

Personality traits, work-family conflict, stress and work engagement of working women

by

Nthabeleng Innocentia Mdhluli

Submitted in partial fulfilment of the requirements for the degree of

MASTER OF COMMERCE

in the subject

INDUSTRIAL AND ORGANISATIONAL PSYCHOLOGY

at the

UNIVERSITY OF SOUTH AFRICA

SUPERVISOR: PROF S GROBLER

August 2019

DECLARATION

I, Nthabeleng Innocentia Mdhuli, student number 35291087, declare that “Personality traits, work-family conflict, stress and work engagement of working women” is my own work, and that all the sources that I have used or have quoted from have been indicated and acknowledged by means of complete references.

SIGNATURE:

N. Mdhuli

DATE: August 2019

ACKNOWLEDGEMENTS

I thank my Heavenly Father for giving me strength during my academic career. Thank You for the strength You gave me when I thought I could not continue. Thank You for guiding me and showing me what I am capable of.

To, Prof Sonja Grobler, thank you so much for all your guidance, support and for encouraging me in the right direction. Thank you for always being available for any query. Your support and guidance meant a lot to me.

To my husband, thank you for giving me the opportunity to follow my dreams, to grow and to better myself. Thank you for being there for the children when I had to attend block weeks at UNISA in order to complete my first year. Thank you for always reminding me of my assignments and to push till the end.

To my mom, Elizabeth Maroku. Thank you for the strong woman that you are, for the strength and support that you have given me to accomplish my dreams.

Jopie van Rooyen and Partners, thank you for your support and assistance with obtaining the assessments and for always being available to help.

I thank the participating organisation and participants who willingly completed the questionnaire for the study.

Thanks to my statistician, Andries Masenge, for your help, support, and guidance with the data analysis. Thank you for having the patience to explain concepts to me and for always being available to help.

To my friends, thank you very much for your love and support.

TABLE OF CONTENTS

CHAPTER 1: SCIENTIFIC ORIENTATION TO THE RESEARCH	1
1.1 INTRODUCTION.....	1
1.2 BACKGROUND AND MOTIVATION.....	1
1.3 PROBLEM STATEMENT AND MOTIVATION FOR THE RESEARCH.....	4
1.4 RESEARCH QUESTIONS	5
1.5 RESEARCH AIMS.....	6
1.5.1 General aim of the study	6
1.5.2 Specific theoretical aims.....	6
1.5.3 Specific empirical aims	6
1.6 STATING THE RESEARCH VARIABLES.....	8
1.7 STATING THE HYPOTHESIS.....	8
1.8 THE PARADIGM PERSPECTIVE	8
1.9 META-THEORETICAL STATEMENTS	9
1.9.1 Industrial and Organisational Psychology.....	9
1.9.2 Career Psychology	9
1.9.3 Conceptual description.....	10
1.9.3.1 <i>Big Five model</i>	10
1.9.3.2 <i>Work-family conflict</i>	11
1.9.3.3 <i>Stress</i>	11
1.9.3.4 <i>Work engagement</i>	11
1.10 RESEARCH METHOD	12
1.10.1 Research approach	12
1.10.2 Research design	12
1.10.3 Sample size.....	12
1.10.4 Measuring instruments	12
1.10.4.1 <i>Basic Traits Inventory (BTI)</i>	12
1.10.4.2 <i>The Work-Family Conflict Scale (WAFCS)</i>	13
1.10.4.3 <i>The Perceived Stress Scale (PSS)</i>	13
1.10.4.4 <i>Utrecht Work Engagement Scale (UWES-17)</i>	14
1.11 DATA ANALYSIS	15
1.12 METHODS TO ENSURE VALIDITY AND RELIABILITY	15
1.12.1 Validity.....	15
1.12.2 Reliability	16
1.13 ETHICAL CONSIDERATIONS	16
1.14 LIMITATIONS OF THE STUDY.....	17
1.15 CHAPTER LAYOUT	17
1.16 CHAPTER SUMMARY	18

CHAPTER 2 LITERATURE REVIEW.....	19
2.1 INTRODUCTION.....	19
2.2 THE BIG FIVE PERSONALITY MODEL	19
2.3 WORK-FAMILY CONFLICT	21
2.3.1 Dimensions of work-family conflict	22
2.3.2 Consequences of work-family conflict	23
2.3.3 Antecedents of work-family conflict	24
2.3.4 Theoretical framework underlying work-family conflict	25
2.3.5 Predictors of work-family conflict	25
2.3.5.1 <i>Overtime work</i>	25
2.3.5.2 <i>Work Overload</i>	26
2.4 STRESS.....	27
2.4.1 Antecedents of stress	28
2.4.2 Consequences of stress	28
2.4.3 Factors that reduce stress	29
2.4.3.1 <i>Social support</i>	29
2.4.3.2 <i>Workplace social support</i>	29
2.4.3.3 <i>Organisation policy</i>	30
2.5 WORK ENGAGEMENT.....	30
2.5.1 Antecedents of work engagement	31
2.5.2 Consequences of work engagement	32
2.6 THEORETICAL RELATIONSHIP BETWEEN THE BIG FIVE PERSONALITY TRAITS, WORK-FAMILY CONFLICT, STRESS AND WORK ENGAGEMENT	33
2.7 CHAPTER SUMMARY	36
CHAPTER 3: RESEARCH METHODOLOGY ARTICLE.....	38
CHAPTER 4: CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS	74
4.1 INTRODUCTION.....	74
4.2 CONCLUSIONS	74
4.2.1 Theoretical conclusions	74
4.2.2 Empirical conclusions.....	76
4.2.3 Overall conclusions	77
4.3 LIMITATIONS.....	77
4.4 RECOMMENDATIONS	79
4.5 CHAPTER SUMMARY	79
REFERENCES.....	80
ANNEXURE 1: TURNITIN REPORT	98
ANNEXURE 2: ETHICAL CLEARANCE	99

ANNEXURE 3: LANGUAGE EDITING 101

LIST OF FIGURES

Figure 1: Theoretical model..... 7
Figure 2: Antecedents and consequences of work engagement (Bakker & Demerouti, 2008; Halbesleben, 2010) 31

LIST OF TABLES

Table 1: Characteristics of participants in the sample (n=51) 48
Table 2: Reliability of the measuring instruments 52
Table 3: Descriptive statistics: means and standard deviations (n=51) 53
Table 4: Spearman correlation coefficients between the constructs and their subscales 55
Table 5: Correlation analysis between work-family conflict, work engagement and its subscales, and stress (Spearman rho) 56
Table 6: Correlation analysis between work-family conflict and work engagement .. 57
Table 7: Multiple Regression Analysis: Model Summary, the Big Five personality traits as Independent Variables, and Work-family conflict, Stress and Work engagement as Dependent Variables 58

SUMMARY

PERSONALITY TRAITS, WORK-FAMILY CONFLICT, STRESS AND WORK ENGAGEMENT OF WORKING WOMEN

By

NTHABELENG INNOCENTIA MDHLULI

Supervisor: Prof S. Grobler

Department: Industrial and Organisational Psychology

Degree: M. Com (Industrial and Organisational Psychology)

The objectives of the research were: (1) to conceptualise work-family conflict, stress, work engagement and personality from a theoretical perspective, exploring definitions, theoretical models and dimensions; (2) to investigate the relationship between work-family conflict, stress and work engagement; and (3) determine whether the Big Five personality traits influence how working women manage work-family conflict, stress and work engagement. A non-probability sample (n = 450) of working women aged 25 and older with children between 18 years and younger participated in the study. The findings of the study and the practical implications provide useful information about how working women with different personalities manage work-family conflict and stress, and how they can be engaged at work.

KEY TERMS:

Personality, work-family conflict; stress; work engagement.

CHAPTER 1: SCIENTIFIC ORIENTATION TO THE RESEARCH

1.1 INTRODUCTION

This dissertation concentrates on how personality can determine whether working women can manage stress, and how they can be engaged even though they experience work-family conflict. Chapter 1 contains the background to and motivation for the research, the problem statement, the aims, the paradigm perspective, the research design and the methodology used in this study. The chapter concludes with a layout of all the chapters in this dissertation.

1.2 BACKGROUND AND MOTIVATION

This modern working world, with continuous transformation and economic uncertainty, puts greater demands on employees (Koekemoer & Mostert, 2010). To remain competitive in the 21st century, organisations require employees to be emotionally and cognitively devoted to and engaged in their work. Employers' demands make it difficult for working women to manage their tasks, roles and duties (McNall, Nicklin & Masuda, 2010).

Research indicates that working women and working men have different experiences of work-family conflict (Drew & Eamonn, 2015). That is because childcare and household obligations continue to be fulfilled as obligations that women should carry out (Xiao & Cooke, 2012). Women still perceive themselves as the main caregivers and these roles in organisations are often underestimated and inconsistent with leadership roles (Lewis 2010). Organisations work in ways that generally do not support the vocation of women and their need to incorporate work and family responsibilities (Cha, 2013).

Netemeyer, Boles and McMurrian (1996), more than 20 years ago, predicted that, given the rise in dual-working families, single parents and elderly-care families, the conflict between work and family and its difficulty would increase. Rantanen, Kinnunen and Pulkkinen (2013) portray work-family conflict as the obvious struggle to meet

competitors as well as conflicting demands for work and family due to a lack of time and energy resources. The outcome of the conflict between the working family includes an increase in employee turnover, non-assistance, stress, job pressure and burnout and decreased profitability and job loss (Abendroth, Van der Lippe & Maas, 2012; Jang, Park & Zippay, 2011). Employees may also have problems with their well-being and mental condition (Jang et al., 2011). An unpleasant workplace could cause work-life challenges (Amstad, Meier, Fasel, Elfering and Semmer, 2011). The term "stressor(s)" refers to a person's demands that act as a driving force to evoke a response like anger, anxiety and stress (Rothmann & Cooper, 2008). Rothmann & Rothmann (2007) indicated the fact that various tasks that are pressured and finalised in a short span could lead to low levels of employee well-being and work engagement.

There has been a growing interest in the past decade in the concept of work engagement in organisational literature (Poon, 2013), due to its beneficial implications for employees and organisations (Joo & Shim, 2010; Macinga, Sulea, Sârbescu, Fischmann & Dumitru, 2015). Much research has been done on work engagement – both internationally and locally (Rothmann & Rothmann, 2010; Van der Colff & Rothmann, 2009; Zigarmi, Nimon, Houson, Witt & Diehl, 2009). “Personal engagement and disengagement” (Kahn, 1990), “work engagement” (Maslach & Leiter, 2008) and more recently “employee engagement” (Harter, Schmidt & Hayes, 2002; Simpson, 2009) are terms used in the literature. The development of the construct has been driven by the view that promoting work engagement enhances the competitive advantage of organisations as well as the working conditions and wellbeing of employees (Bakker, Albrecht & Leiter, 2011; Rothmann, 2002; Truss, Shantz, Soane, Alfes & Delbridge, 2013; Wollard & Shuck, 2011; Yalabik, Popaitoon, Chowne & Rayton, 2013).

Coetzee and Roythorne-Jacobs (2012) have described work engagement as being enthusiastic, proud, inspired, and challenged and being happily immersed in one’s work. Schaufeli, Salanova, González-Romá and Bakker (2002, p.74) define engagement as “a positive, fulfilling, work related state of mind that is characterised by vigour, dedication and absorption”. Bakker and Demerouti (2009) described vigour

as being mentally resilient and having high energy levels. Absorption refers to an attachment and feelings of being immersed in one's work (Bakker & Demerouti, 2009). De Braine and Roodt (2011) described the final component of work engagement, namely dedication, as a feeling of significance, eagerness, challenge, and at last, a solid association in one's work.

Personality has been related with various positive and noteworthy results for the both employees and organisations and has been acknowledged as an indicator of employee performance in the work place (Barrick, Mount & Li, 2013). Recent studies define it as attributes and propensities that decide traits that are unique to an individual, for example, contemplations, sentiments and feelings that continue after some time (McCrae & Costa, 2003; Parks-Leduc, Feldman & Bardi, 2014;), and manifesting itself through measurable personality traits. Despite the fact that various popular models of personality traits keep on affecting contemporary research (Jung, 1971, Kirton & De Ciantis, 1986), the Five Factor model (the "Big Five") proposed by McCrae and Costa Jr (1999) is the most broadly utilised (Rossberger, 2014).

A short description of the Big Five traits follows (Rossberger, 2014):

- **Extraversion:** extent to which individuals engage with the external world and experience enthusiasm and other positive emotions;
- **Agreeableness:** extent to which individuals value co-operation and social harmony, honesty, decency, and trustworthiness. Agreeable individuals also tend to have an optimistic view of human nature;
- **Conscientiousness:** extent to which individuals value planning, possess the quality of persistence, and are achievement-oriented;
- **Neuroticism:** extent to which individuals experience negative feelings, and their tendency to emotionally overreact; and
- **Openness to Experience:** extent to which individuals exhibit intellectual curiosity, self-awareness, and individualism or non-conformance.

Personality has been accounted for to affect numerous individual work environment factors, such as psychological wellbeing (the factors of *Extraversion* and *Agreeableness* specifically) (Temane & Wissing, 2008), personal accomplishment and burnout (factors of *Extraversion*, *Agreeableness*, *Conscientiousness*, *Neuroticism* specifically) (Morgan & De Bruin, 2010; Taylor & De Bruin, 2006). Langelan et al. (2006) report that work engagement is negatively related to *Neuroticism* and positively related to *Extraversion*. In addition, it has been accounted for that women who are high in *Conscientiousness* will in general be more engaged in their work than women who measure lower on *Conscientiousness* (Halbesleben, Harvey & Bolino, 2009).

The modern organisation expects to have committed, proactive and engaged employees (Rothmann & Rothmann, 2010), and so research is needed on how working women with different personalities manage work-family conflict and stress, and how they can be engaged at work. The researcher's aim in this study was to add to the body of knowledge on the Big Five personality traits, work-family conflict, stress and work engagement, and to assist organisations to better understand the concepts of work-family conflict, stress and work engagement.

1.3 PROBLEM STATEMENT AND MOTIVATION FOR THE RESEARCH

The challenge of adjusting the requests of work and family life has turned out to be progressively predominant among women (Franks, Schurink & Fourie, 2006). Women are still to a great extent in charge of childcare and household obligations related with such duties (Lewis-Enright, Crafford & Crous, 2009). A simultaneous performance of an employee, parent, and companion may result in pressure and struggle (Theunissen, van Vuuren & Visser, 2003). An expanding number of women entering the work environment are encountering inter-role conflict in their home and work domain, thus work-family conflict may occur. The result of the inter-role conflict might cause stress and affect the level at which working women are engagement in their work. Past research has perceived work-family conflict as a significant factor that influences not only employees' wellbeing but also their employers' (Kossek, Baltes & Matthews, 2011). Stress has been reported by Ram, Khoso, Shah, Chandio and

Shaikih (2011) to have a direct and indirect cost for both employees and organisation. In order to promote wellbeing among women in the workplace, it is essential to see how personality adds to the experiences of work-family conflict, stress and work engagement.

Personality traits such as *Conscientiousness* and *Neuroticism* have been linked to work-family conflict (Blanch & Aluja, 2009). These two personality traits have been known to influence work engagement. According to research, work engagement has shown to have a positive relationship with *Conscientiousness* (meaning that as *Conscientiousness* increases, work engagement increases) and a negative relationship with *Neuroticism* (meaning that when *Neuroticism* increases, work engagement decreases) (Jeong, Hyun & Swanger, 2009; Langelaan, Bakker, Van Doornen & Schaufeli, 2006). Therefore, it is worth analysing the relationship of *Conscientiousness* and *Neuroticism* with work-family conflict, stress and work-engagement. It will be beneficial to investigate the relationship between all five personality traits and work-family conflict (De Bruin & Thomson, 2007). The researcher has therefore decided to focus this study on the relationship between the Big Five personality traits and work-family conflict, stress and work-engagement.

1.4 RESEARCH QUESTIONS

To investigate the above concerns, this research was designed to answer the following literature and empirical questions:

Literature questions:

- How is work-family conflict conceptualised in the literature?
- How is stress conceptualised in the literature?
- How is work engagement conceptualised in the literature?
- How are the Big Five personality traits conceptualised in the literature?
- What are the theoretical linkages between work-family conflict, stress, work engagement and the Big Five personality traits? and

- What are the implications of the theoretical relationship between work-family conflict, stress, work engagement and the Big Five personality traits?

Empirical question:

- Do any of the Big Five personality traits influence how working women manage work-family conflict, stress and their work engagement?

1.5 RESEARCH AIMS

The following general and specific aims were formulated from the research questions.

1.5.1 General aim of the study

The general aim of this research was to investigate the role of Big Five personality traits in work-family conflict, stress and work engagement among working women.

1.5.2 Specific theoretical aims

The specific aims relating to the literature review were:

- To conceptualise the Big Five personality traits, work-family conflict, stress and work engagement from a theoretical perspective, exploring definitions, theoretical models and dimensions.

1.5.3 Specific empirical aims

The specific aims relating to the empirical study were:

- To investigate the relationship between the Big Five personality traits, work-family conflict, stress and work engagement; and
- To determine whether the Big Five personality traits influence how working women manage work-family conflict, stress and work engagement.

A description of the relationship between the independent variables (the Big Five personality traits) and the dependent variables (work-family conflict, stress and work engagement) is presented in Figure 1.

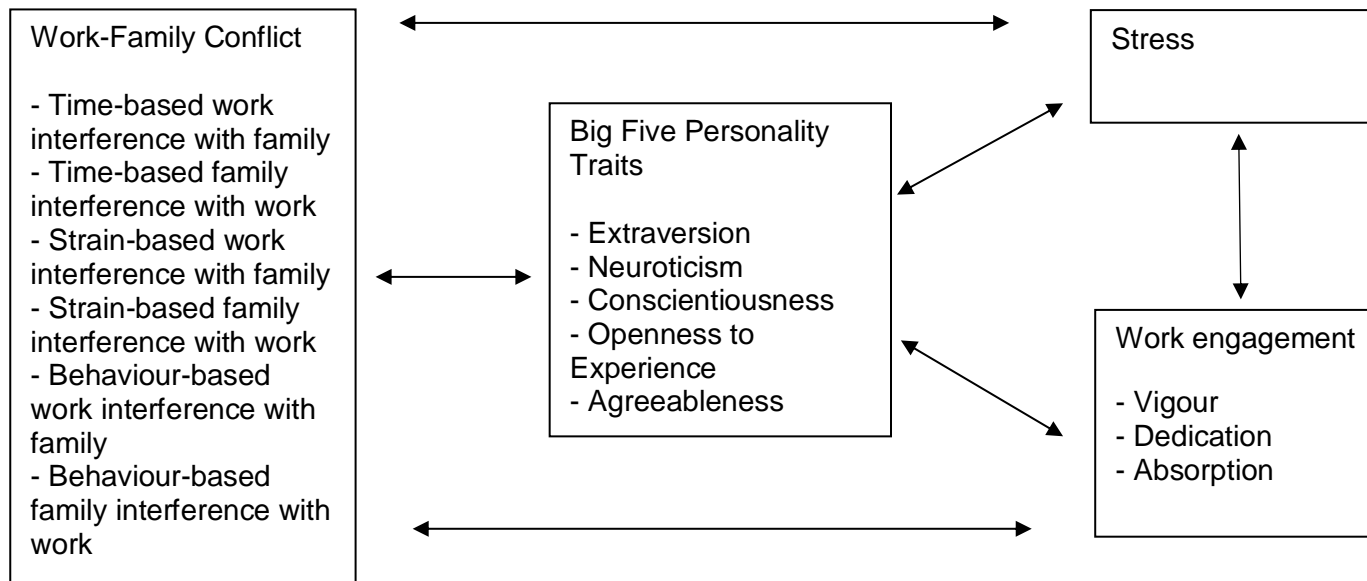


Figure 1: Theoretical model

1.6 STATING THE RESEARCH VARIABLES

Bless, Higson-Smith and Kagee (2007) referred to a variable as an empirical property that can take on different values. There are four research variables in this study, namely the Big Five personality traits, considered as the independent variable, and work-family conflict, stress and work engagement, which are the dependent variables. The study establishes whether there is an empirical relationship between the variables.

1.7 STATING THE HYPOTHESIS

Research hypotheses set the groundwork for tests on the importance of the observed differences. A well-formulated hypothesis forces a clear distinction between a predictor and outcome variables (Fincher, White, Huang & Schwartzstein, 2010). The central hypothesis of the research was formulated as follows:

There is a theoretical and empirical relationship between the Big Five personality traits, work-family conflict, stress and work engagement. Working women's personality traits predict how they manage work-family conflict, stress and work engagement.

Based on the literature review, the following hypotheses were empirically tested.

Hypothesis 1: There are statistically significant relationships between the Big Five personality traits, work-family conflict, stress and work engagement.

