the number (from 1 to 7) that best describes how frequently you feel that way.

Please read carefully through the statement and answer them as honestly as possible, using the following scale:

1 = Never. 2 = Almost never. 3 = Rarely. 4 = Sometimes. 5 = Often. 6 = Very often. 7 = Always

On my present job, this is how I feel about:



1	At my work, I feel bursting with energy.	1	2	3	4	5	6	7
2	I find the work that I do full of meaning and purpose.	1	2	3	4	5	6	7
3	Time flies when I am working.	1	2	3	4	5	6	7
4	At my job, I feel strong and vigorous.	1	2	3	4	5	6	7
5	I am enthusiastic about my job.	1	2	3	4	5	6	7
6	When I am working, I forget everything else around me.	1	2	3	4	5	6	7
7	My job inspires me.	1	2	3	4	5	6	7
8	When I get up in the morning, I feel like going to work.	1	2	3	4	5	6	7
9	I feel happy when I am working intensely.	1	2	3	4	5	6	7
10	I am proud of the work that I do.	1	2	3	4	5	6	7
11	I am immersed in my work.	1	2	3	4	5	6	7
12	I can continue working for very long periods at a time.	1	2	3	4	5	6	7
13	To me, my job is challenging.	1	2	3	4	5	6	7
14	I get carried away when I am working.	1	2	3	4	5	6	7
15	At my job, I am very resilient, mentally.	1	2	3	4	5	6	7
16	It is difficult to detach myself from my job.	1	2	3	4	5	6	7
17	At my work, I always persevere, even when things do not go well	1	2	3	4	5	6	7

Appendix B : Output for Generalized Linear Models

Generalized Linear Regression Models from SPSS

Table 4.6: Summary of the R-Square of the Generalized Linear Model (GLM) for proportion of variance of job insecurity and work-family conflict in general job engagement

a). GLM for the relationship/effect of job insecurity in general job engagement

Regression: WE_SCALE and JOB_INSECURITY^b

Variables Entered/Removed ^a			
Model	Variables Entered	Variables Removed	Method
1	JOB_INSECURITY ^b		Enter

a. Dependent Variable: WE_SCALE

b. All requested variables entered.

Job insecurity alone in general job engagement

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.192 ^a	.037	.032	.78219

a. Predictors: (Constant), JOB_INSECURITY

Significance level of job insecurity and general job engagement

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5.123	1	5.123	8.373	.004 ^b
	Residual	133.988	219	.612		
	Total	139.110	220			

a. Dependent Variable: WE_SCALE

b. Predictors: (Constant), JOB_INSECURITY

Parameter estimates between job insecurity and general job engagement

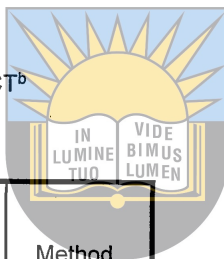
Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	5.564	.268		20.768	.000
	JOB_INSECURITY	-.246	.085	-.192	-2.894	.004

a. Dependent Variable: WE_SCALE

b). GLM for the relationship/effect of work-family conflict on general job engagement

Regression: WE_SCALE and WF_CONFLICT^b



Variables Entered/Removed^a

Model	Variables Entered	Variables Removed	Method
1	WF_CONFLICT ^b		Enter

a. Dependent Variable: WE_SCALE

b. All requested variables entered.

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Work-family conflict alone in general job engagement

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.122 ^a	.015	.011	.79100

a. Predictors: (Constant), WF_CONFLICT

Significance level of work-family conflict and general job engagement

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.087	1	2.087	3.335	.069 ^b
	Residual	137.023	219	.626		
	Total	139.110	220			

a. Dependent Variable: WE_SCALE

b. Predictors: (Constant), WF_CONFLICT

Parameter estimates between work-family conflict and general job engagement

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.829	.536		7.141	.000
	WF_CONFLICT	.237	.130	.122	1.826	.069

a. Dependent Variable: WE_SCALE

GLM for the relationship amongst the combined factors of job insecurity and work-family conflict on general job engagement



Regression: WE_SCALE and WF_CONFLICT, JOB_INSECURITY^b

Variables Entered/Removed^a

Model	Variables Entered	Variables Removed	Method
1	WF_CONFLICT, JOB_INSECURITY ^b		Enter

a. Dependent Variable: WE_SCALE

b. All requested variables entered.