Hypothesis 2: The Big Five personality traits have a significant influence on work-family conflict, stress and work engagement.

1.8 THE PARADIGM PERSPECTIVE

Within the meta-theoretical boundaries, the literature review of personality, work-family conflict, stress and work engagement is presented from a humanistic paradigm. The empirical study resides within a positivistic research paradigm.

Firstly, the research is based upon the humanistic theoretical paradigm. Humanism is a philosophical perspective where the subject matter is the whole human being (Kirk, Cannon, David & Stalpers, 2001). Maslow and the other founders of what would become humanistic psychology wanted to create a psychology focused less on pathology and the prediction and control of human behaviour and more on the positive potentials and distinctive attributes of the human being (Elkins, 2015). Humanism is concerned with such existential themes as meaning, mortality, freedom, limitation, value, creativity and spirituality (Kirk et al., 2001).

Secondly, the research was based upon the positivist empirical paradigm. The positivist paradigm assumes that the realities of social behaviour can be understood and explained by means of collecting data and facts (McKenna, Richardson & Manroop, 2011). The broader theoretical paradigms that informed this research will now be described in meta-theoretical statements.

1.9 META-THEORETICAL STATEMENTS

The meta-theoretical statements presented in this study are on industrial and organisational psychology within the context of career psychology.

1.9.1 Industrial and Organisational Psychology

Psychologists who specialise in the psychology of work and human behaviour in organisations are called industrial and organisational psychologists in South Africa (Nelson, 2012). The essence of industrial and organisational psychology is that it goes further than the workplace, and therefore recognises all the influences on the individual in the work and home environment (Schreuder & Coetzee, 2010). Industrial and organisational psychology, as an applied field of study, aims to enhance the dignity and performance of human beings and the organisation in which they work, by advancing the science and knowledge of human behaviour (Aamodt, 2010).

1.9.2 Career Psychology

Career psychology is the sub-field of industrial and organisational psychology that shows the greatest overlap with some of the areas of specialisation (Van Vuuren,

2010). Career psychology focuses on the meaning of work in people's lives, quality of work life, vocational and career counselling, organisational mental health, stress, and work-personal life balance issues (Van Vuuren, 2010). Career psychology has as a core focus, the psychological contract between the organisation and the employee (Van Vuuren, 2010) whereas personnel psychology, in its applied form (i.e. human resource management) is concerned with the formal employment contract between organisation and employee. In this study, the constructs of personality, work-family conflict, stress, and work engagement are studied within the context of career psychology.

This positivist research paradigm is relevant for this study because it relates to the constructs of personality, work-family conflict, stress, and work engagement. Human behaviour was studied in the work context and measured by statistical data to provide an accurate and objective description of the facts. This study has relevance in the field of career psychology because it supports the need for an overall conceptual framework for career development.

1.9.3 Conceptual description

1.9.3.1 Big Five model

Pervin and Cervone (2010, p.8) define personality as "psychological qualities that contribute to an individual's enduring and distinctive patterns of doing things". Personality traits depict and clarify contrasts in people's reasoning, feeling and conduct in various circumstances in terms of the five factors (Moshoeu, 2017). They give an individual his or her identity and unique nature, including how the individual behaves, feels and thinks (Moshoeu, 2017). The most widely accepted model amongst the several models of personality, across multiple studies is the Big Five model of personality, or the Big Five. There is an agreement among researchers that the Five Factor model of personality is a standout amongst the most noticeable models in psychology to describe the traits of personality (Goldberg, 1981, 1990; John & Srivastava, 1999). The individual traits are grouped into five personality dimensions, namely: *Conscientiousness, Agreeableness, Neuroticism, Openness to Experience* and *Extraversion*.

1.9.3.2 Work-family conflict

Greenhaus and Beutell (1985) conceived a theoretical structure for research on work-family conflict which expresses that numerous job requirements and obligations can't be completed at the same time, performing such tasks can lead to negative outcomes that can cause stress and decreased levels of engagement at work (Rantanen, Kinnunen, Feldt & Pulkkinen, 2008; Sidani & Al Hakim, 2012).

1.9.3.3 Stress

The definition of stress has been debated, but most researchers agree that stress is associated with feelings of fear, anxiety, discomfort, anger, sadness and depression (Bolino & Turnley, 2005; Cropanzano, Howes, Grandey & Ve Toth, 1997; Motowidlo, Packard & Ve Manning, 1986). Stress has been defined by Bell, Rajendran and Theiler (2012, p.117) as “an event or situation that is perceived as threatening, demanding or challenging.” The interchange between the person and the environment; and the person's responses over time to the stress has been identified as two elements of the stress process. Long-term stressors can cause more serious medical issues than short-term stressors (Bell, Rajendran & Theiler, 2012).

1.9.3.4 Work engagement

Coetzee and Roythorne-Jacobs (2012) describe work engagement as feeling enthusiastic, proud, inspired, and challenged and being happy to engage yourself in your work. Schaufeli, Salanova, González-Romá and Bakker (2002, p.74) define engagement as “a positive, fulfilling, work-related state of mind that is characterised by vigour, dedication and absorption”. Bakker and Demerouti (2009) described vigour as being mental resilient and having high energy levels. Absorption refers to a feeling of attachment and immersion in one's work, as well as being focused (Bakker & Demerouti, 2009). De Braine and Roodt (2011) described the final component of work engagement, namely dedication, as feeling significant, enthusiastic, challenged, and ultimately and having strong involvement in your work.

1.10 RESEARCH METHOD

1.10.1 Research approach

A quantitative research approach was followed in this study. Maree and Pietersen (2001, p.145) describe quantitative research as “a process that is systematic and objective in its way of using numerical data from only a selected subgroup of the universe (or population) to generalise the findings to the universe that is being studied”.

1.10.2 Research design

A quantitative cross-sectional survey design was used for this research. A cross-sectional method is deployed for descriptive studies, as is the case with this study. Setia (2016) described a cross-sectional study design as an observational study design in which the outcome and the exposures of the participants are measured at the same time by the investigator. An advantage is that it is cost effective and takes short time to perform (Setia, 2016). A disadvantage of the cross-sectional design is that the research is conducted at just one time, and thus, changes over time are ignored (Setia, 2016).

1.10.3 Sample size

A non-probability sample ($n = 51$) of working women aged 25 and older with children between 18 years old and younger participated in this research. In non-probability sampling the researcher has no guarantee that everyone in the population is represented in the chosen sample and it is not based on randomisation (Leedy & Ormrod, 2013). Convenience sampling is when the researcher selects available participants (De Vos, Strydom, Fouche & Delpont, 2011; Garson, 2012). This method is the most cost effective and may take up the least of the researcher’s time (Leedy & Ormrod, 2013).

1.10.4 Measuring instruments

1.10.4.1 Basic Traits Inventory (BTI)

The Basic Traits Inventory (BTI) was used to measure the working women’s personalities. The BTI is a South African-devised personality instrument, proven to be

valid across cultures (Taylor & De Bruin, 2006). The BTI is grounded in the FFM theory and measures personality in terms of the Big Five personality traits, namely, *Extraversion* (E), *Neuroticism* (N), *Conscientiousness* (C), *Openness to Experience* (O) and *Agreeableness* (A). The instrument consists of 193 items and is presented as a single list, with no differentiation between factors or facets. The BTI reported Cronbach alpha reliability coefficients as *Extraversion* ($\alpha=.87$), *Neuroticism* (0.97), *Conscientiousness* (0.93), *Openness to Experience* (0.94) and *Agreeableness* (0.92) (Taylor & De Bruin, 2006). From her sample of students, Taylor (2008) reported that, statistically, the BTI performs well, with little or no construct, item and response bias. The validity and reliability of the instrument has been confirmed by results from research conducted by Taylor and De Bruin (2006).

1.10.4.2 *The Work-Family Conflict Scale (WAFCS)*

The 10-item Work-Family Conflict Scale of Netemeyer, Boles and McMurrian (1996) was used to measure work-family conflict and family-work conflict. Karatepe and Baddar (2006), who obtained Cronbach alpha values of $\alpha=.76$ and $.75$ for work-family conflict and family-work conflict respectively, used this scale. A sample item for work-family conflict is “Due to work-related duties, I have to make changes to my plans for family activities” and for family-work conflict is “The demands of my family or spouse/partner interfere with work related activities”. Each item is measured using a five-point Likert scale (from 1 = strongly disagree to 5 = strongly agree) (Carlson, Kacmar & Williams, 2000).

1.10.4.3 *The Perceived Stress Scale (PSS)*

The Perceived Stress Scale (PSS) was used to measure working women’s stress level. The PSS was designed based on the concept of stress as an interaction between environmental requirements and the ability of the individual to cope (Cohen, Kamarck & Mermelstein, 1983). Originally having 14 items, its authors later refined it to 10 items (the PSS-10), of which six are negatively phrased and four are positively phrased (Cohen, 1988). These items consider how unpredictable, uncontrollable and overloading people experience their lives (Cohen et al., 1983). This scale is one of the most commonly used stress measurements and has been validated in many countries

(Garcia et al., 2013; Lemma, Gelaye, Berhane, Worku & Williams, 2012). The Cronbach alpha and intra-class correlation coefficient of the PSS-10 was evaluated at more than .70 in all studies in which it was used (Lee, 2012).

The PSS-10 was included in the study because it captures the negative and positive dimensions of the work-home interaction. It is deemed relevant to this research by reason of the validity and reliability achieved in various previous studies. It provides a platform for further validation of the instrument in a multicultural environment. More importantly, the scale is used because it applies to all types of employees, regardless of their marital or parental status, since it is assumed that each person has a personal life that can affect their working life (Moshoeu, 2017).

1.10.4.4 Utrecht Work Engagement Scale (UWES-17)

The UWES-17 was used to measure work engagement (Schaufeli, Salanova, Gonzalez-Romá & Bakker, 2002). The UWES-17 is a questionnaire of 17 items with three subscales: vigour (six items, e.g. "I am bursting with energy in my work"), dedication (five items, e.g. "My job inspires me"), and absorption (six items, e.g. "I feel happy when I'm engrossed in my work"). All items are scored from 0 (never) to 6 (every day) on a seven-point frequency rating scale. International and national studies reveal Cronbach alpha coefficients for the three subscales ranging between .68 and .91 (Goliath-Yarde & Roodt, 2011; Schaufeli et al., 2002; Storm & Rothmann, 2003).

The scale for this study was chosen because it reflects how people see, feel and respond to their jobs, and thus, our understanding of the emotional and personal experience of employees' work will be improved. A South African study has shown that the UWES-17 can be used as an unbiased instrument since its equivalence is acceptable for various racial groups (Storm & Rothman, 2003). UWES is consistent with employee engagement conceptualisation. The scale will also help improve our understanding of the connection between the Big Five personality traits and work engagement.

1.11 DATA ANALYSIS

Statistical analysis was performed using the Statistical Package for the Social Sciences (IBM SPSS version 25.0). Item analysis was performed to determine the reliability of the measuring instruments. This included inspection of the scale means if an item was deleted, scale variance if an item was deleted, item-total correlation and reliability of the scale if an item was deleted. An item was excluded from analysis if its deletion would significantly increase the scale reliability coefficient, or if the item-total correlation value was less than 0.30. Cronbach alpha coefficients greater than 0.70 were deemed acceptable (Nunnally & Bernstein, 1994). A stepwise hierarchical regression analysis was also conducted to evaluate the relationship between the variables.

1.12 METHODS TO ENSURE VALIDITY AND RELIABILITY

The theoretical validity of this study was ensured through the conceptualisation of the variables (Big Five personality traits, work-family conflict, stress and work engagement). Leedy and Ormond (2013, p.6) define validity and reliability as reflecting “the degree to which we may have errors in our measurement”. Reliability and validity are quality insurance criteria used to standardise the questionnaires used for the research study data collection (Pietersen & Maree, 2012).

1.12.1 Validity

The validity of a questionnaire is defined by Polit and Beck (2010) as the degree to which the instrument measures what it intends to measure. The questionnaire should address all aspects of the issues being investigated appropriately. Face validity and content validity are the most frequently reported validity issues in the literature (Parahoo, 2006). Content validity reports that relevant items in the instrument cover all aspects under study and not posting irrelevant items (Parahoo, 2006).

A study or relationship's external validity implies generalising to other individuals, settings and times, and for well-defined target populations, but clearly differentiated from population-wide generalisation (Drost, 2011). In the current study, external

validity was assured by selecting a sample representing the total population, making use of purposive sampling. Validity is also important in the empirical part of the study and was assured by the use of validated psychometric instruments.

1.12.2 Reliability

The degree to which an evaluation instrument produces stable and consistent results can be defined as reliability (Meyer, Lombard, Warnich & Wolhuter, 2010). Reliability was assured by the fact that measuring instruments have been tested and has adaptive norm groups for South African individuals. Cronbach's coefficient alpha was used to determine the reliability of the questionnaires internal consistency. Appropriate statistical techniques that are congruent with the aims of this research were used to analyse the data.

1.13 ETHICAL CONSIDERATIONS

Ethical clearance has been obtained for this research from the Research Ethics Committee of UNISA. Permission to conduct the research was obtained from the participating organisation. During the research process, these important factors were taken into consideration:

- No harm was done to the participants or discomfort caused. All the participants were respected, and their rights and interests protected, including the dignity, privacy and confidentiality of participants, as well as their cultural differences;
- Every participant signed an informed consent form before taking part;
- All the data, information and results were kept confidential, and anonymity and privacy were assured to the participants. When the results were captured, participants' names were omitted, and a number was assigned to each. The completed questionnaires were accessed only by the researcher and the supervisor. The data was captured on a password-protected Excel spreadsheet, and only the researcher, supervisor and statistician had access to the data; and
- Participants were given the option to participate in the study and were always assured that they could withdraw at any time. All the information necessary was explained to the participants before taking part, including the nature, procedure, potential benefits and anticipated inconvenience of participation.

1.14 LIMITATIONS OF THE STUDY

The study had limitations, as it was conducted on a small sample. Not all participants completed their questionnaires, resulting in a low return rate.

1.15 CHAPTER LAYOUT

The chapters are presented in the following manner.

Chapter 1 Scientific orientation to the research

This chapter introduces the research topic and provides the background and motivation for the research as well as the variables that were analysed.

Chapter 2 Literature Review

This chapter contains a review of the relevant literature regarding the conceptualisation and contextualisation of the five personality traits, work-family conflict, stress, and work engagement.

Chapter 3 Research Article

This chapter defines and describes the constructs of the five personality traits, work-family conflict, stress, and work engagement, and their multifaceted dimensions. The background and outcomes of the theoretical framework and measurements of variables are discussed. Results are compiled, and the findings presented in the form of an article and the discussion of the findings are presented and communicated in a clear and articulate way.

Chapter 4 Conclusions, Limitations and Recommendations

This chapter examines the study's conclusions based on the stated aims of the research study, while the formulation of limitations and recommendations for literature review and empirical study were discussed.

1.16 CHAPTER SUMMARY

The scientific orientation to the research was discussed in Chapter 1. This included background and motivation, research issue, goals, paradigm perspective, research design and methodology. The chapter concluded with a layout of all the dissertation chapters.

CHAPTER 2 LITERATURE REVIEW

2.1 INTRODUCTION

This chapter looks at the literature on the Big Five personality traits, work-family conflict, stress, and work engagement. The literature is integrated towards formulating the central theoretical statement to be explored in the empirical study.

2.2 THE BIG FIVE PERSONALITY MODEL

Many definitions of personality have been recorded. Burger (2010) defines personality as the consistent behaviour patterns and intrapersonal processes that originate from within an individual, while Waite and Hawker (2009) refer to the qualities that form a person's character or the characteristic patterns of thought, feelings and behaviours that make a person unique. Larsen and Buss (2014) describe personality as the set of organised and relatively enduring psychological traits and mechanisms within the individual. For the purpose of this study, personality is defined as the typical or preferred way for a person to behave, think and feel (SHL, 2013).

In trait theories, personality is seen as a combination of traits (SHL, 2013). Trait theories provide a rationale for an individual's different response to stress in their environment; promote an understanding of sources that prove to be stressful for people; and, more importantly, assist in identifying potential strategies for coping more effectively (SHL, 2013).

Bergh and Theron (2006) define personality at work as the attributes that best fit the needs of the working environment, including the acquired work styles, behaviours, abilities and attitudes that are required to perform successfully in a specific job or role. It seems that the theory of personality traits (Bergh & Theron, 2006) can contribute to a better understanding of how people differ in their behavioural responses to the variety of factors affecting their working lives (Herbst, Van der Westhuizen & Visser, 2007).

There are several personality models through multiple studies. The model most widely accepted is the Five Factor model of personality, or the Big Five. In the literature, there is consensus that the five-factor model is one of the most prominent models in contemporary psychology to describe the most outstanding characteristics of personality (Goldberg, 1981, 1990; John & Srivastava, 1999). This model organises a wide range of individual characteristics into five dimensions of personality, namely: *Conscientiousness*, *Agreeableness*, *Neuroticism*, *Openness to Experience* and *Extraversion*.

Conscientiousness refers to the degree of efficiency and effectiveness with which an individual plan, organizes and performs tasks (Taylor & De Bruin, 2006) and includes the degree of discipline, control, order, effort, prudence and achievement needs of the individual. (Maltby, Day & Macaskill, 2010; Taylor & De Bruin, 2006). For example, the dimension has been linked with descriptions such as “persistent”, “organised”, “reliable”, “thorough”, “goal-directed”, “responsible”, “hardworking” and “achievement-oriented” (Barrick, Mount & Li, 2013; Sutherland, De Bruin & Crous, 2007). Evidence shows that *Conscientiousness* is a health and wellness predictor.

Templer (2012) describes *Agreeableness* in terms of collectivistic orientation in the analysis of individual and societal levels. An individual with collectivist behaviour demonstrates sensitivity to others and is more accommodating and compromising; such individuals avoid conflict and confrontation. Matzler, Renzl, Mooradian, Von Krogh and Mueller (2011) claim that while the Agreeableness trait was directly linked to the behaviours, attitudes and performance of the workplace, the mechanism mediating such a relationship was not well investigated. This is because of the unclear validity of personality measures in the application of human resources. It is assumed, however, that cooperative interactions and the desire to help others can best explain the relationship between workplace compatibility, attitudes and performance (Matzler et al., 2011).

Neuroticism means “a person’s emotional stability and the general tendency to experience negative affect in response to their environment” (Taylor & De Bruin, 2006,

p. 4). Individuals measuring high in *Neuroticism* tend to be easily upset and critical. They often feel guilt, sadness, hopelessness, anxiety and tension and tend to be emotionally volatile (Maltby et al., 2010; Taylor & De Bruin, 2006). Individuals with low *Neuroticism* levels are emotionally stable, even-tempered, calm, safe, well-adjusted, and stress-tolerant (Burger, 2004).

Openness to Experience (referred to as openness hereafter) differs from the other Big Five personality traits to some extent and is the least understood trait (Taylor & De Bruin, 2006). *Openness* is characterized by a profound scope of emotional and intellectual awareness and the need to broaden and examine experiences that can be seen in the imaginative, aesthetic, unconventional and curious nature of open people (McCrae & Costa, 1997, 2003). *Openness* seems to be a double-edged sword that intensifies both the positive and negative experiences encountered by individuals (McCrae & Costa, 1991, 1997).

Extraversion includes temperamental as well as interpersonal dimensions: individuals with such a high level of sensitivity to positive emotions and potential rewards are assertive, active and vigorous in their actions and social relations. (Michell, Clark & Jaramillo, 2011).

In determining how women behave, react and engage in the workplace, understanding the dynamics associated with personality in the workplace plays an important role. It also provides organisations with a better understanding of how women with different personalities can manage work-family conflict, stress, and work engagement.

2.3 WORK-FAMILY CONFLICT

Bakker, Demerouti and Dollard (2008) described work-family conflict as a strain that occurs within the self, which is transferred across different areas of life as a result of different individual demands. Powell and Greenhaus (2010) describe work-family conflict as a type of inter-role conflict in which the requirements for fulfilling one role (work / family) make it difficult to fulfil the requirements of the other role (family / work). The essence of this theory is that multiple role requirements and responsibilities

cannot be fulfilled simultaneously, resulting in negative outcomes such as distress and a reduced level of work engagement (Rantanen, Kinnunen, Feldt & Pulkkinen, 2008; Sidani & Al Hakim, 2012).

2.3.1 Dimensions of work-family conflict

Claims that work-family conflicts arise as a result of time-based conflict, strain-based conflict, and behaviour-based conflict are increasingly being supported (Jacobs, Mostert & Pienaar, 2008; McMillan, Morris & Atchley, 2011). According to these studies, any characteristic role that affects the time involvement, strain, or behaviour of a person within a role can result in conflict between that role and another role.

Time-based conflict. This kind of strife occurs if a person's time fights for work and family roles. Only one domain at a time is allowed to spend quality time at the expense of the other domain. There are two forms of time-based conflict: (1) time pressures related to one role can make it impossible to meet the expectations of the other role or (2) one can worry about meeting one role's expectations while trying to fulfil other role responsibilities (Aryee, 2005). Time-based conflict is the result of time pressures in both the workplace and the family.

Strain-based conflict. The conflict occurs when a strain created from a role affects the extent to which symptoms like stress, anxiety, depression and fatigue may be seen in another role (Aryee, 2005). It is difficult to perform adequately in the other role due to the strain in one role, and both roles become incompatible.

When working women have a high level of stress, they are not satisfied because they have several roles that cause their physical and mental resources to become depleted (Berge, 2018). There is a sense of overload and roles for those with excessive demands. In cases of overwhelming demand for their roles, high conflicts can result both at work and in the home and these demands lead to less time to dedicate to either role (Berge, 2018).

Behaviour-based conflict. This type of conflict arises when certain behaviours that are required in one area are inconsistent with another (Shaffer, Joplin & Hsu, 2011). For example, the workplace often requires that the worker is performance-focused, professional and driven, while one should adopt such behaviours as sensitivity, care, love and spontaneity in the family roles. In earlier studies, little attention was given to behaviour-based conflicts and empirical research is needed to find sources of conflict for a person.

2.3.2 Consequences of work-family conflict

In a meta-analytical review, Amstad et al. (2011) reported that women may have work related results of family-work disputes, such as higher absenteeism, intention for leave, turnover, behaviour, and burnout. This could lead to loss of productivity and profitability in organisations (Amstad et al., 2011). Working women also may suffer from familial conflict outcomes, such as lower marital satisfaction, satisfaction with their lives, families, and a higher family strain (Amstad et al., 2011). Work-family conflict may also result in domain-unspecific outcomes (Amstad et al., 2011). For example, depression and anxiety are shown to have negative consequences of conflict experiences between families and work (Amstad et al., 2011; Frone, Russell & Barnes, 1996; Mihelic & Tekavcic, 2014; Rantanen, Pulkinen & Kinnunen, 2005). In addition, other emotional disorders, including emotional exhaustion, have been reported (Ilies, De Pater Lim & Binnewies, 2012) and psychological distress (Nohe & Sonntag, 2014; Rantanen et al., 2005). There have been studies that have reported physical disorders from conflict between work and family, such as high blood pressure and burnout. (Amstad et al., 2011; Nohe & Sonntag, 2014). In serious cases, child welfare in conflict-affected homes may be affected. For example, children who do not get quality time with their mom may be neglected, leading to emotional distress and depression (Amstad et al., 2011).

Conflict between work and the family has been associated with certain characteristics, like *Neuroticism* (Bryant et al., 2009; Malekiha, Abedi & Baghban, 2012), *Extraversion* (Smoot, 2005), and *Agreeableness* (Baltes, Zhdanova & Clark, 2011). Women with high *Extraversion* tendency are positive about challenges and apply pro-active

problem-solving strategies in order to cope with complications. (Michell, Clark & Jaramillo, 2011). Women who have a high score in terms of *Agreeableness* show behaviours like gallant, flexible, collaborative and forbearing while also looking for social support (Michel et al., 2011). Women who score high in *Agreeableness* tend to employ coping strategies for work and family behaviour that affect the extent of conflict between work and family (Baltes et al., 2011).

2.3.3 Antecedents of work-family conflict

In order to avoid harmful results of conflict between family and work, it is important to understand the factors that contribute to conflict experienced by working women. Work-life conflict may have a negative impact, family roles can impede work roles and work roles can impair family roles (Schmidt, 2011). Another contribution was the finding of interdependent relations between conflict between family and employment, as well as global stressors in family situations and family roles (Smoktunowicz, Lesnierowska, Cieslak & Benight, 2017). *Neuroticism* appears to be the most important factor, moderately linked to higher family and work conflicts (Kinnunen, Rantanen, Mauno & Peeters, 2013). Moreover, an internal control locus (a core subscale of auto-evaluation) had a negative connection to conflicts between family and work (Michel et al., 2011; Mihelic & Tekavcic, 2014).

A lengthy study with eight different professions displayed the same relation between self-esteem (a key self-assessment subscale) and conflicts in working-family situations (Innstrand, Langballe, Espnes, Aasland & Falkum, 2010; Mihelic & Tekavcic, 2014). Byron (2005) and Michel, Clark and Jaramillo (2011) analytical reviews have concluded that work-to-family conflict and family-to-work conflict are two separate concepts. In other words, the two conflicts seem to have a different history (Mihelic & Tekavcic, 2014). The experience of the family-to-work conflicts is related to the working features, such as hours worked a week, stress, flexibility and level of employment participation (Michel et al., 2011). The experiences of the work-family conflict are also linked to family-related features such as hours of work, family stress, number of children, child age, support for the family and marital status (Burke, Fiksenbeum, Koyuncu & Jing, 2011; Michel et al., 2011).

Research shows that social support is an antecedent of conflict between family and work (Greenhaus, Ziegert & Allen, 2012; Michel et al., 2011). More specifically, support from co-workers and supervisors helps reduce conflicts between work and family, while support from friends, families, or partners helps reduce conflicts between family and work (Michel et al., 2011). The Byron (2005) study highlighted the similar relationship with work-to-family conflicts and family-to-work conflict, family support and the childhood age. This history was therefore overlapping. The above-mentioned research demonstrates that even if all working women have work-family conflict and stress at home and at work, the way women face these challenges is different because of their personality.

2.3.4 Theoretical framework underlying work-family conflict

The literature review presents several theoretical models for understanding the interface between workplace and family. These include compensation, drainage of resources, enrichment, congruence, conflicts between work and family members, spills, segmentation, ease of integration and ecological theories (Frone, 2003; Greenhaus & Powell, 2006). The following section shows the theoretical framework behind the conflict between work and family.

2.3.5 Predictors of work-family conflict

In this section, the researcher discusses overtime work, work overload, external work pressures, drive and family supportive supervisor behaviour as work-family conflict predictors between working women.

2.3.5.1 Overtime work

Time and demand are the predictors of conflicts between work and family (Frone, Russell & Cooper, 1992; Greenhaus & Beutell, 1985; Skinner & Pocock, 2008). The British economy scientist John Maynard Keynes forecast in 1930 that only a fifteen-hour week would be needed by 2030 because technology is going to take up a great deal of the job we do (Keynes, 1933). The connection between working and family-related overtime can be explained by the fact that working longer limits the time spent on individual non-work activities. This time reduction in other activities has proven to

be linked to family and/or health problems (Frone, Yardley & Markel, 1997; Kinnunen, Feldt, Geurts & Pulkkinen, 2006; O'Driscoll, Ilgen & Hildreth, 1992). Wallace (1997) has found that highly engagement employees, who are motivated by employment, often white-collar workers, can work additional hours voluntarily because of the enjoyment of their jobs and do not consider that behaviour to invade other spheres of their lives. This is not necessarily a direct relationship. For example, Major et al. (2002) investigations have shown several overtime histories that have helped to contribute to work-family conflicts and, subsequently, well-being, such as workload, organisational expectations and awards. Similarly, O'Driscoll, Ilge and Hildreth (1992) reported that a conflict between family and work mediated a relationship that led to psychological stress between work and life satisfaction. The findings, however, seem to make the relation between long hours and work-family conflict more conclusive than the connection between long hours and wellbeing.

The relationship between the number of hours worked and the well-being, which was researched by Burke and Fiksenbaum, (2009), shows that while women who are workaholics as well as passionate worker women are heavy work investors and work long hours, women who are workaholics report lower levels of well-being than the latter.

2.3.5.2 Work Overload

The overload of work was recognised as the strongest and the most consistent predictor of conflicts between work-family conflicts (Skinner & Pocock, 2008). Moreover, work overload is likely to have a dual effect on the hours worked by employees and contributing to health concerns (Frone, Russell & Cooper 1992; Frone, Yardley & Markel 1997). While Crawford, LePine and Rich (2010) and Van den Broeck, De Cuyper, De Witte and Vansteenkiste (2010) identified job overload as a challenge that results in a positive outcome, its role in the family-related conflict and well-being is most likely negative.

Working women sometimes handle the conflict between work and family by developing coping strategies that can bring positive results. Examples of such coping strategies

are priority, delegation and the change of attitude to family and work demand. If such strategies are not developed, they could lead to several negative reactions affecting either field, such as burnout, depression, anxiety, insomnia, absenteeism or poor working performance (Oosthuizen & Mostert, 2010). A meta-analysis carried out by Allen, Johnson, Saboe, Cho and Evans (2012) called for additional personality research as a contributor to conflict between work and the family. In case the association can be understood, organisations can match the characteristics of women and find the best fitness for the job, which can reduce conflict and stress in the workplace and increase the commitment to work.

2.4 STRESS

Stress is a key and influential factor for competitive and changing organisations today, and a strong predictor of different individual and work results (Singh & Kumar-Dubey, 2011). Stress is an expression that is hard to define and yet women can recognize that they are stressed by the physical, emotional, mental and compartmental response (Murray, 2011). In Radhakrishnan and Jins, (2012), stress refers to the sum of a person's physical, mental and emotional tension or feeling because of having their environment harmed and/or threatened with human well-being.

Different classifications give insights into stress theory. Leung, Chan and Yu (2009) classify stressors as stressors for tasks, physical stressors, psychological stressors and stressors for organisation. Task stressors include excessive workload, conflict of roles, and ambiguity. The sources of stress within the organisation (e.g., organizational structure and career development environment) are organisational stressors. The environmental stressors that exist in the workplace or at home (e.g. poor working environment) are physical stressors (Leung, Chan & Yu, 2009).

The brain's stress reaction can be triggered by several factors (National Mental Health Institute, 2015). These triggers can be mild to extreme, with short to long-term variations. Stress is not always bad, because the stress response is an instinct of survival. If the stress response persists for too long, however, it can have deleterious effects on the organism (National Mental Health Institute, 2015). For example,

neurotransmitters needed for combat or flight reactions in cases of chronic stress are not needed in daily life. Even though some stress levels are considered normal and healthy, continuous stress can affect working women both physically and mentally. It could affect the immune system and other major body systems would not work normally (National Mental Health Institute, 2015).

2.4.1 Antecedents of stress

The demands related to roles, lack of resources, insufficient support and time to be aware of the demands of the overall job are often identified as a cause of stress among working women (Gillespie, Walsh, Winefield, Dua & Stough, 2001).

2.4.2 Consequences of stress

Work stress was identified as one of the major issues within the working environment of the European Union (Bell et al. 2012). Job stress has been linked to adverse effects on psychological and physical health for working women, which are a significant emotional cost to the wellbeing of women and which have a substantial financial burden on organisational performance (Bell et al, 2012). The International Labour Organisation (ILO, 2013) has found that almost 10 percentages of accidents at work relate to stress, and therefore stress management can help maintain organisational harmony. The sustainability of current values and working practices is questioned by rising levels of stress and sickness related absences (Lewis, Gambles & Rapapaport, 2007).

Nearly every working woman experiences a certain kind of stress in her life. While some stress may actually be healthy, acute stress causes many physiological responses that can lead to health problems. Acute stress affects mentality, problem solving, decision-making and the ability to work efficiently and effectively (Lyon 2012). A stressor that can be aggressive for a woman may not be so strong for another. Personality is believed to play a complex role in the perception of stress from woman to woman (Ebstrup, Eplov, Pisinger & Jorensen, 2011).

Considerable research has been conducted about personality and perceived stress, which specifically reports that people with high levels of *Neuroticism* are more likely to perceive life events as highly stressful, whereas those with high levels of *Extraversion* are less likely to perceive life- events as stressful (Ebstrup et al, 2011). Ebstrup et al. (2011) investigated the association of the NEO-PI five-factor personality model with stress. Their survey examined the relationship of the 5-factor personality model with stress. Mroczek and Almeida (2004) replicated the study of the day-to-day stress levels and the 5-factor personality model. These researchers report that women with higher *Neuroticism* react more aversively and negatively to stressful events. Both studies showed an important positive correlation between perceived stress and the level of *Neuroticism*, and that women with higher *Neuroticism* reported higher levels of stress on a given day (Mroczek & Almeida, 2004). Additional significant findings included that *Extraversion* was significantly negatively correlated with perceived stress (Mroczek & Almeida, 2004).

2.4.3 Factors that reduce stress

Factors that have been found to reduce stress among working women are discussed next.

2.4.3.1 Social support

Kossek and Lautsch (2012) define social support as working women's belief that they are loved and looked after, valued, and a feeling of having access to direct and indirect relationships which provide information, emotional feeling and assistance as a source of help. A crucial factor in reducing employment stress is social support. Literature offers multiple social support definitions. Social support is defined as "supporting an individual from social relationships to others, groups and the larger community and the perception that someone is being cared for." Skomorovsky (2014, p. 44). Overdale and Gardner (2012, p. 313) define social support as ' information that leads one to believe in being cared for and loved, appreciated and cherished and integrated in the communications and mutual obligation network. '

2.4.3.2 Workplace social support

A further important form of support is social care at the workplace, which is defined as "the extent in which working women see their well-being as valued by sources at work as supervisors and the broader organisation in which they are incorporated and the perception that these sources contribute to their well-being" (Kossek, Pichler, Bodner & Hammer, 2011, p. 291).

2.4.3.3 Organisation policy

Organisational family support not only consists of formal provisions, but also indirect assistance such as a working-family climate where employees feel that they do not need to sacrifice their family role efficiency to be able to perform their duties or receive assistance from supervisors and colleagues (Kossek et al. 2011). Several studies have shown that the direct supervisor's role is often more important than any official contribution. Primecz et al. (2014) notes that direct supervisors and colleagues have the largest influence on the extent to which workers can benefit from alternative schedules or mothers can return to work following maternity leave.

Working women require support from various sources so that they can effectively fulfil their job and family duties. The absence of such support constantly causes women to worry about their children's well-being and adaptation. In addition, poor physical and emotional health is likely to be experienced by women without social support (Cook, 2012; Whitley, Fuller-Thomson & Brennenstuhl, 2015). Tucker and Kelly (2009) suggested that women, regardless of their personality, need support, support from their families, neighbourhoods or communities to function efficiently. Women supported by their employees and others have been better able to successfully fulfil expectations related to work and the role of their families (Ferguson, Carlson, Zivnuuska & Whitten 2012).

2.5 WORK ENGAGEMENT

Positive psychology, a branch which concentrates on well-being and strength and not on human weaknesses and negative results, has shifted from burnout to work engagement (Schaufeli & Bakker, 2010). Work engagement is an indicator of a personal (energetic) resource which the employees bring into the organisation. Work

engagement is defined as "the positive and fulfilling state of mind, which is characterised by vigour, dedication, and absorption." (Schaufeli et al., 2002, p. 74). Vigour refers to employees who are mentally resilient while at work, while being prepared to invest effort and stay constant in the face of difficulties (Schaufeli et al., 2002). Dedication refers "to meaning, enthusiasm, inspiration and pride and challenge" (Schaufeli et al. 2002, p. 74), and absorption means that people focus fully on their work and get so involved that time goes fast, and it is difficult to detach themselves from their task (Schaufeli et al., 2002). Time worked can occasionally be stressful but involves people and gives meaning to their working lives (Dåderman & Basinska 2016). In the 1990s, the term "work engagement" was used interchangeably with "employee engagement". Employee engagement refers, however, to our relationship with the organisation while work engagement specifically refers to working relationships (Schaufeli & Bakker, 2010). Figure 2 demonstrates the antecedents and consequences of work engagement.

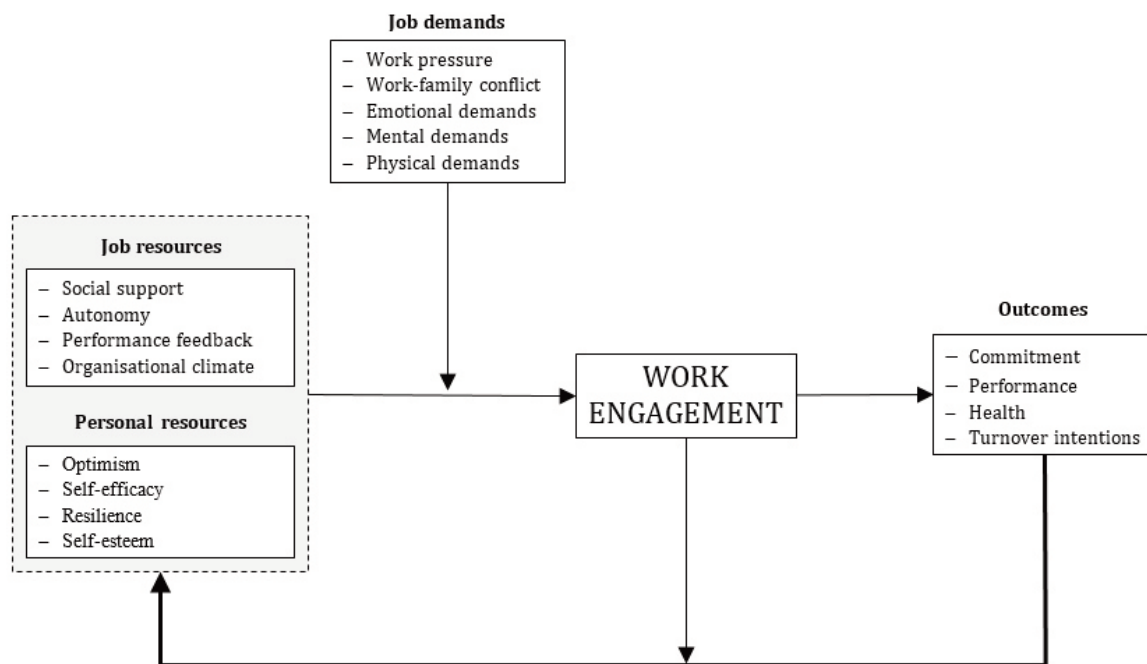


Figure 2: Antecedents and consequences of work engagement (Bakker & Demerouti, 2008; Halbesleben, 2010)

2.5.1 Antecedents of work engagement

Work engagement is positively connected with job characteristics that can be described as resources, motivators or stimulators, such as social support of employees and superiors, feedback on performance, coaching, job autonomy, variety of tasks and training centres (Schaufeli & Bakker 2001). The level of experienced working commitment is positive in connection with the extent to which employees recovered on their prior working day, reports Sonnentag (2003). In addition, self-efficacy is related positively to work engagement (Salanova, Llorens, Cifre, Martinez & Schaufeli, 2003), and self-efficacy seems to precede both engagement and commitment (Salesava et al, 2003).

Some women have no symptoms of stress irrespective of high job demands and long working hours (Schaufeli & Bakker, 2001). Rather, they appeared to be pleased to work hard and to deal with job requirements. From a positive viewpoint of psychology (Seligman & Csikszentmihalyi, 2000), these people could be described as involved in their work. In addition, employees increasingly want to experience a sense of purpose and meaningfulness at work (Geldenhuys, Šaba & Venter, 2014).

If demands for work and family are not offset, tensions often arise, resulting in family-work conflicts and ultimately in negative results such as decreased job fulfilment and lower working performance (Bagger & Li, 2011). Organisations must make sure that working women find their jobs pleasant (Milyavskaya, Ma, Koestner, Lydon & Mclure, 2011). It is therefore crucial for organisations to foster work engagement among working women. If they do so, working women will receive the support needed, which has been shown to result in working women feeling worthy and valued in their organisation (Higgs, 2011).

2.5.2 Consequences of work engagement

Despite the positive relationships between work engagement and important organisational results, studies have shown that absorption at work may cost employee-home balance. Bakker, Albrecht and Leiter (2011) note a possible undesirable side to engagement and point to a probable “over engagement” by employees, a sentiment supported by Halbesleben (2011). This unwanted side may

occur if employees take a job home which affects their family lives (Becker, Gates & Newsom, 2004). This behaviour may undermine the ability of employee recovery and lead to health problems (Geurts, Kompier, Roxburgh & Houtman 2003). Bakker et al. (2011) further suggested that a high level of engagement could lead to workaholism. Where a workaholic works long hours, without pressure and enjoyment, for the action itself, a dedicated worker does it for his choice and pleasure (Porter, 1996). Beckers et al. (2004) found that this statement supports a positive relationship between work engagement, overtime work and working at home. The well-being of highly engaged employees is negatively affected by workplace stressors, that's according to Britt, Castro and Adler (2005) and Sonnentag, Mojza and Binnewies and Scholl (2008). So, while engagement cannot be described as a demand for work, it may have elements that, under certain conditions, make it a stressor, for example, in emotionally demanding jobs.

In previous research, work-family conflict was recognised as an important factor affecting not only the wellbeing of working women but also their employers (Kossek, Baltes & Matthews, 2011). It is important to know how personality contributes to the work-family conflict experience, stress and engagement, in order to foster welfare among women in the workplace. Not only will it help working women to understand how to manage their work and family responsibilities, it will help organisations to better understand the challenges women face on a daily basis and provide them with resources to effectively perform their tasks.