Combined effect of job insecurity and work-family conflict in physical job engagement

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.236 ^a	.056	.047	.77628

a. Predictors: (Constant), WF_CONFLICT, JOB_INSECURITY

Significance level of the combined factors of job insecurity and work-family conflict to combined job engagement

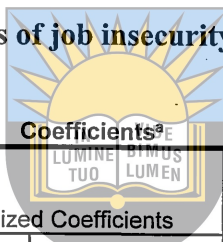
ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	7.742	2	3.871	6.424	.002 ^b
	Residual	131.368	218	.603		
	Total	139.110	220			

a. Dependent Variable: WE_SCALE

b. Predictors: (Constant), WF_CONFLICT, JOB_INSECURITY

Parameter estimates of combined factors of job insecurity and work-family conflict to combined job engagement



Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.510	.571		7.895	.000
	JOB_INSECURITY	-.259	.085	-.202	-3.063	.002
	WF_CONFLICT	.267	.128	.138	2.085	.038

a. Dependent Variable: WE_SCALE

Table 4.8: Summary of the R-Square of the Generalized Linear Model (GLM) for proportion of variance of job insecurity and work-family conflict in physical job engagement.

Regression PHYSICAL_JE and JOB_INSECURITY^b

Variables Entered/Removed^a

Model	Variables Entered	Variables Removed	Method
1	JOB_INSECURITY ^b		Enter

a. Dependent Variable: PHYSICAL_JE

b. All requested variables entered.

Job insecurity alone in physical job engagement

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.099 ^a	.010	.005	.92116

a. Predictors: (Constant), JOB_INSECURITY

Significance level of job insecurity and physical job engagement

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.838	1	1.838	2.166	.143 ^b
	Residual	185.831	219	.849		
	Total	187.669	220			

a. Dependent Variable: PHYSICAL_JE

b. Predictors: (Constant), JOB_INSECURITY

Parameter estimates between job insecurity and physical job engagement

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	5.185	.316		16.434	.000
	JOB_INSECURITY	-.147	.100	-.099	-1.472	.143

a. Dependent Variable: PHYSICAL_JE

GLM for the relationship/effect of work-family conflict on physical job engagement

Regression: PHYSICAL_JE and WF_CONFLICT^b

Variables Entered/Removed^a

Model	Variables Entered	Variables Removed	Method
1	WF_CONFLICT ^b		Enter

a. Dependent Variable: PHYSICAL_JE

b. All requested variables entered.

Work-family conflict alone on physical job engagement

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.080 ^a	.006	.002	.92276

a. Predictors: (Constant), WF_CONFLICT

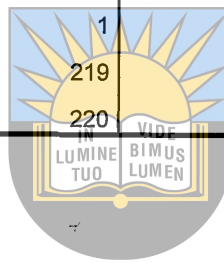
Significance level of work-family conflict on physical job engagement

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.192	1	1.192	1.400	.238 ^b
	Residual	186.476	219	.851		
	Total	187.669	220			

a. Dependent Variable: PHYSICAL_JE

b. Predictors: (Constant), WF_CONFLICT



Parameter estimates between work-family conflict and physical job engagement

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.993	.626		6.383	.000
	WF_CONFLICT	.180	.152	.080	1.183	.238

a. Dependent Variable: PHYSICAL_JE

GLM for the relationship amongst the combined factors of job insecurity and work-family conflict on physical job engagement

Regression: PHYSICAL_JE and WF_CONFLICT, JOB_INSECURITY^b

Variables Entered/Removed^a

Model	Variables Entered	Variables Removed	Method
1	WF_CONFLICT, JOB_INSECURITY ^b		Enter

a. Dependent Variable: PHYSICAL_JE

b. All requested variables entered.