2.6 THEORETICAL RELATIONSHIP BETWEEN THE BIG FIVE PERSONALITY TRAITS, WORK-FAMILY CONFLICT, STRESS AND WORK ENGAGEMENT

Literature suggests that employees with various characteristics are motivated by various factors that may be either strength or weakness, depending on the employee's situation or resources (Bandura, 2001; Inceoglu & Warr, 2012). Those traits determine whether working women can manage conflicts, stress and work in the workplace. Wayne, Musisca and Fleeson (2004) have demonstrated a negative relation between Conscientiousness and work-family conflict. *Conscientious* women are able to plan

and organise and work effectively, thereby reducing conflicts between the work and family. This is confirmed by a meta-analysis by Allen et al. (2012) of dispositional variables and family conflict, which shows that *Conscientious* women have the skills to better manage their time and work, and family roles and responsibility as well as forms of conflicts because they are consistently associated with job results (Barrick & Mount, 1992). *Conscientious* persons are described as disciplined, reliable, self-controlled, orderly, orderly, and willing (Taylor & De Bruin, 2006) and effective in time and stress management (Westerman & Simmons, 2007). *Conscientiousness* was shown not only to predict performance significantly (Barrick & Mount, 1991) across occupational groups but also engagement (Mostert & Rothmann, 2006). *Conscientious* people are driven to achieve their end goals, even if they are carried out outside of the workplace. Kim et al. (2009) examined all five personality dimensions and stated that *Conscientiousness* was the main characteristic of personality which influenced engagement.

In an expert study by Wayne et al. (2004), *Agreeableness* is negatively linked to work-family conflict. In relation to work-family conflict, Allen et al. (2012) found small significant impacts of *Agreeableness*. However, no significant relationship between work-family conflict was found in Rantanen's et al. (2005) longitudinal study. Their findings demonstrated a strong positive connection between *Agreeableness* and distress; however, there was no direct connection to the agreement as a predictor to a conflict between family and work. Rantanen et al (2005) argue that *Agreeableness* is not as significant as other traits, such as *Neuroticism*, in predicting work-family conflicts. Kim, Shin, and Swanger (2009) suggested that *Agreeableness* might be an unimportant predictor of engagement. Even if *Agreeableness* was not a predictor of work engagement, its effect on dedication was slightly positive (Kim, Shin & Swanger, 2009).

Positive relationships between *Neuroticism* and work-family conflict have been shown in previous studies. Several cross-sectional studies have found that *Neuroticism* is a strong predictor of conflict between work and family (Andreassi 2011; Blanch & Aluja, 2009; Braunstein-Bercovits, Frish- Burstein & Benjamin, 2012; Wayne et al., 2004).

As with the other four factors of the model, *Neuroticism* "consists of two poles of the one dimension: emotional stability and negative emotionality" (Abbasi, 2011, p. 2). Thus, working women who experience higher levels of *Neuroticism* are more likely to be anxious, stressful and negative. Opie and Henn (2013) have reported *Neuroticism* to have a negative effect on work engagement. The main impact of *Neuroticism* on work engagement was expected to be found, as a previous study found that work engagement is linked with low *Neuroticism* (Jeong et al., 2009). Literature also shows that *Neuroticism* is positively linked with burnout (a well-being results often seen as the contrast to the engagement at work) (Langelaan, Bakker, van Doornen & Schaufeli, 2006; Morgan & De Bruin, 2010).

Earlier researchers refer to culture (Hakel, 1974; Norman, 1963) or intellect (Hogan, 1983; John, 1989) as the *Open to Experience*. Women who measure high in this trait are open to new culture, intellect and creativity, insight, curiosity and imagination (Barrick & Mount, 1991). They tend to be flexible and think in different ways and therefore more open to change. Working women who possess this trait are willing to transfer skills and compartments that have been learned from one domain to another and better solve problems by creative thinking (Michel et al., 2011).

In the face of work-family conflicts, women with high levels of *Extraversion* tend to perceive problems positively while seeking social support and using proactive problem resolution strategies to tackle problems, and therefore improve functioning in their work and family roles (Michael et al., 2011). It has also been shown that women who score high in *Extraversion* are strongly committed to work and are positive in terms of paid as well as volunteer work (George, Helson & John, 2011). Swickert et al. (2002) investigated the effects of *Extraversion* on stress among psychology students. Results showed that *Extraversion* was related positively to stress. Schneider, Rench, Lyons and Riffle (2012) have examined the impact of personality on stress reactions and the findings show that *extraversion* affects stress responses positively and negatively.

Stress affects the productivity, performance, behaviour and satisfaction of working women directly (Onay & Kılci, 2011, p. 364). The study of conflict between work and

family shows that numerous factors in the workplace have contributed and affect the family environment (Jacobs, 2016). Opie and Henn's (2013) study showed that working women could not achieve optimum concentration and dedicate the time and energy needed in their roles because of work-family conflict.

Opie and Henn (2013) have confirmed the negative effect of work-family conflict on work engagement. The results show that conflict between work and family roles predicted work engagement negatively. The conflict between work and family can decrease the extent to which an individual is engaged. The study also found that negative work-home interaction and negative home-work interaction adversely affect enthusiasm for work and work engagement. This leads to a decrease in the level of engagement, since women in this position are too worried about the interference between work and the home environment to do meaningful work (Opie & Henn, 2013).

Hallberg and Schaufeli (2006) said that work engagement was more linked to stress-related health complaints (e.g., emotional weariness and depressing symptoms) than work involvement and organisational commitment. Some indications are, however, that engagement is positively linked to medical conditions, that is, low levels of depression and distress (Schaufeli, Taris & Van Rhenen, 2003), and psychological complaints (Demerouti, Bakker, Janssen & Schaufeli, 2001). The theoretical implication here is that women who engage in work are generally well adapted and less likely to experience negative emotions in the changes in their working environment.

Stress at work impedes happiness at the workplace and engagement is an important part of happiness. Women who know what contributes to their stress can find strategies for managing family and work responsibilities.

2.7 CHAPTER SUMMARY

The focus areas in this chapter were personality, work-family conflict, stress and engagement. The chapter started by introducing the concepts of personality, work

family conflict, stress and work engagement and the connection that these variables have with each other. The research article is provided in Chapter 3.

CHAPTER 3: RESEARCH ARTICLE

Who women are helps them to cope and be engaged at work: Personality, work-family conflict, stress and work engagement.

Orientation: Working women with various personality traits tend to be motivated by different triggers which can be either a strength or weakness in managing their work and family duties, stress and work.

Research purpose: The primary aim of this research study was to investigate the relationship that the Big Five personality traits might have with work-family conflict, stress and work engagement among working women.

Motivation for the study: As there is limited research in South Africa on the relationship between personality traits and work-family conflict, it is worth considering why women who possess certain personality traits can manage work-family conflict, stress and be engaged at work while others are unable to manage their work and family responsibilities.

Research design: A quantitative cross-sectional survey design was used for this study.

Main findings: There was a significant positive correlation between *Neuroticism* and stress. Working women with higher levels of *Neuroticism* will therefore be more likely to be anxious, stressful and negative. Working women who possess some levels of *Extraversion*, *Agreeableness* and *Conscientiousness* can foster a high level of engagement in the workplace.

Practical implications: Organisations should make a greater effort to focus on the interface of working women's families, their health and their wellbeing. Understanding the relationship between personality traits and work-family conflict, stress and work engagement will help provide guidelines to improve women's life-balance.

Value added: This study might highlight the interventions needed in making sure that women are supported, and resources are made available for them to manage their work and family life.

INTRODUCTION

Substantial progress in women's development has been seen over the past decade in South Africa. The rate of unemployment amongst women has however increased from 23.2% in the first quarter of 2008 to 27.2% in the second quarter of 2018 in the past decade (Statistics South Africa, 2018). For some women, managing their work and family duties could be a challenge.

Work-family conflict has arisen because of an increase in the number of working women, dual-earner couples, and the number of hours spent at work (Koekermoer & Mostert, 2010). Conflict between family and work was a problem that affected women, their families and their jobs (Smith, 2010). Conflict between family and work responsibilities has led to higher turnover, absenteeism, stress, labour tensions, burnout and lower productivity (Abendroth, Van der Lippe & Maas, 2012; Jang, Park & Zippay, 2011). Although all women are confronted with challenges, some have clearly succeeded more than others to handle work-family conflict (Riordan & Louw-Potgieter, 2011; Wallace & Smith, 2011). It thus seems that the personality of working women plays a significant role in how they manage work-family conflict (Aryee, Srinivas & Tan, 2005). Personality traits might therefore influence a women's level of engagement and perception of work stress, according to Györkös, Becker, Massoudi, Bruin and Rossier (2012) and Rossier, Zecca, Stauffer, Maggiori and Dauwalder (2012).

Why is it then that women who possess certain personality traits are able to manage work-family conflict, stress and be engaged at work while others are unable to manage their work and family responsibilities? Research shows that some of the Big Five personality traits and working engagement are significantly related. A clear and positive relation between work engagement and all dimensions of the Big Five personality traits have been established (Moshoeu, 2017). However, literature

indicates that various triggers that may be strong or weak motivate women with certain personality traits depending on their situation or resources (Inceoglu & Warr, 2012). In addition, women with certain personality traits may modify their motivational process differently (Goldberg, 1992), and assess a similar situation in a different way (Liao, Yang, Wang, Drown & Shi, 2013).

Kinnunen et al. (2003) argue that there is only a small body of knowledge in the subject of the connection between personality and working-family domain. Thomson and De Bruin (2007) point out that there is value in investigating the impact of personality on work-family conflict and work engagement. More engaged women and women who are less committed to work may differ in certain aspects and their employment, but few studies have been published or models of the possible contributors to employment. A small number of optimism and self-efficacy reports have been found in the meta-analysis by Halbesleben (2010), but there appears to be no comprehensive information on a wider range of traits (Xanthopoulou, Bakker, Demerouti & Schaufeli, 2009a). There is, therefore, a need for further information and theorisation.

This research thus aimed at exploring the role of personality in work-family conflict, stress and work engagement of working women. Women who understand what is contributing to their stress are able to find strategies to manage their work and family responsibilities. Since this study focuses on the impact of the Big five personality traits on family conflict, stress and work engagement, it can highlight the interventions necessary to ensure that women are supported, and resources are provided for them to manage their work and family life.

The theoretical perspectives of the Big Five personality traits, work-family conflict, stress, and work engagement are discussed first. Then the survey is discussed followed by a discussion of the findings leading to insights for interventions.

Literature Review

Due to changes in role and work pressure on employees today, women face higher levels of stress in their everyday lives. Work and family are thus currently seen as the most important areas for women in their working lives, with the greatest challenge being to integrate these roles without adverse effects on health and well-being (Jaga, Bagraim & Williams, 2013).

The personality of working women has shown to play a significant role in how they manage work-family conflict (Aryee, Srinivas & Tan, 2005). Personality traits can influence a person's level of engagement and perception of work stress (Györkös, Becker, Massoudi, Bruin & Rossier, 2012; Rossier, Zecca, Stauffer, Maggiori & Dauwalder, 2012). However, literature indicates that various triggers, which may be strong or weak, depending on their situation or resources (Inceoglu & Warr, 2012), motivate women who have certain personality traits. In addition, women with certain personality traits may also modify their motivational process differently (Goldberg, 1992), and assess a similar situation in a different way (Liao, Yang, Wang, Drown & Shi, 2013). It is therefore relevant to discuss the various theories underpinning this research namely, the Big Five personality model, family-work conflict, stress and work engagement.

The Big Five factor model of personality

The Basic Traits Inventory is a personality instrument devised by Taylor and de Bruin (2006), based on the FFM and established to be a cross-culturally valid instrument for South Africa. Pervin and Cervone (2010) define personality as “psychological qualities that contribute to an individual’s enduring and distinctive patterns of doing things” (p. 8). Personality traits have been documented as a relatively stable set of qualities and environmental-related feelings and behaviour (Costa & McCrea, 1992). The Big Five personality factors are labelled as *Conscientiousness*, *Neuroticism*, *Agreeableness*, *Extraversion* and *Openness to Experience*.

Conscientiousness is underpinned by individual differences between planning, organisation and performance (Costa & McCrae, 1991). More specifically, those

individuals with high scores in this trait are deliberate, determined, timely, reliable, organized, highly willing and usually achieve academic or organisational success (Michael, Handfield-Jones & Alexrod, 2011). Individuals who scores low on *Conscientiousness* are, on the other hand inclined to be careless, aimless, and unreliable in working towards their aims.

The *Neuroticism* dimension describes the ability to adapt or emotional stability versus maladjustment, according to Costa and McCrae (1991). Persons with high levels of *Neuroticism* have emotional instability and tend to be worried, fearful, culpable and sorrowful, angry, embarrassing, and disgusted (Michel et al., 2011). Individuals measuring low on *Neuroticism*, on the other hand, are emotionally stable, uniform, relaxed and tend to have calm characteristics. Furthermore, people with high levels of *Neuroticism* have a lower chance of controlling their impulses and handling stressful situations without getting upset (Michel et al, 2011).

Agreeableness is the dimension that deals mainly with interpersonal tendencies (Costa & McCrae, 1991). A person with a high level of *Agreeableness* is usually characterized as helpful, friendly and caring for others (Taylor & De Bruin 2006). These authors note in contrast that a person who measures low level on *Agreeableness* tend to be egocentric, competitive, irritable and sceptical of the intentions of other persons. Women who have a high level of *Agreeableness* seem likely to help and/or please others, such as colleagues or family members (Baltes, Clark & Chakrabarti, 2010).

Extraversion evaluates the interpersonal interaction and activity in quantity and intensity (Pervin, 1996). People with high scores on *Extraversion* are known as extraverts and have features of sociability, affirmativeness, conversational activity and a high level of activity. Extraverts tend to be cheerful, vigorous and optimistic. By contrast, individuals with a low score are called introverts and can typically be described as reserved, independent and quiet (Michel et al. 2011).

Openness to Experience has been depicted with elements such as active imagination, aesthetical sensitivity, intellectual curiosity, variety preference and judgment

independence (Costa & McCrae, 1991). Individuals that are characterized as high in this dimension are curious about both internal and external worlds and willing to entertain new and original values and ideas. Instead, people who are not as comfortable in this respect prefer familiar to novel and usually have muted emotional responses.

The Big Five features describe and explain differences in the way people think, feel and act in various situations. They give working women their identity and their uniqueness, including how they address and face challenges at work and in their family. All five personality dimensions are associated with positive work attitudes and work performance (Bjørkelo, Einarsen & Matthiesen, 2010, Chiaburu, Oh, Berry, Li & Gardner, 2011). Other researchers have documented that personality traits forecast global results like health care, subjective well-being, satisfaction at work, and performance (Zhai, Willis, O'Shea, Zhai & Yang, 2013). Due to its stability, the Big Five personality framework is thought to capture critically stable differences between working women's management of work and family responsibilities and their work engagement (McCrae & Costa, 2008). Personality traits can have a direct or indirect effect on work-family conflict.

Work-family conflict

Work / non-working interface research began based on the principle of role theory, whereby people take a variety of roles, each with their own unique set of behaviours, standards and expectations (Kahn, Wolfe, Quinn, Snoek & Rosenthal, 1964). The theory of conflict between family and work is based on the principle of role scarcity, according to which people have a fixed amount of resources (time and energy) and different roles from the same resource pool can lead to overload of functions or conflict between functioning (Jain & Nair, 2013). The concept of work and family balance has received a lot of attention, since women have joined the work force in organisations and moved to higher positions (Ruppner, 2013). According to Jang and Zippay (2011), conflict between work and the family arises where the exercise of one function interferes with the time and demands of other roles and the stress of one role over another.

Three forms of work-family conflict have been identified in Greenhaus and Beutell (1985). Firstly, they identified *time-based conflict*, which represents the pressure arising when requests from one field make the demands from another field physically impossible. Secondly *strain-based conflict*, which concern stresses, such as tension, fatigue, depression, and fear, which can develop in one area and make it hard to meet the requirements of another domain. Thirdly, they identified *behaviour-based conflict* resulting from behaviour that is different from behaviour in another role.

Certain personality traits such as *Conscientiousness* and *Agreeableness* can be used as protectors against conflicts that arise between the workplace and family, while other variables, such as *Neuroticism*, can be risk factors that predispose women to cope with work-family conflict (Rantanen, Pulkkinen & Kinnunen, 2005). In a study by Mahasha (2016), the working women indicated that effectiveness in the workplace means having a good work plan, organisation, time management and delegation. These women score high on *Conscientiousness*. In managing family responsibilities, the same skills are applied. The participants felt that all family and work responsibilities would be difficult to manage without delegation (Mahasha, 2016). Participants demonstrated their ability to delegate certain housework to domestic workers and some work to subordinates. The participant's strategies are similar to the Cheung and Halpern (2010) model, known as SOC (Selection, Optimisation and Compensation). According to the authors, selection means women in management need to have clear goals specifically for their work and family responsibilities and set time aside to focus on these goals on a daily basis. Women who succeed in the workplace, especially in managerial positions, are those who have refined the roles placed upon them by society by letting go of some duties, such as house chores, but on the other hand still remain good mothers and good leaders (Wallace & Smith, 2011).

Women who score high on *Neuroticism* and *Agreeableness* experience work-related outcomes of conflicts with the family, such as higher absenteeism, the intention to quit, turnover, citizenship and burnout (Amstad, Meier, Fasel, Elfering & Semmer, 2011). This can result in productivity losses and lower profitability for organisations. Likewise,

women may experience work-family conflict-related outcomes, including low marital satisfaction, satisfaction with life, family-related performance and higher strain associated with their families (Amstad et al., 2011). These authors add that conflict between work and family can also lead to unspecific domain outcomes. Depression and anxiety, for example, were shown to be harmful consequences of work-family conflict (Amstad et al., 2011; Mihelic & Tekavcic, 2014).

Stress

Stress is termed as “a relationship with the environment that the person appraises as significant for her wellbeing and in which the demands tax or exceed coping resources” (Lazarus & Folkman, 1986, p. 63). Bell, Rajendran and Theiler (2012) defined stress as a threatening, demanding or challenging event or situation. According to Russo and Fallon (2015, p. 407), stress “is defined by the situations or life events that require adjustment”. Stress is therefore subjective to the working women's perception of and response to the stressful event.

The principle of conservation of resources (COR) has conceptualised an overall understanding of stress (Williams et al., 2012). The COR theory (Hobfoll, 1989) operates under the notion that people are constantly striving to obtain, maintain, promote and protect their resources. Moustaka and Constantinidis (2010) have stated that stress is a situation, not a disease that can be experienced due to the exposure to a wide range of work demands. The effects of stress can be expressed in a range of ways and involve changes in cognitive-perceptive function, emotion and behaviour (European Agency for Safety and Health at Work, 2014).

Stress at work is a problem for both women and organisations, and can lead to major health problems, such as burnout, disease, labour turnover, lack of morality and low skills and performance (Hussein, Aniza & Ahmad Taufik, 2012). Women with high *Neuroticism* have higher levels of negativity (for example fear, sadness, embarrassment, anger, fault, disgust) and anxiety than those who have low scores on this factor (Lee-Baggley, Preece & DeLongis, 2005). Behaviour associated with *Neuroticism* include anxiety, moodiness, irritability and pessimism. In contrast to

Neuroticism, the *Agreeableness* trait is associated with better stress management strategies (Lee-Baggley et al., 2005). High levels of *Agreeableness* are associated with stoical and conformal attitudes towards stressful situations, and individuals measuring high on this trait are not so susceptible of using emotional strategies to address stressful stimuli (e.g. self-blame, avoidance, and wishful thinking) (Lee-Baggley et al., 2005).

Organisations should therefore focus on the interface of working women's families, their health and their wellbeing. Understanding the value of combining work and family roles will lead to improved women's life-balance (Stoddard & Madsen, 2007), because the most important and prominent areas in working women's lives are work and family. Working women who are stressed are unable to be available at work cognitively and emotionally and their reasoning capacity decreases.

Work engagement

A considerable amount of research has been done on work engagement – both internationally and locally (Rothmann & Rothmann, 2010; Van der Colff & Rothmann, 2009; Zigarmi, Nimon, Houson, Witt & Diehl, 2009). The theory of work engagement emerged with the movement from constant organisational environment to continuous change, individual work to teamwork, and physical demands to mental and emotional demands (Schaufeli, 2013). Tims, Bakker and Xanthopoulou (2011, p. 121) defined work engagement as “a positive affective-motivational work-related state that is characterised by vigour, dedication and absorption”. These authors explain that vigour is a person's increased energy and mental capacity during work. Furthermore, dedication implies enthusiasm, pride, inspiration and readiness to take on challenges. Finally, absorption means that a person is involved in a task they do and has difficulty disengaging from that task (Tims et al., 2011). Vigour and dedication are directly opposed to exhaustion and cynicism (Schaufeli, Bakker & Salanova, 2006). Working women who are vigorous and dedicated are therefore considered to be committed to work and approach negative situations as challenges rather than barriers.

Work engagement is a significant determinant of productivity, efficiency and

effectiveness in organisations (Tims et al. 2011). Women with a high degree of engagement are able to identify with their work (Park & Ono 2016). According to Serrano and Reichard (2011), work engagement is positively linked with organisational performance. If women are engaged in their work, the organisation and its production should benefit. Higher sales, lower quality errors, less incidents with safety, and consequently lower company cost are associated with work engagement (Gallup, 2013). Schwartz (2010) indicates that organisations with low employee engagement lose 33% of their annual decline in operating income as compared to an 11% annual decline in earnings growth.

Organisations should therefore prioritise the importance of working women's emotional and physical health and put measures in place that will allow them to be engaged in their work. Research carried out by Moshoeu (2017) suggests that participants with positive domestic interaction, a level of agreement, awareness and emotional stability can foster a high degree of workplace engagement. Women with positive effect and proactive personality traits show more engagement because of their energy level, enthusiasm, and dedication to fulfilling their work role (Jacobs, 2016).

Research Methodology

A cross-sectional quantitative research design was applied in this study. A cross-sectional method is usually deployed for observational descriptive studies, as is the case with this study (Setia, 2016).

Sample

To be eligible for this study, participants were required to be working women aged 25 and older with children 18 years old and younger. A convenience sample with a snowball approach was used to gather an initial sample of 175 participants. Of the 175 total responses, 124 surveys were classified as incomplete because the respondent either quit the survey partway through or skipped multiple questions. For the quantitative analysis, all of the incompletes were omitted, leaving a final sample size of $N = 51$ (11.33% response rate). Table 1 summarizes the characteristics of the participants.

Table 1

Characteristics of participants in the sample (n=51)

Gender	N	%
Female	51	100
Age		
25-29	11	21.6
30-34	7	13.7
35-39	18	35.3
40-44	9	17.6
45-49	2	3.9
50 and older	4	7.8
Ethnicity		
Black/African	35	68.6
Coloured	2	3.9
Indian	2	3.9
White	6	11.8
Other	6	11.8
Marital Status		
Customary married	1	2.0
Divorced	1	2.0
Married	27	53.0
Single	20	39.2
Widow	2	3.9
Number of dependent children		
0	13	25.4
1	8	15.7
2	14	27.5
3	10	19.6
4	5	9.8
8	1	2.0

The sample group consisted of 51 females (100%). The majority of the participants were black (68.6%), between 35-39 years old (35.3%), married (53.0%) and have 2 children (27.5%).

Measuring Instruments

Basic Traits Inventory (BTI)

The Basic Traits Inventory (BTI) is a South African-developed personality instrument, proven to be valid across cultures (Taylor & De Bruin, 2006). The BTI is grounded in the FFM theory and measures personality in terms of the Big Five traits, namely,

Extraversion (E), Neuroticism (N), Conscientiousness (C), Openness to Experience (O) and Agreeableness (A). The instrument consists of 193 items that is presented as a single list, with no differentiation between factors or facets. The BTI reported Cronbach alpha reliability coefficients for *Extroversion* ($\alpha=.87$), *Neuroticism* ($\alpha=.97$), *Conscientiousness* ($\alpha=.93$), *Openness to Experience* ($\alpha=.94$) and *Agreeableness* ($\alpha=.92$) (Taylor & De Bruin, 2006). From the sample of students, Taylor (2008) reported that, statistically, the BTI performs well, with little or no construct, item and response bias. Results from research carried out by Taylor and De Bruin (2006) confirmed the validity and reliability of the measuring instrument. Grobler and De Beer (2015) reported acceptable psychometric properties for the BTI for all the official language groups in South Africa.

The Work-Family Conflict Scale (WFCS)

The 10-item Work-Family Conflict Scale of Netemeyer, Boles and McMurrian (1996) was used to measure work-family conflict and family-work conflict. Karatepe and Baddar (2006) reported Cronbach alpha values of $\alpha=.76$ and $\alpha=.75$ for work-family conflict and family-work conflict respectively. A sample item for work-family conflict is “Due to work-related duties, I have to make changes to my plans for family activities” and for family-work conflict is “The demands of my family or spouse/partner interfere with work related activities”. This instrument uses a five-point Likert scale (1 = strongly disagree to 5 = strongly agree) (Carlson, Kacmar & Williams, 2000).

The Perceived Stress Scale (PSS)

The PSS-10 was designed according to the notion of stress as the interaction of environmental requirements with the capacity of the person to handle it (Cohen, Kamarck & Mermelstein, 1983). The questionnaire consists of 10 items (the PSS-10), six of them being phrased negatively and four of them positive (Cohen, 1988). These items consider how unpredictable, uncontrollable and overloaded the lives of individuals are (Cohen et al., 1983). This scale is one of the most used perceived stress measures in many countries and has been validated (Garcia et al., 2013; Lemma et al., 2012). The Cronbach alpha and intra-class correlation coefficient of the PSS-10 was reported at more than .70 in all studies in which it was used (Lee, 2012).

The PSS-10 was included in this study on the basis that it detects both negative and positive aspects of work-home interaction. Based on the validity and reliability of several previous studies, this questionnaire is considered relevant and provides a platform for further validating the instrument in a multicultural environment. More significantly, this scale has been applied because it covers all types of employees regardless of their family status, since every person is assumed to have a personal life influencing their employment life (Moshoeu, 2017).

Utrecht Work Engagement Scale (UWES-17)

The UWES-17 was used to measure work engagement (Schaufeli, Salanova, Gonzalez-Romá & Bakker, 2002). The UWES-17 is a 17-item self-reporting questionnaire with three subscales: vigour (six items, e.g. “I am bursting with energy in my work”), dedication (five items, e.g. “My job inspires me”), and absorption (six items, e.g. “I feel happy when I’m engrossed in my work”). All items are scored on a seven-point frequency rating scale ranging from 0 (never) to 6 (every day). International and national studies reveal Cronbach alpha coefficients for the three subscales ranging between .68 and .91 (Goliath-Yarde & Roodt, 2011; Schaufeli et al., 2002; Storm & Rothmann, 2003).

The scale has been chosen to reflect the vision, sensation, and responsiveness of employees and thus to better understand the emotional and personal experience of their work. A study from South Africa showed that UWES-17 could be used as a non-biased instrument, as the equivalence for different race groups is acceptable (Storm & Rothman, 2003).

Research procedure and ethical consideration

Before commencing with the research, ethical clearance and permission was obtained from the relevant university and the requirements for ethical practice in research were upheld (ECR Reference #: 2018_CEMS/IOP_014).

The participants received an e-mail with a direct link to online questionnaires from

Jopie Van Rooyen Psychometrics and SurveyMonkey. Members were asked to participate and complete the four measuring instruments and to provide demographic information. A biographical questionnaire requesting information regarding age, gender, job title, number of years in service, marital status, number of dependent children, and gender of dependent were sent to the participants.

Data analysis

Statistical analysis was conducted using the Statistical Package for the Social Sciences (SPSS version 25.0). The item analysis was performed to determine the reliability of the measuring instruments. An item was excluded from analysis if its deletion would significantly increase the scale reliability coefficient, or if the item-total correlation value was less than .30. Cronbach alpha coefficients greater than .70 were deemed acceptable (Nunnally & Bernstein, 1994).

Descriptive statistics were used in the analysis and minimum, maximal, average and standard deviating values were provided. In calculating the direction and strength between independent variables (*Extraversion, Neuroticism, Conscientiousness, Openness to Experience, Agreeableness*) and dependent variables (work-family conflict, stress and work engagement), Spearman coefficient (r) was employed (Graziano & Raulin, 2014).

The relationship between the Big Five personality traits, work-family conflict, stress, and employment was further analysed through inferential statistics. Stepwise hierarchical regression was applied (Bryman, 2014; Ma, Tan, Hei, Zhao & Xie, 2016). The practical significance of the variance for regression was calculated by determining the value of f^2 ($=R^2/1-R^2$) (Cohen, 1992). Cohen (1992) provides the following guidelines: ≥ 0.02 = small effect; ≥ 0.15 = medium effect; ≥ 0.35 = large effect.

Results

Reliability of the measuring instruments

Item analysis was done for each of the subscales of the Basic Traits Inventory (BTI), work-family conflict and its subscales, stress and work engagement and its subscales. Table 2 shows the results of this study.

Table 2

Reliability of the measuring instrument subscales

Subscale	N of items	Cronbach Alpha Coefficient (α)
Extraversion	36	.87
Neuroticism	34	.97
Conscientiousness	41	.93
Openness to Experience	32	.93
Agreeableness	37	.92
WAFCS	17	.89
Stress	10	.80
UWES	17	.97
Vigour	6	.92
Dedication	5	.93
Absorption	6	.91

Table 2 shows that the Cronbach alpha coefficients of the subscales for the measuring instruments varied from $\alpha = .80$ to $\alpha = .97$, which exceed the conventional .70 level of acceptance indicating internal consistencies within the recommended range.

Descriptive statistics: Basic traits, work-family conflict, stress and work engagement

The mean and standard deviations for *Extraversion*, *Neuroticism*, *Conscientiousness*, *Openness to Experience*, *Agreeableness*, work-family conflict, stress and work engagement are presented in Table 3.

Table 3

Descriptive statistics: means and standard deviations (n=51)

Subscales	Max	Mean	Std. Deviation	Skewness		Kurtosis	
				Stats	Std Error	Stats	Std Error
Extraversion	16	116.71	15.93	.50	.33	.03	.66
Neuroticism	15	81.65	25.98	.82	.33	.27	.66
Conscientiousness	20	159.08	20.32	-.63	.33	1.29	.66
Openness	16	124.39	17.73	.13	.33	-.24	.66
Agreeableness	17	137.75	17.22	-.26	.33	.01	.66
Work-Family Conflict	3.88	2.59	.71	-.19	.33	-.78	.66
Stress	3.60	2.25	.65	.28	.33	-.40	.66
Work Engagement	5.82	3.47	1.40	-.42	.33	-.70	.66
Dedication	5.80	3.5	1.63	-.50	.33	-.75	.66
Vigour	6.00	3.51	1.38	-.31	.33	-.44	.66
Absorption	6.00	3.41	1.44	-.35	.33	.39	.66

Basic Traits Inventory (BTI)

The mean score for the BTI scale ranged from 81.65 to 159.08. The table depicts that the highest mean score was obtained for *Conscientiousness* ($M = 159.08$; $SD = 20.32$); followed by *Agreeableness* ($M = 137.75$; $SD = 17.22$); *Openness* ($M = 124.39$; $SD = 17.73$); *Extraversion* ($M = 116.71$; $SD = 15.93$); the lowest score was observed in the *Neuroticism* scale ($M = 81.65$; $SD = 25.98$). The standard deviations indicate that the variability for the *Extraversion* trait was actually smaller ($SD = 15.93$), relative to the other dimensions among the survey participants regarding the Big Five personality traits.

Work-Family Conflict Scale (WAFCS)

In terms of the means and standard deviations presented in Table 3., the total mean average score of the Work-Family Conflict Scale was ($M = 2.57$; $SD = 0.71$). The standard deviations indicate that the variability for the overall work-family conflict

construct was small ($SD = 0.71$) among the survey participants.

Perceived Stress Scale (PSS-10)

In terms of the means and standard deviations presented in Table 3., the total mean average score of the Perceived Stress Scale (PSS-10) was ($M = 2.25$; $SD = 0.65$), The standard deviations indicate that the variability for the overall perceived stress construct was actually small ($SD = 0.65$) among the survey participants.

Utrecht Work Engagement Scale (UWES-17)

Overall mean score ($M = 3.47$) and standard deviation ($SD = 1.40$) was obtainable for the Work Engagement. The highest mean score on Dedication ($M = 3.5$; $SD = 1.63$) and Vigour ($M = 3.51$; $SD = 1.38$) were observed and the lowest mean score ($M = 3.41$; $SD = 1.44$) was achieved for Absorption. The standard deviations indicate that the variability for the overall Work Engagement construct was actually small ($SD = 0.34$) relative to its sub dimensions Dedication ($M = 3.5$; $SD = 1.63$) and Vigour ($M = 3.51$; $SD = 1.38$) among the survey participants with regard to work-life balance.

Correlation analysis between personality traits, work-family conflict, stress, and work engagement

Tables 4, 5 and 6 report on the correlations between the Big Five personality traits, work-family conflict, stress, and work engagement by indicating significant and non-significant relationships.

Table 4: Spearman correlation coefficients between the constructs and their sub-scales

			Extra	Neuro	Cons	Open	Agree
Spearman's rho	Work-family conflict	Correlation Coefficient	-.47**	0.24	-0.16	-0.16	-0.16
		Sig. (2-tailed)	0.01	0.09	0.26	0.26	0.26
		N	51	51	51	51	51
	Stress	Correlation Coefficient	-0.17	.62**	-0.14	-0.27	-0.13
		Sig. (2-tailed)	0.23	0.01	0.32	0.06	0.37
		N	51	51	51	51	51
	Work Engagement	Correlation Coefficient	0.07	-0.25	0.20	-0.04	0.20
		Sig. (2-tailed)	0.61	0.07	0.17	0.81	0.17
		N	51	51	51	51	51
	Dedication	Correlation Coefficient	-0.01	-.36*	0.06	-0.13	0.03
		Sig. (2-tailed)	0.97	0.01	0.68	0.36	0.86
		N	51	51	51	51	51
	Vigour	Correlation Coefficient	0.18	-0.23	0.24	0.06	0.27
		Sig. (2-tailed)	0.21	0.11	0.10	0.66	0.06
		N	51	51	51	51	51
	Absorption	Correlation Coefficient	0.03	-0.21	0.22	-0.08	0.27
		Sig. (2-tailed)	0.86	0.14	0.13	0.57	0.05
		N	51	51	51	51	51

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

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

Where:

Extra=Extraversion

Neuro= Neuroticism

Cons=Conscientiousness

Open= Openness to experience

Agree= Agreeableness

Table 4 reflects a series of Spearman's rank-order correlations that were conducted to determine if there were relationships between the Big Five personality traits, work-family conflict, stress and work engagement. A two tailed test of significance indicated that there was a significant positive relationship between *Neuroticism* and stress $r(51) = .62, p < .01$. The results indicate that *Neuroticism* is positively correlated to work-family conflict $r(51) = .24, p > .05$. Working women with higher levels of *Neuroticism* experience higher stress and work-family conflict. *Conscientiousness* and *Agreeableness* are also positively correlated to work engagement and its subscales Vigour $r(51) = .24, p > .05$ and Absorption $r(51) = .22, p > .05$. The results indicate that working women with higher levels of *Conscientiousness* and *Agreeableness* experience higher work engagement.

Table 5

Correlation analysis between work-family conflict, work engagement and its subscales, and stress (Spearman rho)

		Stress
Work-family conflict	Correlation Coefficient	.23
	Sig. (2-tailed)	.11
	N	51
Work Engagement	Correlation Coefficient	-.36*
	Sig. (2-tailed)	.01
	N	51
Dedication	Correlation Coefficient	-.34*
	Sig. (2-tailed)	.02
	N	51
Vigour	Correlation Coefficient	-.33*
	Sig. (2-tailed)	.02
	N	51
Absorption	Correlation Coefficient	-.33*
	Sig. (2-tailed)	.02
	N	51

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

Table 5 reflects Spearman's rank-order correlations that were conducted to determine if there were relationships between the work-family conflict, stress and work engagement and its subscales. The results indicate that stress is positively correlated to work-family conflict $r(51) = .23, p > .05$. Working women with higher levels of stress experience higher levels work-family conflict. However, a one tailed test of significance indicated a negative correlation between stress and work engagement $r(51) = -.36^*, p < .05$ and its subscales Dedication $r(51) = -.34^*, p < .05$, Vigour $r(51) = -.33^*, p < .05$ and Absorption $r(51) = -.33^*, p < .05$. This means that as working women experience increased stress, their level of work engagement decreases.

Table 6

Correlation analysis between work-family conflict and work engagement

		Work Engagement	Dedication	Vigour	Absorption
Spearman's rho	Correlation Coefficient	-.20	-.22	-.26	-.13
Work-Family conflict	Sig.(2-tailed)	.17	.13	.07	.36
	N	51	51	51	51

Table 6 reflects Spearman's rank-order correlations that were conducted to determine if there were relationships between the work-family conflict and work engagement and its subscales. The results indicated that work-family conflict was unrelated to work engagement $r(51) = -.20, p > .05$ and its subscales Dedication $r(51) = -.22, p > .05$, Vigour $r(51) = -.26, p > .05$ and Absorption $r(51) = -.13, p > .05$. This means that as working women experience increased work-family conflict, their level of work engagement decreases.

Multiple regression analysis

Multiple regression analyses between the Big Five personality traits as independent variables and work-family conflict, stress and work engagement as dependent variables are presented in Table 7.

Table 7

Multiple Regression Analysis: Model Summary, the Big Five personality traits as Independent Variables, and Work-family conflict, Stress and Work engagement as Dependent Variables

	Unstandardised coefficient		Standardised coefficient	t	p	F	R	R ²	ΔR ²
	B	SE	Beta						
Work-family conflict									
(Constant)	4.83	1.10		4.37	.00	3.01	.50	.25	24
Extraversion	-.02	.01	-.41	-2.77	.01				
Neuroticism	.01	.00	.16	1.17	.25				
Conscientiousness	-.01	.01	-.07	-.40	.69				
Openness	.01	.01	.05	.29	.78				
Agreeableness	-.01	.01	-.05	-.35	.73				
Stress									
(Constant)	1.83	.88		2.09	.04	6.68	.65	.43	42
Extraversion	.01	.01	.06	.47	.64				
Neuroticism	.02	.01	.62	5.10	.00				
Conscientiousness	.01	.01	.00	.02	.99				
Openness	-.01	.01	-.20	-1.33	.19				
Agreeableness	-.01	.01	-.04	-.30	.77				
Work engagement									
(Constant)	2.70	2.28		1.18	.24	1.90	.42	.17	16
Extraversion	-.01	.01	-.01	-.07	.94				
Neuroticism	-.01	.01	-.25	-.17	.10				
Conscientiousness	0.1	.01	.19	1.02	.32				
Openness	-.02	.02	-.30	-1.62	.12				
Agreeableness	.02	.01	.25	1.48	.15				

From Table 7, the dimensions of the Big Five personality traits accounted for 24% of variance in work-family conflict. The dimension of *Extraversion* produced a statistically significant model of $F_{(5,45)} = 3.01$; $p < 0.01$. The dimensions of the Big Five personality traits accounted for 42% of variance in stress. Again, the dimension of *Neuroticism* produced a statistically significant model of $F_{(5,45)} = 6.68$; $p < 0.00$. Lastly, the dimensions of the Big Five personality accounted for approximately 16% of variance in work engagement among working women. The results indicated a non-statistically significant model of $F_{(5,45)} = 1.90$; $p > 0.05$ between the Big Five personality dimensions and work engagement and its dimensions.

The practical significance of the variance was calculated as $f^2 = 0.33$ for work-family conflict; $f^2 = 0.75$ for stress; and $f^2 = 0.20$ for work engagement. The variance of the Big Five personality traits has a large practical effect for stress and a medium effect for work-family conflict and work engagement.

Discussion

The aim of the study was to investigate the role of personality in work-family conflict, stress and work-engagement among working women.

All the four measuring instruments used were found to be reliable when compared to the acceptable guideline of $\alpha > .70$ (Nunnally & Bernstein, 1994). The results indicated that all the subscales of the Basic Traits Inventory have acceptable Cronbach alpha coefficients above $\alpha = .70$. These findings are consistent with the findings of Taylor and De Bruin (2006) who obtained a satisfactory reliability score of $\alpha = .80$ for all five personality factors.

The WAFCS had a Cronbach alpha of .89. These findings are consistent with the findings of Karatepe and Baddar (2006) who obtained Cronbach alpha values of $\alpha = .76$. It can thus be concluded that it is a reliable measure of work-family conflict.

The Perceived Stress Scale (PSS-10) had a Cronbach alpha of .80, confirming its internal consistency. This finding is in line with a previous study that has reported a Cronbach alpha .70 indicating good internal consistency (Lee, 2012).

The UWES-17 had a Cronbach alpha of .97. The results are supported by Storm and Rothman (2003) who report a reliability of $\alpha=.78$ for vigour, $\alpha=.89$ for dedication and $\alpha=.69$ for absorption, among a sample of South African police officers. It can be concluded that the work engagement subscales of the UWES-17 are a reliable measure of work engagement.