Combined effect of job insecurity and work-family conflict in physical job engagement

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.132 ^a	.017	.008	.91971

a. Predictors: (Constant), WF_CONFLICT, JOB_INSECURITY

Significance level of combined factors of job insecurity and work-family conflict in physical job engagement

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.270	2	1.635	1.933	.147 ^b
	Residual	184.399	218	.846		
	Total	187.669	220			

a. Dependent Variable: PHYSICAL_JE

b. Predictors: (Constant), WF_CONFLICT, JOB_INSECURITY

Parameter estimates of combined factors of job insecurity and work-family conflict in physical job engagement

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.406	.677		6.509	.000
	JOB_INSECURITY	-.157	.100	-.106	-1.567	.119
	WF_CONFLICT	.197	.152	.088	1.301	.195

a. Dependent Variable: PHYSICAL_JE

Table 4.10: Summary of the R-Square of the Generalized Linear Model (GLM) for proportion of variance of job insecurity and work-family conflict in cognitive job engagement.

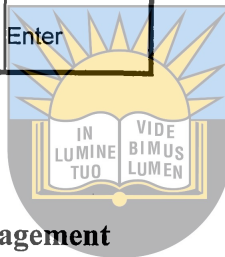
Regression: COGNITIVE_JE and JOB_INSECURITY^b

Variables Entered/Removed^a

Model	Variables Entered	Variables Removed	Method
1	JOB_INSECURITY ^b		Enter

a. Dependent Variable: COGNITIVE_JE

b. All requested variables entered.



Job insecurity alone in cognitive job engagement

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.205 ^a	.042	.038	.95039

a. Predictors: (Constant), JOB_INSECURITY

Significance level of job insecurity and cognitive job engagement

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	8.699	1	8.699	9.631	.002 ^b
	Residual	197.811	219	.903		
	Total	206.510	220			

a. Dependent Variable: COGNITIVE_JE

b. Predictors: (Constant), JOB_INSECURITY

Parameter estimates between job insecurity and cognitive job engagement

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	6.100	.326		18.739	.000
	JOB_INSECURITY	-.321	.103	-.205	-3.103	.002

a. Dependent Variable: COGNITIVE_JE

GLM for the relationship/effect of work-family conflict on cognitive job engagement

Regression: COGNITIVE_JE and WF_CONFLICT^b



Variables Entered/Removed^a

Model	Variables Entered	Variables Removed	Method
1	WF_CONFLICT ^b		Enter

a. Dependent Variable: COGNITIVE_JE

b. All requested variables entered.

Work-family conflict alone in cognitive job engagement

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.059 ^a	.004	-.001	.96935

a. Predictors: (Constant), WF_CONFLICT

Significance level of work-family conflict and cognitive job engagement

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.731	1	.731	.778	.379 ^b
	Residual	205.779	219	.940		
	Total	206.510	220			

a. Dependent Variable: COGNITIVE_JE

b. Predictors: (Constant), WF_CONFLICT

Parameter estimates between work-family conflict and cognitive job engagement

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.533	.657		6.897	.000
	WF_CONFLICT	.141	.159	.059	.882	.379

a. Dependent Variable: COGNITIVE_JE

GLM for the relationship amongst the combined factors of job insecurity and work-family conflict to cognitive job engagement

Regression: COGNITIVE_JE and WF_CONFLICT, JOB_INSECURITY^b

Variables Entered/Removed^a

Model	Variables Entered	Variables Removed	Method
1	WF_CONFLICT, JOB_INSECURITY ^b		Enter

a. Dependent Variable: COGNITIVE_JE

b. All requested variables entered.

Combined effect of job insecurity and work-family conflict in cognitive job engagement

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.219 ^a	.048	.039	.94976

a. Predictors: (Constant), WF_CONFLICT, JOB_INSECURITY

Significance level of combined factors of job insecurity and work-family conflict to cognitive job engagement

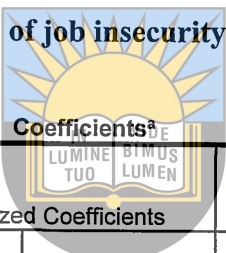
ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	9.863	2	4.931	5.467	.005 ^b
	Residual	196.647	218	.902		
	Total	206.510	220			

a. Dependent Variable: COGNITIVE_JE

b. Predictors: (Constant), WF_CONFLICT, JOB_INSECURITY

Parameter estimates of combined factors of job insecurity and work-family conflict to cognitive job engagement



Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	5.398	.699		7.722	.000
	JOB_INSECURITY	-.330	.104	-.211	-3.182	.002
	WF_CONFLICT	.178	.157	.075	1.136	.257

a. Dependent Variable: COGNITIVE_JE

Table 4.12: Summary of the R-Square of the Generalized Linear Model (GLM) for proportion of variance of job insecurity and work-family conflict in emotional job engagement.