The Big Five personality traits, work-family conflict, stress and work engagement

The results of this study established a significant relationship between some of the Big Five personality traits and work-family conflict. Previous cross-sectional studies showed a positive relationship between *Neuroticism* and work-family conflict that were supported by the findings of this study. *Neuroticism* was found to be a strong predictor of work-family conflict in both directions (Andreassi, 2011; Blanch & Aluja, 2009; Braunstein-Bercovits, Frish- Burstein & Benjamin, 2012; Wayne et al., 2004). For example, in a study by Noor (1996) exploring demographic, personality and role variables as correlates of 145 Englishwomen's wellbeing, personality (including *Neuroticism*) was shown to be a predictor of work-family conflict, which in turn lowered wellbeing.

The results of this study reported that *Neuroticism* and stress have a significant correlation. This is consistent with Abbasi (2011) that reported that women with higher levels of *Neuroticism* are most susceptible to anxiety, stress and negative emotionality. Higher levels of *Neuroticism* mean higher perceived stress levels. In addition, women with higher levels of *Neuroticism* tend to experience high levels of emotional distress, such as anxiety, anger, sadness, insecurity and guilt (Costa & McCrae, 1992), compared to women with lower levels *Neuroticism*. The evidence shows that women with *Neuroticism* tend to experience adverse events and bad moods as well as changes of mood (Suls, Green & Hillis, 1998).

The results of this study found a non-significant relationship between *Extraversion*, *Conscientiousness* and *Agreeableness* and work engagement. This finding was not expected because several studies have shown that the extent of the involvement of individuals in their work is influenced by personality (Langelaan et al., 2006). In their study, Diener and Lucas (1999) found *Extraversion* to be a powerful predictor for positive wellbeing. Extraverts are most likely to experience vigour, one of the main dimensions of work engagement, in relation to women with high levels of *Neuroticism* (Brief & Weiss, 2002). A study by Opie and Henn (2013) has shown that *Conscientiousness* is an important predictor of employment engagement. *Conscientiousness* has been shown to predict work engagement (Jeong et al., 2009; Mostert & Rothmann, 2006). Moshoeu (2017) reported that *Conscientiousness* affects how women perceive their work positively. Kim, Shin and Swanger (2009) hypothesized that *Agreeableness* could serve as an insignificant engagement predictor which is in line with the results of this study. While *Agreeableness* was not a predictor of work engagement, its effect on dedication was slightly positive in the study by Kim, Shin and Swanger (2009).

Work-family conflict and stress

The results of this study established that work-family conflict and stress were significantly related. This finding is in line with the study of Onay and Kılıcı (2011) that showed that stress affects the productivity, performance, behaviour and satisfaction of working women. The study of work-family conflict shows that several factors contribute to and affect the family environment in the working environment (Jacobs, 2016). Studies have confirmed that some work variables are associated with increasing conflicts of work-family relations (Aryee et al., 1999; Frone et al., 1992; Kinnunen & Mauno, 1998). Opie and Henn (2013) found that work-family conflict and stress could prevent women from achieving optimum concentration and spending time and energy on their jobs.

Work-family conflict and work engagement

The findings of this study showed a negative correlation between work-family conflict and work engagement. This finding is in line with that of Opie and Henn (2013), which

confirms that the conflict between work and family has a negative impact on work engagement. The results of this study have shown that work-family conflict affected work engagement negatively. Conflict between the work and the family is likely to reduce the level of workplace engagement of women, as they are too worried about the interference of both the working environment and home environment to carry out significant work (Opie & Henn 2013). Moshoeu (2017) noted that women tend to psychologically separate from their job roles by perceiving their participation to cause friction with their time at home, thus reducing the degree of engagement to their work roles.

Stress and work engagement

The results of this research established a negative correlation between stress and work engagement. These results are supported by Hallberg and Schaufeli (2006) who indicated in their study that work engagement was more significantly related to stress-related health complaints (for example, emotional exhaustion and depressive symptoms).

The results showed *Extraversion* to have a significant effect on work-family conflict for this sample; *Neuroticism* also showed to have a non-significant effect on work engagement. These findings support the outcomes of Michel et al. (2011), who reported that women higher in *Extraversion* perceive problems in a positive manner and utilise problem-solving strategies when faced with challenges. Bakker, Van Der Zee, Lewig and Dollard (2006) indicated that women with high *Extraversion* scores tend to see challenges as positive and use proactive problem-solving strategies to cope. Langelaan et al. (2006) reported that emotional stability (low *Neuroticism*) has been considered significant when predicting work engagement. A study done by Gulamali (2017) reported that vigour and absorption were predicted by *Neuroticism*. This confirms the findings of the research of Kim et al. (2009) which related vigour to *Neuroticism*.

Conclusion

A growing number of women who enter the work place face conflict in their work and

family life. As a result, they can experience stress that influences the level in which these women are engaged in their work. The results of this study showed that conflict between family and work negatively predicted work engagement. Conflict between work and family is likely to reduce the extent to which working women are engaged at work. Findings in the literature support a strong relationship between the Big Five personality traits, work-family conflict, stress and work engagement.

The results confirmed that *Neuroticism* and work-family conflict were correlated in a statistically significant way. There was a significant positive correlation between *Neuroticism* and stress. Working women with higher levels of *Neuroticism* will therefore be more likely to be anxious, stressful and negative. In short, higher levels of *Neuroticism* mean higher perceived stress levels. A positive correlation was found between *Extraversion*, *Conscientiousness*, *Agreeableness* and work engagement. This means that working women who possess some levels of *Extraversion*, *Agreeableness* and *Conscientiousness* can foster a high level of engagement in the workplace. Understanding the relationship between personality traits and work-family conflict, stress and work engagement will help provide guidelines to improve women's life-balance.

Although research on the issue of family-work conflict is growing, little research has been carried out on the experiences of working father in dealing with work-family conflict. Future studies should therefore investigate the possible short-term and long-term effects of personality on work-family conflict, stress and work engagement among both working men and women. Furthermore, organisations could use the battery of tests used in this study to add an alternative approach to the recruitment process as assessments will be used to select candidates whose personalities are best suitable for the position.

This study provided insight into how working women with different personalities manage work-family conflict, stress and work engagement. Therefore, organisations can plan interventions and resources to address the health and wellbeing of working women who are unable to manage their work and family responsibilities.

Insight into the personality, work-family conflict, stress and work engagement of working women as provided in this study could provide guideline for more effective support for increasing numbers of women in the workforce.

REFERENCES

- Abendroth, A. K., Van der Lipper, T. & Mass, I. (2012). Social support and the working hours of employed mothers in Europe. The relevance of the state, the workplace, and the family. *Social Science Research*, 41(3), 581-597.
- Abbasi, I. S. (2011). The influence of neuroticism on stress perception and its resultant negative affect. *Master's Theses*. Paper 3965. Retrieved from http://scholarworks.sjsu.edu/etd_theses.
- Amstad, F. T., Meier, L. L., Fasel, U., Elfering, A. & Semmer, N. K. (2011). A meta-analysis of work-family conflict and various outcomes with a special emphasis on cross-domain versus matching-domain relations. *Journal of Occupational Health Psychology*, 16, 151-169.
- Andreassi, J. K. (2011). What the person brings to the table: Personality, coping and work-family conflict. *Journal of Family Issues*, 6, 1 – 26.
- Aryee, S., Srinivas, E. S. & Tan, H. H. (2005). Rhythms of life: Antecedents and outcomes of work-family balance in employed parents. *Journal of Applied Psychology*, 90(1), 132-146.
- Bakker, A.B., Van Der Zee, K.I., Lewig, K.A., & Dollard, M.F. (2006). The relationship between the big five personality factors and burnout: A study among volunteer counsellors. *The Journal of Social Psychology*, 146(1), 31-50. <http://dx.doi.org/10.3200/SOCP.146.1.31-50>
- Baltes, B. B., Clark, M. A. & Chakrabarti, M. (2010). Work-life balance: The roles of work-family conflict and work-family facilitation. In P. A. Linley, S. Harrington & N. Garcea (Eds.), *Oxford handbook of positive psychology and work* (pp. 201-212). New York, NY: Oxford University Press.
- Baltes, B. B., Zhdanova, L. S. & Clark, M. A. (2011). Examining the relationships between personality, coping strategies and work-family conflict. *Journal of Business and Psychology*, 26(4), 517-530.
- Bell, A., Rajendran, D. & Theiler, S. (2012). Job Stress, Wellbeing, Work-Life Balance and Work-Life Conflict Among Australian Academics. *Electronic Journal of Applied Psychology*. 8. 25-37. 10.7790/ejap.v8i1.320.
- Björkelo, B., Einarsen, S. & Matthiesen, S. B. (2010). Predicting proactive behaviour at work: Exploring the role of personality as an antecedent of whistleblowing behaviour. *Journal of Occupational and Organisational Psychology*, 83(2), 371-394.

- Blanch, A. & Aluja, A. (2009). Work, family and personality: A study of work-family conflict. *Personality and Individual Differences*, 46, 520-524, doi:10.1016/j.paid.2008.12.004
- Braunstein-Bercovitz, H., Frish-Burstein, S. & Benjamin, B. A. (2012). The role of personal resources in work-family conflict: Implications for mothers' well-being. *Journal of Vocational Behavior*, 80, 317 – 325.
- Brief, A. P. & Weiss, H. M. (2002). Organizational behavior: Affect in the workplace. *Annual Review of Psychology*, 53, 279-307.
- Bryman, A. (2014). *Research methodology: business and management contexts* (4th ed.). Cape Town: Oxford University Press Southern Africa.
- Carlson, D.S., Kacmar, K.M. and Williams, L.J. (2000) Construction and Initial Validation of a Multidimensional Measure of Work-Family Conflict. *Journal of Vocational Behavior*, 56, 249-276. <https://doi.org/10.1006/jvbe.1999.1713>
- Chiaburu, D. S., Oh, I-S., Berry, C. M., Li, N. & Gardner, R. G. (2011). The five factor model of personality traits and organizational citizenship behaviors: A meta-analysis. *Journal of Applied Psychology*, 96, 1140–1166.
- Cheung, F. & Halpern, D. (2010). Women at the Top: Powerful Leaders Define Success as Work + Family in a Culture of Gender. *The American psychologist*. 65. 182-93. 10.1037/a0017309.
- Cohen, S., 1988. Perceived stress in a probability sample of the United States. In: Spacapan, S., Oskamp, S. (Eds.), *The Social Psychology of Health*. Sage, Newbury Park, CA, pp. 31e67
- Cohen, S., Kamarck, T., Mermelstein, R. (1983). A global measure of perceived stress. *Journal of Health and Social Behavior*, 24, 385-396
- Costa, P. T., Jr. & McCrae, R. R. (1992). Revised NEO Personality Inventory (NEO PI-R) and NEO Five-Factor Inventory (NEO-FFI) *professional manual*. Odessa, FL: Psychological Assessment Resources.
- Costa, P. T. & McCrae, R. R. (1991). Revised NEO personality inventory (NEO PI-R) and NEO five factor inventory (NEO-FFI): Professional Manual. Odessa, FL: Psychological Assessment Resources.
- Costa Jr, P. T. & McCrae, R. R. (2008). The Revised NEO Personality Inventory. In G.J. Boyle, G. Matthews & D.H. Saklofske (Eds.). *The Sage Handbook of Personality Theory and Assessment* (pp. 179-198). London: Sage Publications.

- Diener, E. & Lucas, R. E. (1999). Personality and subjective well-being. In D. Kahneman, E. Diener & N. Schwarz (Eds.) *Well-being: The foundations of hedonic psychology* (pp. 213–229): New York: Russell Sage Foundation.
- European Agency for safety and Health at work (2014). Making Europe a safer, healthier and more productive place at work. <http://www.slideshare.net/euosha> (Accessed 31 March 2013).
- Frone, M. R., Russell, M. & Cooper, M. L. (1992). Antecedents and outcomes of work-family conflict: Testing a model of the work-family interface. *Journal of Applied Psychology*, 77, 65–78.
- Garcia, J., Hromi-Fiedler, A., Mazur, R.E., Marquis, G., Sellen, D., Lartey, A., (2013). Persistent household food insecurity, HIV, and maternal stress in peri-urban Ghana. *BMC Public Health* 13, 215.
- Gallup, (2013). State of the global workplace: *Employee engagement insight for business leaders worldwide*. Washington, DC: Gallup Inc. Retrieved from <https://nicolascodier.files.wordpress.com/2014/04gallup-worldwide-report-on-engagement-2013.pdf>
- Goldberg, L. R. (1992). The development of markers of the Big-Five factor structure. *Psychological Assessment*, 4, 26–42
- Goliath-Yarde, L. & Roodt, G. (2011). Differential item functioning of the UWES-17 in South Africa. *SA Journal of Industrial Psychology*, 37(1), 1–11. <http://dx.doi.org/10.4102/sajip.v37i1.897>
- Graziano, A. M. and Raulin, M. L. (2014) *Research methods: a process of inquiry*. Eighth edition. Harlow, Essex, England: Pearson.
- Greenhaus, J. H. & Beutell, N. J. (1985). Sources of conflict between work and family roles. *Academy of Management Review*, 10(1), 76-88
- Grobler, S. & De Beer, M. (2015): Psychometric evaluation of the Basic Traits Inventory in the multilingual South African environment, *Journal of Psychology in Africa*. <http://dx.doi.org/10.1080/14330237.2014.997033>
- Gulamali, D.I., (2017). Relationship between personality and work engagement: the role of individual traits and international experience. (Unpublished MA dissertation). Universidade Católica Portuguesa.
- Györkös, C., Becker, J., Massoudi, K., de Bruin, G. P. & Rossier, J. (2012). The impact of personality and culture on the job demands-control model of job stress. *Swiss Journal of Psychology*, 71, 21–28. doi 10.1024/1421-0185/a000065

- Halbesleben, J. R. B. (2010). A meta-analysis of work engagement: Relationships with burnout, demands, resources, and consequences. In A. B. Bakker and M. P. Leiter (Eds.), *Work engagement: A handbook of essential theory and practice* (pp. 102-117). London and New York: Psychology Press.
- Hallberg, U. & Schaufeli, W.B. (2006). "Same same" but different? Can work engagement be discriminated from job involvement and organizational commitment? *European Psychologist*, 11, 119-127.
- Hobfoll, S. E. (1989). Conservation of resources: A new attempt at conceptualizing stress. *American Psychologist*, 44, 513–524.
- Hussein, J., Aniza, I. and Ahmad Taufik, J. (2012). Factors associated with organizational stress among intensive care unit healthcare workers, in Somalia hospital. *Malaysian Journal of Public Health Medicine*, 12, 57-66.
- Inceoglu I. and Warr P. (2012). Personality and Job Engagement. *Journal of Personnel Psychology*, pp.1-9
- Jacobs, C. L. (2016). The relationship between stress factors and workplace outcomes amongst educators in the Western Cape Province. (Unpublished MA dissertation). University of South Africa.
- Jaga, A., Bagraim, J. & Williams, Z. (2013). Work-family enrichment and psychological health. *SA Journal of Industrial Psychology/SA Tydskrif vir Bedryfsielkunde*, 39(2), Art.#1143,10pages.<http://dx.doi.org/10.4102/sajip.v39i2.1143>
- Jain, S. & Nair., S.K. (2013). Research on Work-Family Balance: A Review. Business Perspectives and Research. Institute of Management Studies, Mumbai
- Jang, S. P., Park, R. & Zippay, A. (2011). The interaction effects of scheduling control and work-life balance program on job satisfaction and mental health. *International Journal of Social Welfare*, 20, 135-143.
- Jang, S. J. & Zippay, A. (2011). The juggling act: Managing work-life conflict and work-life balance. *Families in Society: The Journal of Contemporary Social Services*, 92(1), 84–90.
- Jeong, H., Hyun, K. & Swanger, N. (2009). Burnout and engagement: A comparative analysis using the Big Five personality dimensions. *International Journal of Hospitality Management*, 28, 96–104. <http://dx.doi.org/10.1016/j.ijhm.2008.06.001>
- Kahn, R.L., Wolfe, D.M., Quinn, R.P., Snoek, J.D. and Rosenthal, R.A. (1964).

Organizational Stress: *Studies in Role Conflict and Ambiguity*. John Wiley, Oxford.

- Karatepe, O. M. & Baddar, L. (2006). An empirical study of the selected consequences of frontline employees' work-family conflict and family-work conflict. *Tourism Management*, 27(5), 1017-1028.
- Kim, H. J., Shin, K. H. & Swanger, N. (2009). Burnout and engagement: A comparative analysis using the Big Five personality dimensions. *International Journal of Hospitality Management*, 28(1), 96-104. doi:10.1016/j.ijhm.2008.06.001
- Kinnunen, U., Rantanen, J., Mauno, S. & Peeters, M. (2013). Work-family interaction. In M. Peeters, J. D. Jonge & T. Taris (Eds.), *An introduction to contemporary work psychology* (p. 267–289). Chichester, UK: Wiley- Blackwell.
- Koekemoer, E. & Mostert, K. (2010). An exploratory study of the interaction between work and personal life: Experiences of South African employees. *South African Journal of Industrial Psychology*, 36(1), 1–15.
- Langelaan, S., Bakker, A. B., van Doornen, L. J. P. & Schaufeli, W. (2006). Burnout and work engagement: Do individual differences make a difference? *Personality and Individual Differences*, 40, 521-532.
- Lazarus, R S and Folkman, S, (1986). Cognitive theories of stress and the issue of circularity. In M H Appley and R Trumbull (Eds), (1986). *Dynamics of Stress. Physiological, Psychological, and Social Perspectives* (pp. 63–80). New York,: Plenum. Abstract-PsycINFO
- Lee, E. H. (2012). Review of the psychometric evidence of the perceived stress scale. *Asian Nursing Research*, 6(4), 121-127.
- Lee-Baggley, D., Preece, M. & DeLongis, A. (2005). Coping With Interpersonal Stress: Role of Big Five Traits. *Journal of personality*. 73. 1141-80. 10.1111/j.1467-6494.2005.00345.x.
- Lemma, S., Gelaye, B., Berhane, Y., Worku, A. & Williams, M.A., (2012). Sleep quality and its psychological correlates among university students in Ethiopia: a cross-sectional study. *BMC Psychiatry* 12, 237.
- Liao, F., Yang, L., Wang, M., Drown, D. and Shi, J. (2013). Team–Member Exchange and Work Engagement: Does Personality Make a Difference? *Journal of Business Psychology*
- Ma, W., Tan, S., Hei, X., Zhao, J. & Xie, G. (2016). A Prediction Method Based on Stepwise Regression Analysis for Train Axle Temperature. *International Computational Intelligence and Security (CIS)*, 2016 12th International Conference on (pp. 386-390).

- Mahasha, K.L. (2016). Balancing work and family responsibilities: the case of women in management positions in Nkangala district (Doctoral dissertation).
- Michel, J. S., Clark, M. A. & Jaramillo, D. (2011). The role of five factor model of personality in the perceptions of negative and positive forms of work-nonwork spillover: A meta-analytic review. *Journal of Vocational Behaviour*, 79(1), 191-203.
- Michael, E., Handfield-Jones, H. & Alexrod, B. (2011). *The war for talent*. Boston, MA: Harvard Business Press.
- Michel, J. S. & Clark, M. A. (2013). Investigating the relative importance of individual differences on the work-family interface and the moderating role of boundary preference for segmentation. *Stress Health*, 29, 234 – 336.
- Mihelič, K. K., Tekavčič, M. (2014). Work family conflict: A review of antecedents and outcomes. *International Journal of Management & Information Systems*, 18(1), 15-26.
- Moshoeu, A. N. (2017). A model of personality traits and work-life balance as determinants of employee engagement. (Unpublished MA dissertation). University of South Africa.
- Mostert, K. & Rothmann, S. (2006). Work-related well-being in the South African Police Service. *Journal of Criminal Justice*, 34, 479–491. <http://dx.doi.org/10.1016/j.jcrimjus.2006.09.003>
- Moustaka, E. and Constantinidis, T.C (2010). Sources and effects of work-related stress in nursing. *Health sciences Journal* 4(4) 210-216.
- Netemeyer, R. G., Boles, J.S. & McMurrian, R. (1996). Development and validation of work-family conflict and family-work conflict scales. *Journal of Applied Psychology*, 81: 400-410.
- Noor, N. M. (1996). Some demographic, personality and role variables as correlates of women's well-being. *Sex Roles: A Journal of Research*, 34, 603 – 620.
- Nunnally, J. C. and Bernstein, I. H. (1994). *Psychometric Theory* ed.3. New York: McGraw Hill.
- Onay, M. & Kılıcı, S. (2011). İş stresi ve tükenmişlik duygusunun işten ayrılma niyeti üzerine etkileri: Garsonlar ve aşçıbaşılar. *Organizasyon ve Yönetim Bilimleri Dergisi*, 3(2), 363-372

- Opie, T. & Henn, C.M.(2013). Work-family conflict and work engagement among mothers: Conscientiousness and neuroticism as moderators. *SA Journal of Industrial Psychology/SA Tydskrif* , 39(1), Art.#1082, 12 pages. <http://dx.doi.org/10.4102/sajip>.
- Park, J. & Ono, M. (2016). Effects of workplace bullying on work engagement and health: the mediating role of job insecurity. *The International Journal of Human Resource Management*. 1-24. 10.1080/09585192.2016.1155164.
- Pervin, L. A. (1996). *The science of personality*. New York: Wiley
- Pervin, L. A. & Cervone, D. (2010). *Personality: Theory and research* (11th ed). New Jersey: Wiley-Blackwell.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y. & Podsakoff, N. P. (2003). Common Method Biases in Behavioral Research: A Critical Review of the Literature and Recommended Remedies. *Journal of Applied Psychology*, 88, 879-903. <http://dx.doi.org/10.1037/0021-9010.88.5.879>
- Potgieter, S. C. B. & Barnard, A. (2010). The construction of work-life balance: The experience of black employees in a call-centre environment. *South African Journal of Industrial Psychology*, 36(1), 1-9
- Rantanen, J., Pulkkinen, L. & Kinnunen, U. (2005). The Big Five personality dimensions and work-family conflict, and psychological distress: A longitudinal review. *Journal of Individual Differences*, 26, 155 – 166.
- Riordan, S. & Louw-Potgieter, J. (2011). Career Success of Women Academic in South Africa. *South African Journal of Psychology*, 41(2), 157-172.
- Rossier, J., Zecca, G., Stauffer, S. D., Maggiori, C. & Dauwalder, J.-P. (2012). Career Adapt-Abilities Scale in a French-speaking Swiss sample: Psychometric properties and relationships to personality and work engagement. *Journal of Vocational Behavior*, 80, 734–743. doi 10.1016/j.jvb.2012.01.004
- Rothmann, S. & Rothmann, S. (2010). Factors associated with employee engagement in South Africa. *South African Journal of Industrial Psychology* 36(2), 1-12
- Ruppner, L. (2013). Conflict Between Work and Family: An Investigation of Four Policy Measures. *Sociology Indicator Research*, 110, 327-347.
- Russo, T.J. & Fallon, M.A. (2015). Coping with stress: supporting the needs of military families and their children. *Early Childhood Education Journal*, 43, 407- 416.