Regression: EMOTIONAL_JE and JOB_INSECURITY^b

Variables Entered/Removed^a

Model	Variables Entered	Variables Removed	Method
1	JOB_INSECURITY ^b		Enter

a. Dependent Variable: EMOTIONAL_JE

b. All requested variables entered.

Job insecurity alone in emotional job engagement

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.209 ^a	.044	.039	.82045

a. Predictors: (Constant), JOB_INSECURITY

Significance level of job insecurity and emotional job engagement

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	6.756	1	6.756	10.037	.002 ^b
	Residual	147.419	219	.673		
	Total	154.175	220			

a. Dependent Variable: EMOTIONAL_JE

b. Predictors: (Constant), JOB_INSECURITY

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Parameter estimates between job insecurity and emotional job engagement

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	5.497	.281		19.559	.000
	JOB_INSECURITY	-.283	.089	-.209	-3.168	.002

a. Dependent Variable: EMOTIONAL_JE

GLM for the relationship/effect of work-family conflict in emotional job engagement

Regression: EMOTIONAL_JE and WF_CONFLICT^b

Variables Entered/Removed^a

Model	Variables Entered	Variables Removed	Method
1	WF_CONFLICT ^b		Enter

a. Dependent Variable: EMOTIONAL_JE

b. All requested variables entered.

Work-family conflict alone in emotional job engagement

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.184 ^a	.034	.030	.82467

a. Predictors: (Constant), WF_CONFLICT

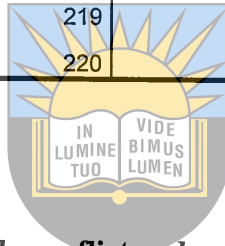
Significance level of work-family conflict and emotional job engagement

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5.238	1	5.238	7.701	.006 ^b
	Residual	148.937	219	.680		
	Total	154.175	220			

a. Dependent Variable: EMOTIONAL_JE

b. Predictors: (Constant), WF_CONFLICT



Parameter estimates between work-family conflict and emotional job engagement

Model		Coefficients ^a		Standardized Coefficients	t	Sig.
		Unstandardized Coefficients				
		B	Std. Error	Beta		
1	(Constant)	3.080	.559		5.508	.000
	WF_CONFLICT	.376	.136	.184	2.775	.006

a. Dependent Variable: EMOTIONAL_JE

GLM for the relationship amongst the combined factors of job insecurity and work-family conflict to emotional job engagement

Regression: EMOTIONAL_JE and WF_CONFLICT, JOB_INSECURITY^b

Variables Entered/Removed^a

Model	Variables Entered	Variables Removed	Method
1	WF_CONFLICT, JOB_INSECURITY ^b		Enter

a. Dependent Variable: EMOTIONAL_JE

b. All requested variables entered.

Combined effect of job insecurity and work-family conflict in emotional job engagement

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.290 ^a	.084	.076	.80486

a. Predictors: (Constant), WF_CONFLICT, JOB_INSECURITY

Significance level of combined factors of job insecurity and work-family conflict to emotional job engagement

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	12.956	2	6.478	10.000	.000 ^b
	Residual	141.219	218	.648		
	Total	154.175	220			

a. Dependent Variable: EMOTIONAL_JE

b. Predictors: (Constant), WF_CONFLICT, JOB_INSECURITY

Parameter estimates of combined factors of job insecurity and work-family conflict to emotional job engagement

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.875	.592		6.542	.000
	JOB_INSECURITY	-.303	.088	-.224	-3.452	.001
	WF_CONFLICT	.410	.133	.201	3.094	.002

a. Dependent Variable: EMOTIONAL_JE



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