- Schaufeli, W.B. (2013), "What is engagement?", in Truss, C., Alfes, K., Delbridge, R., Shantz, A. and Soane, E. (Eds), *Employee Engagement in Theory and Practice*, Routledge, London, pp. 15-35.
- Schaufeli, W.B., A.B. Bakker and M. Salanova. 2006. "The measurement of work engagement with a short questionnaire." *Educational and Psychological Measurement*, 66(4): 701-716.
- Schaufeli, W. B., Salanova, M., Gonzalez-Romá, V. & Bakker, A. B. (2002). The measurement of engagement and burnout: A confirmative analytic approach. *Journal of Happiness Studies*, 3, 71-92.
- Schwartz, T. (2010). The productivity paradox: How Sony pictures gets more out of people by demanding less. <https://hbr.org/2010/the-productivity-paradox-howsony-pictures-gets-more-out-of-people-by-demanding-less>.
- Serrano, S. & Reichard, R. (2011). Leadership strategies for an engaged workforce. *Consulting Psychology Journal: Practice and Research*. 63. 176-189. 10.1037/a0025621.
- Setia, M. S. (2016). Methodology Series Module 3: Cross-sectional Studies. *Indian Journal of Dermatology*, 61(3), 261–264. <http://doi.org/10.4103/0019-5154.182410>
- Smith, K. T. (2010). Work-life balance perspectives for future marketing professionals. *Services Marketing Quarterly*, 31(4), 434-447
- Statistics South Africa. (2016). *Quarterly Labour Force Survey (Quarter 1)*. Statistical Release: P02011.
- Stoddard, M. & Madsen, S. (2007). *Toward an Understanding of the Link between Work-Family Enrichment and Health*. Susan R. Madsen. 9.
- Storm, K. & Rothmann, S. (2003). A psychometric analysis of the Utrecht Work Engagement Scale in the South African police service. *South African Journal of Industrial Psychology*, 29(4), 62–70.
- Suls, J., Green, P. & Hillis, S. (1998). Emotional reactivity to everyday problems, affective inertia and neuroticism. *Personality and Social Psychology Bulletin*, 24, 127 – 136.
- Taylor, N. (2008). The construction of a South African five factor personality questionnaire (Doctoral dissertation).
- Taylor, N. & De Bruin, G.P. (2006). *Basic Traits Inventory*. Johannesburg, SA: Jopie Van Rooyen and Partners.

- Thomson, L.A. & De Bruin, K. (2007). Personality as predictor of life balance in South African corporate employees. *Journal of Contemporary Management*, 4, 68–85. Retrieved from http://0-thor.sabinet.co.za.ujlink.uj.ac.za/WebZ/images/ejour/images/ejour/jcman/jcman_v4_a5.pdf?sessionId=01-56164-226256144&format=F
- Tims, M., Bakker, A.B. and Xanthopoulou, D. (2011), “Do transformational leaders enhance their followers’ daily work engagement?”, *The Leadership Quarterly*, Vol. 22 No. 5, pp. 121-131.
- Van der Colff, J.J. & Rothmann, S. (2009). Occupational stress, sense of coherence, coping, burnout and work engagement of registered nurses in South Africa. *SA Journal of Industrial Psychology*. 35(1), 1-10. doi: 10.4102/sajip.v35i1.423
- Wallace, T. & Smith, H. B. (2011). Core Issues Affecting Women Progressing to Senior Management: A Comparative Overview of the Global South. UNESCO.
- Watier, N. N., Lamontagne, C., and Chartier, S. (2011), “What Does the Mean Mean?,” *Journal of Statistics Education*, 19(2), 1-20. <http://www.amstat.org/publications/jse/v19n2/watier.pdf>
- Wayne, J.H., Musisca, N. & Fleeson, W. (2004). Considering the role of personality in the work family experience. *Journal of Vocational Behavior*, 64, 108-130. [http://dx.doi.org/10.1016/S0001-8791\(03\)00035-6](http://dx.doi.org/10.1016/S0001-8791(03)00035-6)
- Williams, E.S., Halbesleben, J.R.B., Manwell, L.B., McMurray, J.E., Rabatin, J., Rashid, A. et al., (2012). The effect of workplace health care worker stress and burnout on patient outcomes. In P. Carayon, (Ed.), *Handbook of human factors and ergonomics in health care and patient safety*, (2nd edn.), (pp. 119-128), Boca Raton, USA: CRC Press, Taylor & Francis Group.
- Xanthopoulou, D., Bakker, A. B., Demerouti, E. & Schaufeli. W. B. (2009a). Work engagement and financial returns: A diary study on the role of job and personal resources. *Journal of Occupational and Organizational Psychology*, 82, 183-200
- Zhai, Q., Willis, M., O’Shea, B., Zhai, Y. & Yang, Y. (2013). Big Five personality traits, job satisfaction and subjective wellbeing in China. *International Journal of Psychology*, 48(6), 1099-1108.
- Zigarmi, D., Nimon, K., Houson, D., Witt, D. & Diehl, J. (2009). Beyond engagement: Toward a framework and operational definition for employee work passion. *Human Resource Development Review*, 8, 300–326

CHAPTER 4: CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS

4.1 INTRODUCTION

The results, limitations and recommendations for future research are discussed in this chapter.

4.2 CONCLUSIONS

The general aim of the study was to investigate the role of the Big Five personality traits in work-family conflict, stress and work-engagement among working women.

4.2.1 Theoretical conclusions

The study achieved the stated specific theoretical aims by conceptualising each of the constructs, the Big Five personality traits, work-family conflict, stress, and work engagement. The empirical objective was to test the theorised relationships scientifically (see Fig. 1).

The importance of this study may be seen in the empirical results. This study makes a significant contribution by looking at the Big Five personality traits and how they influence work-family conflict, stress, and work engagement among working women. The concepts of personality traits, work-family conflict, stress, and work engagement, and the relationship that these variables have with each other, were discussed in Chapters 2 and 3.

Pervin and Cervone (2010, p.8) define personality as “psychological qualities that contribute to an individual’s enduring and distinctive patterns of doing things”. The personality traits describe and explain differences of opinion, feeling and behaviour in individuals (Moshoeu, 2017). Their identity and their unique character give the individual their own way of acting, feeling and thinking (Moshoeu, 2017). Multiple studies are based on various personality models. The Big Five or the Big Five model is the most widely accepted model. Researchers agree that one of the most important models of contemporary psychology in describing the most important characteristics of the personality is that the five-factor model of the personality (Goldberg, 1981, 1990;

John & Srivastava, 1999). This model organises a wide range of individual features into five dimensions of personality namely: *Conscientiousness*, *Agreeableness*, *Neuroticism*, *Openness to Experience* and *Extraversion*.

The work of Greenhaus and Beutell (1985), who developed a theoretical framework for researching conflict between work and families, is the central focus of a great deal of the work-family conflict debates. Essentially, the requirements and responsibilities in several areas cannot be fulfilled at the same time, leading to negative results, such as distress and a reduced level of work engagement (Rantanen, Kinnunen, Feldt & Pulkkinen 2008; Sidani & Al Hakim 2012).

The definition of stress was debated, although the majority of researchers believe that the emphasis was associated with feelings of fear, anxiety, discomfort, cold, sadness and depression (Cropanzano, Howes, Grandey, Ve Toth, 1997; Motowidlo, Packard, Ve Manning, 1986; Bolino, 2005). Stress has been defined by Bell, Rajendran and Theiler (2012, p.117) as “an event or situation that is perceived as threatening, demanding or challenging.” There are two elements that can be distinguished in the stress process: the real interchange of the individual and the environment and the person's response over time. Long-term stressors are causing serious health problems compared to short-term (Bell, Rajendran & Theiler, 2012).

Coetzee and Roythorne-Jacobs (2012) describe work engagement as being enthusiastic, proud, inspired and challenged. Schaufeli, Salanova, González-Romá and Bakker (2002) define commitment as a positive and accomplishing mind-set related to work that is characterised by vigour, dedication and absorption. Bakker and Demerouti (2009) indicated that vigour involves a high degree of mental resilience and energy. Absorption refers to the attachment, feelings and total concentration in one's work (Bakker & Demerouti, 2009). The final part of the work engagement, namely dedication, is characterised by a feeling of importance, enthusiasm, challenge and ultimately a strong engagement in your work (De Braine & Roodt, 2011).

A growing number of women who enter the work place face conflict in their work and family life. As a result, that can cause stress and influence the level in which women are engaged in their work. SHL (2013) defined personality as a typical or preferred way for a person to behave, think and feel. Women with various personalities use various ways to manage conflict, stress engagement in the workplace. Study by Opie and Henn (2013) indicated that working women are not able to achieve maximum concentration because of stress associated with work-family conflict and are unable to dedicate the time and energy necessary to their roles. Stress directly affects the productivity, performance, behaviour and satisfaction of working women (Onay & Kılıcı 2011). Opie and Henn (2013) have confirmed the negative effects of work-family conflicts in employment. Their results showed that conflict between family and work negatively predicted work engagement. In essence, conflict between work and family is likely to reduce the extent to which working women are engaged at work. Findings in the literature support a strong relationship between the Big Five personality traits, work-family conflict, and work engagement.

4.2.2 Empirical conclusions

The empirical aims of the study were, firstly, to investigate the relationship between personality dimensions, work-family conflict, and stress and work engagement among working women. Secondly, to determine whether the Big Five personality traits influence how working women manage work-family conflict, stress and work engagement.

The dimensions of the Basic Traits Inventory (BTI) yielded the following results: *Extraversion* ($\alpha=0.87$), *Neuroticism* ($\alpha=0.97$), *Conscientiousness* ($\alpha=0.93$), *Openness to Experience* ($\alpha=0.93$) and *Agreeableness* ($\alpha=0.92$). The results indicated that all the subscales of the Basic Traits Inventory have acceptable Cronbach alpha coefficients above $\alpha=0.70$.

The WAFCS had a Cronbach alpha of ($\alpha=0.89$) and it can thus be concluded that it is a reliable measure of work-family conflict. The Perceived Stress Scale had a Cronbach alpha of ($\alpha=0.80$), confirming its internal consistency.

The UWES-17 had a Cronbach alpha of 0.97, and its dimensions yielded the following reliability scores: vigour ($\alpha=0.92$), dedication ($\alpha=0.93$) and absorption ($\alpha=0.91$). It can thus be concluded that the work engagement subscales of the UWES-17 are a reliable measure of work engagement.

The results confirmed that *Neuroticism* and work-family conflict were correlated in a statistically significant way. Andreassi (2011) emphasised that *Neuroticism* is a powerful predictor of work-family conflict. There was a significant positive correlation between *Neuroticism* and stress. Working women with higher levels of *Neuroticism* will therefore be more likely to be anxious, stressful and negative. In short, higher levels of *Neuroticism* mean higher perceived stress levels. A positive correlation was found between *Extraversion*, *Conscientiousness*, *Agreeableness* and work engagement. This means that working women who possess some levels of *Extraversion*, *Agreeableness* and *Conscientiousness* can foster a high level of engagement in the workplace (Moshoeu, 2017).

A positive statistically significant correlation was identified between work-family conflict and stress. In a meta-analytical review by Amstad et al. (2011), women may experience work-related conflict outcomes like higher absenteeism, intent to quit, turnover, organisational citizenship and burnout. Depression and anxiety are shown to be detrimental result of work-family conflicts (Amstad et al., 2011; Mihelic & Tekavcic, 2014).

4.2.3 Overall conclusions

It can be concluded that the general aim of the study was achieved, as it was determined that there is a statistically significant relationship between working women's personality and how they deal with work-family conflict, stress, and work engagement.

4.3 LIMITATIONS

The present study had several limitations that also highlight opportunities for future research.

Firstly, due to money and time constraints, the study was limited, as it focused only on working women. Future studies could look at how include working fathers with different personalities manage work-family conflict, stress and work engagement.

Secondly, while the results may be representative of the working women who participated in the research, the small sample size ($n=51$) cannot be generalised as being representative of working women in general. It is recommended that in order to generalise the findings of this study, future research should utilise a larger population and sample. Further research should seek to find a more representative sample of the general population. Additionally, since the sample size ($n = 51$) for this study was small, the sample lacked statistical power. However, according to Song, Tsui and Law (2009), a small sample provides a more conservative test of the true correlations between variables. In addition, a convenience sample was used, which reduced the sample size, and further minimised the generalisation of the findings and this means that there will be a low external validity.

Thirdly, the BTI, WAFCS, PSS-10 and UWES-17 are all self-reporting questionnaires, and the use of self-report measures could impact the common method variance of the construct. This can result in common method bias influencing the results (Podsakoff, Mackenzie, Lee & Podsakoff, 2003).

A fourth limitation is that the research design for the current study was cross-sectional. This implied that the relationship between the Big Five personality traits, work-family conflict, stress and work engagement of working women was not assessed and monitored over time. Longitudinal studies could be conducted in future to draw causal inferences based on the relationships examined in the present study.

The fifth limitation is that only a quantitative research method was used in this study. A combination of quantitative and qualitative methods could be used in future to provide a better understanding of the variables under research.

Despite the above-mentioned limitations, it can be concluded that the study shows promise for investigating how working women manage work-family conflict, stress and work engagement.

4.4 RECOMMENDATIONS

The current study was mainly based on previous studies with a cross-section design. The results of longitudinal research can be more accurate than cross-sectional.

Although research on the issue of family-work conflict is growing, little research has been carried out on the experiences of working father in dealing with work-family conflict. Future studies should therefore investigate the possible short-term and long-term effects of personality on work-family conflict, stress and work engagement among both working men and women.

The use of various qualitative as well as quantitative research methodologies is recommended, as it could increase the understanding of the relationship between personality on work-family conflict, stress and work engagement.

4.5 CHAPTER SUMMARY

In this chapter, the literature underpinning this study was discussed with the emphasis on personality dimensions, work-family conflict, stress, and work engagement. The results were explained, conclusions were drawn, and limitations were highlighted. Recommendations were formulated for further research based on this research's findings. Seeing that the research objectives of this study were achieved, the research was concluded.

REFERENCES

- Aamodt, M. G. (2010). *Industrial/organizational psychology: An applied approach*. Belmont, California: Cengage Learning.
- Abbasi, I. S. (2011). The influence of neuroticism on stress perception and its resultant negative affect. *Master's Theses*. Paper 3965. Retrieved from http://scholarworks.sjsu.edu/etd_theses.
- Abendroth, A. K., Van der Lipper, T. & Mass, I. (2012). Social support and the working hours of employed mothers in Europe. The relevance of the state, the workplace, and the family. *Social Science Research*, 41(3), 581-597.
- Allen, L. S., Johnson, R. C., Saboe, K. N., Cho, E., Dumani, S. & Evans, S. (2012). Dispositional variables and work-family conflict: A meta-analysis. *Journal of Vocational Behavior*, 80, 17 – 26.
- Amstad, F. T., Meier, L. L., Fasel, U., Elfering, A. & Semmer, N. K. (2011). A meta-analysis of work-family conflict and various outcomes with a special emphasis on cross-domain versus matching-domain relations. *Journal of Occupational Health Psychology*, 16, 151-169.
- Andreassi, J. K. (2011). What the person brings to the table: Personality, coping and work- family conflict. *Journal of Family Issues*, 6, 1 – 26.
- Aryee, S. (2005). The work- family interface in Urban Sub-Saharan Africa: A theoretical Analysis. In S.A.Y. Poelmans (Ed.), *Work and family: An international perspective* (pp. 261-285). Mahwah: Lawrence Erlbaum Associates, Inc.
- Bagger, J. & Li, A. (2011), "How Does Supervisory Family Support Influence Employees' Attitudes and Behaviors? A Social Exchange Perspective", *Journal of Management*, Vol. 40 No. 4, pp. 1123–1150
- Bakker, A., Albrecht, A. L. & Leiter, M. (2011). Key questions regarding work engagement. *European Journal of Work and Organizational Psychology*, 20(1), 4-28. doi:10.1080/1359432X.2010.485352
- Bakker, A. B. & Demerouti, E. (2008). Towards a model of work engagement. *Career Development International*, 13(3), 209-233.
- Bakker, A.B. & Demerouti, E. (2009). The crossover of work engagement between working couples: A closer look at the role of empathy. *Managerial Psychology*. 24(3), 220–236. <http://dx.doi.org/10.1108/02683940910939313>

- Bakker, A. B., Demerouti, E. & Dollard, M. F., (2008). How job demands affect partners' experience of exhaustion: Integrating work-family conflict and crossover theory. *The Journal of Applied Psychology*, 93(4), 901-11. doi:10.1037/0021-9010.93.4.901
- Bakker, A.B., Van Der Zee, K.I., Lewig, K.A., & Dollard, M.F. (2006). The relationship between the big five personality factors and burnout: A study among volunteer counsellors. *The Journal of Social Psychology*, 146(1), 31-50. <http://dx.doi.org/10.3200/SOCP.146.1.31-50>
- Baltes, B. B., Zhdanova, L. S. & Clark, M. A. (2011). Examining the relationships between personality, coping strategies and work-family conflict. *Journal of Business and Psychology*, 26(4), 517-530.
- Bandura, A. (2001). The changing face of psychology at the dawning of a globalization era. *Canadian Psychology*, 42, 12-24.
- Barrick, M. R. & Mount, M. K. (1991). The Big Five personality dimensions and job performance: A meta-analysis. *Personnel Psychology*, 44(1), 1-26.
- Barrick, M. R., Mount, M. K. & Li, N. (2013). The theory of purposeful work behaviour: The role of personality, higher-order goals and job characteristics. *Academy of Management Review*, 38(1), 132-153.
- Beckers, D. G. J., van der Linden, D., Smulders, P. G. W., Kompier, M. A. J., van Veldhoven, M. & van Yperen, N. W. (2004). Working overtime hours: Relations with fatigue, work motivation, and the quality of work. *Journal of Occupational and Environmental Medicine*, 46(12), 1282-1289. doi: 10.1097/01.jom.0000147210.95602.50
- Becker, G., Gates R.J. & Newsom, E. (2004). Self-care among chronically ill African Americans: Culture, health disparities, and health insurance status. *American Journal of Public Health*. 94, 2066–2074.
- Bell, A., Rajendran, D. & Theiler, S. (2012). Job Stress, Wellbeing, Work-Life Balance and Work-Life Conflict Among Australian Academics. *Electronic Journal of Applied Psychology*. 8. 25-37. 10.7790/ejap.v8i1.320.
- Berger, L. (2018). Working Mothers Satisfaction: *The Influence of Time Demands and Time-Based Conflict*. *J Ment Disord Treat* 4: 158. DOI: [10.4172/2471-271X.1000158](https://doi.org/10.4172/2471-271X.1000158)

- Blanch, A. & Aluja, A. (2009). Work, family and personality: A study of work-family conflict. *Personality and Individual Differences*, 46, 520-524, doi:10.1016/j.paid.2008.12.004
- Bless, C., Higson-Smith, C. & Kagee, A. (2007). *Fundamentals of social research methods: An African perspective* (4th ed). Cape Town: Juta.
- Bolino, M.C. & Turnley, W.H. (2005). The Personal Costs of Citizenship Behavior: The Relationship between Individual Initiative and Role overload, Job Stress, and Work-Family Conflict. *Journal of Applied Psychology*, 90, 740-748.
- Braunstein-Bercovitz, H., Frish-Burstein, S. & Benjamin, B. A. (2012). The role of personal resources in work-family conflict: Implications for mothers' well-being. *Journal of Vocational Behavior*, 80, 317 – 325.
- Britt, T. W., Castro, C. A. & Adler, A. B. (2005). Self-engagement, stressors, and health: A longitudinal study. *Personality and Social Psychology Bulletin*, 31(11), 1475-1486. doi: 10.1177/0146167205276525
- Bryant, R.H., Allen, T.D., Borman, W.C., Spector, P.E., Phares, V. & Bryant J.B., (2009). Personality and work-family conflict: The mediational role of coping styles. University of South Africa.
- Byron, K. (2005). A meta-analytic review of work-family conflict and its antecedents. *Journal of Vocational Behavior*, 67, 169–198.
- Burger, J.M. (Ed.). (2004). *Personality* (6th edn.). Belmont, CA: Wadsworth/Thomson Learning.
- Burger, J.M. (2010). *Personality*. Wadsworth Publishing: Belmont, CA.
- Bergh, Z. & Theron, A. (2006). *Psychology in the Work Context*. 3rd Edition. Cape Town: Oxford.
- Burke, R. J. & Fiksenbaum, L. (2009). Work motivations, work outcomes, and health: Passion versus addiction. *Journal of Business Ethics*, 84(2), 257-263.
- Burke, R. J., Fiksenbaum, L., El-Kot, G., Koyuncu, M. & Jing, W. (2011). *Potential antecedents and consequences of work-family conflict: a three country study*. In *Creating Balance?* (pp. 101-119). Springer Berlin Heidelberg.
- Carlson, D. S., Kacmar, K. M., Wayne, J. H. & Grzywacz, J. G. (2006). Measuring the positive side of the work-family interface: Development and validation of a work-family enrichment scale. *Journal of Vocational Behavior*, 68, 131-164.

- Cha, Y. (2013). Overwork and the persistence of gender segregation in occupations. *Gender & Society*, 27. Retrieved January 31, 2013, from PsycARTICLES database. <http://dx.doi.org/10.1177/0891243212470510>
- Coetzee, M. & Roythorne-Jacobs, H. (2012). *Career counselling and guidance in the workplace: A manual for career practitioners*. (2nd edn.). Cape Town, South Africa: Juta.
- Cohen, S., 1988. Perceived stress in a probability sample of the United States. In: Spacapan, S., Oskamp, S. (Eds.), *The Social Psychology of Health*. Sage, Newbury Park, CA, pp. 31e67
- Cohen, S., Kamarck, T., Mermelstein, R. (1983). A global measure of perceived stress. *Journal of Health and Social Behavior*, 24, 385-396
- Cook, K.E. (2012). Social support in single parents' transition from welfare to work: Analysis of qualitative findings. *International Journal of Social Welfare*, 21, 338-350.
- Crawford, E. R., LePine, J. A. & Rich, B. L. (2010). Linking job demands and resources to employee engagement and burnout: A theoretical extension and meta-analytic test. *Journal of Applied Psychology*, 95(5), 834-848. doi: 10.1037/a0019364
- Cropanzano, R., Howes, J., Grandey, A. & Toth, P. (1997). The relationships of Organizational Politics on support to work behaviours, attitudes, and stress. *Journal of Organizational Behavior*, 18, 159-180.
- Dåderman, A.M., Basinska, B.A.(2016). Job Demands, Engagement, and Turnover Intentions in Polish Nurses: The Role of Work-Family Interface. *Frontiers in Psychology* (7):1621. DOI:10.3389/fpsyg.2016.01621.
- De Braine, R. & Roodt, G. (2011). The Job Demands-Resources model as predictor of work identity and work engagement: A comparative analysis. *South African Journal of Industrial Psychology*, 37(2), 1–11. <http://dx.doi.org/10.4102/sajip.v37i2.889>
- De Bruin, K. & Thomson, L.-A., (2007). Personality as a predictor of life balance in South African corporate employees. *Journal of Contemporary Management*, 4, 68-85. Retrieved from <http://0-reference.sabinet.co.za.ujlink.uj.ac.za/document/EJC51017>
- Demerouti, E., Bakker, A.B., Janssen, P.P.M. & Schaufeli, W.B. (2001). Burnout and engagement at work as a function of demands and control. *Scandinavian*

Journal of Work, Environment & Health, 27, 279–286. <http://dx.doi.org/10.5271/sjweh.615>

- De Vos, A. S., Strydom, H., Fouche, C. B. & Delpont, C. L. (2011). *Research at grass roots*. Pretoria, SA: Van Schaik Publishing.
- Drew, E. P. & Eamonn, M. M. (2015). Work/life balance: senior management champions or laggards? *Women in Management Review*, 20(4), 264-278.
- Drost, E.A. (2011). Validity and Reliability in Social Science Research. *Education Research and Perspectives*, 38, 105- 123.
- Ebstrup, J. F., Eplov, L. F., Pisinger, C. & Jorgensen, T. (2011). Association between the five factor personality traits and perceived stress: Is the effect mediated by general self-efficacy? *Anxiety, Stress & Coping*, 24(4), 407-419
- Elkins, D. N. (2015). Beyond religion: Toward a humanistic spirituality. In Schneider, K.J., Pierson, J.F. & Bugental, J.F.T. (Eds.) *The handbook of humanistic psychology* (2nd ed.). California: Sage.
- Ferguson, M., Carlson, D., Zivnuuska, S. & Whitten, D. (2012). Support at work and home: The path to satisfaction through balance. *Journal of Vocational Behaviour*, 80, 299-307.
- Franks, K., Schurink, W. & Fourie, L. (2006). Exploring the social construct on of life roles of career-oriented women. *South African Journal of Industrial Psychology*, 32(1), 17–24.
- Frone, M. R., Russell, M. & Barnes, G. M. (1996). Work-family conflict, gender, and health-related outcomes: A study of employed parents in two community samples. *Journal of Occupational Health Psychology*, 1, 57-69
- Frone, M., Russell, M. & Cooper, M. (1992). Antecedents and Outcomes of Work-Family Conflict: Testing a Model of the Work-Family Interface. *The Journal of applied psychology*. 77. 65-78. 10.1037//0021-9010.77.1.65.
- Frone, M. R. (2003). Work-family balance. In J. C. Quick & L. E. Tetrick (Eds.), *Handbook of Occupational Health Psychology* (pp. 143-162), Washington: American Psychological Association.
- Frone, M. R., Yardley, J. K. & Markel, K. (1997). Developing and testing an integrative model of the work-family interface. [Special issue]. *Journal of Vocational Behavior*, 50, 145-167.

- Garcia, J., Hromi-Fiedler, A., Mazur, R.E., Marquis, G., Sellen, D., Lartey, A., et al., 2013. Persistent household food insecurity, HIV, and maternal stress in peri-urban Ghana. *BMC Public Health* 13, 215.
- Garson, G. D. (2012). *Logistic regression: Binary and multinomial*. Asheboro, NC: Statistical Publishing Associates.
- Geldenhuis, M., Łaba, K. & Venter, C.M. (2014), "Meaningful Work, Work Engagement and Organisational Commitment", *SA Journal of Industrial Psychology*, Vol. 40 No. 1, pp. 1– 10.
- George, L., Helson, R. & John, O. P. (2011). The "CEO" of women's work lives: How Big Five Conscientiousness, Extraversion, and Openness predict 50 years of work experiences in a changing sociocultural context. *Journal of Personality and Social Psychology*, 101, 812– 830.
- Geurts, S. A. E., Kompier, M. A. J., Roxburgh, S. & Houtman, I. L. D. (2003). Does work– home interference mediate the relationship between workload and well-being? *Journal of Vocational Behavior*, 63(3), 532-559. doi: 10.1016/S0001-8791(02)00025-8
- Gillespie, N. A., Walsh, M., Winefield, A., Dua, J. & Stough, C. (2001). Occupational stress in universities: Staff perceptions of the causes, consequences and moderators of stress. *Work & Stress*, 15(1), 53-72. doi:10.1080/026783701117944
- Goldberg, L.R. (1981). Language and individual differences: The search for universals in personality lexicons. In: *Wheeler (Ed.), Beverly Hills, CA: Sage. Rev. Pers. Soc. Psychol.* 1:141-165.
- Goldberg, L.R. (1990). An alternative "description of personality": *The Big Five factor structure. J. Person. Soc. Psychol.* 59: 1216-1229.
- Goliath-Yarde, L. & Roodt, G. (2011). Differential item functioning of the UWES-17 in South Africa. *SA Journal of Industrial Psychology*, 37(1), 1– 11. <http://dx.doi.org/10.4102/sajip.v37i1.897>
- Greenhaus, J. H. & Beutell, N. J. (1985). Sources of conflict between work and family roles. *Academy of Management Review*, 10(1), 76-88.
- Greenhaus, J. H. & Powell, G. N. (2006). When work and family are allies: A theory of work-family enrichment. *The Academy of Management Review*, 31(1), 72-92. <http://dx.doi.org/10.2307/20159186>

- Greenhaus, J. H., Ziegert, J. C. & Allen, T. D. (2012). When family-supportive supervision matters? Relations between multiple sources of support and work–family balance. *Journal of Vocational Behavior*, 80, 266-275.
- Hakel, M. D. (1974). Normative personality factors recovered from ratings of personality descriptors: The beholder's eye. *Personnel Psychology*, 27, 409 – 421.
- Halbesleben, J. R. B. (2010). A meta-analysis of work engagement: Relationships with burnout, demands, resources, and consequences. In A. B. Bakker and M. P. Leiter (Eds.), *Work engagement: A handbook of essential theory and practice* (pp. 102-117). London and New York: Psychology Press.
- Halbesleben, J.R.B., Harvey, J. & Bolino, M.C. (2009). Too engaged? A conservation of resources view of the conservation between work engagement and work interference with family. *Journal of Applied Psychology*, 94(6), 1452–1465. <http://dx.doi.org/10.1037/a0017595>
- Harter, J.K., Schmidt, F.L. & Hayes, T.L. (2002). Business-unit-level relationship between employee satisfaction, employee engagement, and business outcomes: A meta-analysis. *Journal of Applied Psychology*, 87, 268-279.
- Herbst, L., Van der Westhuizen, S. & Visser, D. (2007). Personality, sense of coherence and the coping of working mothers. *South African Journal of Industrial Psychology*. 33. 10.4102/sajip.v33i3.397.
- Higgs, J. (2011). *Social support, psychological conditions, and work engagement as predictors of intention to stay* (master's mini-dissertation). North West University, Vanderbijlpark.
- Hogan, R. (1983). *A socioanalytic theory of personality*. Lincoln, NE: University of Nebraska Press.
- Ilies, R., De Pater, I. E., Lim, S. & Binnewies, C. (2012). Attributed causes for work–family conflict: Emotional and behavioral outcomes. *Organizational Psychology Review*, 2(4), 293 – 310.
- Inceoglu I. and Warr P. (2012). Personality and Job Engagement. *Journal of Personnel Psychology*, pp.1-9
- Innstrand, S. T., Langballe, E. M., Espnes, G. A., Aasland, O. G. W. & Falkum, E. (2010). Work–home conflict and facilitation across four different family structures in Norway. *Community, Work & Family*, 13, 231–249.

- International Labour Organisation-ILO. (2013). Global Employment Trends 2013, Recovering from a Second Jobs Dip. *International Labour Office Publication Geneva, Switzerland.*
- Jacobs, D., Mostert, K. & Pienaar, J. (2008). The experience of work-life interaction in the Northern Cape mining industry: An exploratory study. *South African Journal of Economic Management Sciences*, 11(1), 17-36.
- Jang, S. P., Park, R. & Zippay, A. (2011). The interaction effects of scheduling control and work-life balance program on job satisfaction and mental health. *International Journal of Social Welfare*, 20, 135-143.
- Jeong, H., Hyun, K. & Swanger, N. (2009). Burnout and engagement: A comparative analysis using the Big Five personality dimensions. *International Journal of Hospitality Management*, 28, 96–104. <http://dx.doi.org/10.1016/j.ijhm.2008.06.001>
- John, O. P. (1989). Towards a taxonomy of personality *descriptors*. New York: Springer – Verlag.
- John, O. P. and Srivastava, S. (1999). The big five trait taxonomy: History, measurement, and theoretical perspectives. *Handbook of personality: Theory and research*, 2:102–138.
- Joo, B-K. & Shim, J. H. (2010). Psychological empowerment and organizational commitment: The moderating effect of organizational learning culture. *Human Resource Development International*, 13, 425–441. doi: 10.1080/13678868.2010.50196
- Jung, Carl G. (1971), *Collected Works, Volume 6: Psychological Types*, Princeton, NJ: Princeton University Press.
- Kahn, W.A. (1990). Psychological conditions of personal engagement and disengagement at work. *Academy of Management Journal*, 33(4), 692–724.
- Karatepe, O. M. & Baddar, L. (2006). An empirical study of the selected consequences of frontline employees' work-family conflict and family-work conflict. *Tourism Management*, 27(5), 1017-1028.
- Kim, H., Shin, K. & Swanger, N., (2009). Burnout and engagement: A comparative analysis using the Big Five personality dimensions. *International Journal of Hospitality Management*, 28, 96-104.

- Kinnunen, U., Feldt, T., Geurts, S. & Pulkkinen, L. (2006). Types of work-family interface: Well-being correlates of negative and positive spill over between work and family. *Scandinavian journal of psychology*, 47(2), 149-162.
- Kinnunen, U. & Mauno, S. (1998). Antecedents and outcomes of work-family conflict among employed women and men in Finland. *Human Relations*, 51(2), 157-177.
- Kinnunen, U., Rantanen, J., Mauno, S. & Peeters, M. (2013). Work-family interaction. In M. Peeters, J. D. Jonge & T. Taris (Eds.), *An introduction to contemporary work psychology* (p. 267–289). Chichester, UK: Wiley- Blackwell.
- Kirk PM, Cannon PF, David JC, Stalpers JA (eds) (2001). *Ainsworth & Bisby's dictionary of the fungi*. 9th edition. CABI Publishing, Wallingford.
- Kirton, M. J., De Ciantis, S. M. (1986) Cognitive style and personality: The Kirton Adaption-Innovation and Cattell's Sixteen Personality Factor Inventories. *Personality and Individual Differences*, 7, 141–146.
- Koekemoer, E. & Mostert, K. (2010). An exploratory study of the interaction between work and personal life: Experiences of South African employees. *South African Journal of Industrial Psychology*, 36(1), 1–15.
- Kossek, E. E., Baltes, B. B. & Matthews, R. A. (2011). How work-family research can finally have an impact in organizations. *Industrial and Organizational Psychology*, 4, 352–369.
- Kossek, E. E. & Lautsch, B. A. (2012). Work-family boundary management styles in organizations: A cross-level model. *Organizational Psychology Review*, 2(2), 152-171. <http://dx.doi.org/10.1177/2041386611436264>
- Kossek, E., Pichler, S., Bodner, T. & Hammer, L. (2011). Workplace social support and work-family conflict: A meta-analysis clarifying the influence of general and work-family-specific supervisor and organizational support. *Personnel psychology*. 64. 289-313. 10.1111/j.1744-6570.2011.01211.x.
- Langelaan, S., Bakker, A. B., van Doornen, L. J. P. & Schaufeli, W. (2006). Burnout and work engagement: Do individual differences make a difference? *Personality and Individual Differences*, 40, 521-532.
- Larsen, R. J. & Buss, D. M. (2014). *Personality psychology: Domains of knowledge about human nature* (5th ed.). New York, NY: McGraw-Hill Education.
- Lazarus, R S and Folkman, S, (1986). Cognitive theories of stress and the issue of circularity. In M H Appley and R Trumbull (Eds), (1986). Dynamics of Stress. Physiological, Psychological, and Social Perspectives (pp. 63–80). New York,: Plenum. Abstract-PsycINFO

- Lee, E. H. (2012). Review of the psychometric evidence of the perceived stress scale. *Asian Nursing Research*, 6(4), 121-127.
- Leedy, P. D., R & Ormond, J. E (2013). *Practical Research: Planning and design (10th ed)*. Upper Saddle River, New Jersey: Pearson.
- Lemma, S., Gelaye, B., Berhane, Y., Worku, A. & Williams, M.A. (2012). Sleep quality and its psychological correlates among university students in Ethiopia: a cross-sectional study. *BMC Psychiatry* 12, 237.
- Leung, M. Y., Chan, Y. S. & Yu, J. (2009). Integrated model for the stressors and stresses of construction project managers in Hong Kong. *Journal of Construction Engineering and Management*, 135(2), 126-134.
- Lewis, S. (2010). "Restructuring workplace cultures: the ultimate work-family challenge?", *Gender in Management: An International Journal*, 25(5),355-365, <https://doi.org/10.1108/17542411011056859>
- Lewis-Enright, K., Crafford, A. & Crous, F. (2009). Towards a workplace conducive to the career advancement of women. *South African Journal of Industrial Psychology*, 35(1), 1–9. <http://dx.doi.org/10.4102/sajip.v35i1.832>
- Lewis, S., Gambles, R., and Rapoport, R. (2007). The constraints of a work-life balance approach: an international perspective. *International Journal of Human Resources Management* 18(3): 360-373
- Lyon, B. 2012. Stress, Coping and Health: A conceptual overview. In Rice, V.H. (ed), *Handbook of Stress, Coping, and Health: Implications for Nursing Research, Theory, and Practice*. Second Edition. Thousand Oaks, California: SAGE Publications, 2-20.
- Macsinga, I., Sulea, C., Sârbescu, P., Fischmann, G. & Dumitru, C. (2015). Engaged, Committed and Helpful Employees: The Role of Psychological Empowerment, *The Journal of Psychology: Interdisciplinary and Applied*, 149(3), 263-276. doi: 10.1080/00223980.2013.874323
- Malekiha, M., Abedi, M.R., & Baghban, I. (2012). Work-family conflict and personality. *Interdisciplinary Journal of Contemporary Research in Business*, 3(10), 144-153.
- Maltby, J., Day, L. & Macaskill, A. (2010). *Personality, individual differences and intelligence*. (2nd edn.). Essex: Pearson Education Limited.
- Maree, K. & Pietersen, J. 2009. Surveys and the use of questionnaires. In: K. Maree (ed.), *First steps in research* (Pretoria: Van Schaik Publishers), pp.154-170.

- Maslach, C. & Leiter, M. P. (2008). Early predictors of job burnout and engagement. *Journal of Applied Psychology*, 93, 498-512. doi: 10.1037/0021-9010.93.3.498
- Matzler, K., Renzl, B., Mooradian, T., Von Krogh, W. & Mueller, J. (2011). Personality traits, affective commitment, documentation of knowledge, and knowledge sharing. *The International Journal of Human Resource Management*, 22(2), 296-310.
- Meyer, L., Lombard, K., Warnich, P & Wolhuter, C. (2010). *Outcomes-Based Assessment for South African teachers*. Pretoria: Van Schaik.
- McKenna, S., Richardson, J., and Manroop, L. (2011), 'Alternative Paradigms and the Study and Practice of Performance Management and Evaluation', *Human Resource Management Review*, 21, 148–157.
- McMillan, H. S., Morris, M. L. & Atchley, E. K. (2011). Constructs of the work/life interface: A synthesis of the literature and introduction of the concept of work/life harmony. *Human Resource Development Review*, 10(1), 6-25.
- McNall, L. A., Nicklin, J. M. & Masuda, A. D. (2010). A meta-analytic review of the consequences associated with work–family enrichment. *Journal of Business & Psychology*, 25, 381–396.
- Michel, J. S., Clark, M. A. & Jaramillo, D. (2011). The role of five factor model of personality in the perceptions of negative and positive forms of work-nonwork spillover: A meta-analytic review. *Journal of Vocational Behaviour*, 79(1), 191-203.
- Michel, J. S., Kotrba, L. M., Mitchelson, J. K., Clark, M. A. & Baltes, B. B. (2011). Antecedents of work–family conflict: A meta-analytic review. *Journal of Organizational Behavior*, 32, 689–725.
- Mihelič, K. K., Tekavčič, M. (2014). Work family conflict: A review of antecedents and outcomes. *International Journal of Management & Information Systems*, 18(1), 15-26.
- Milyavskaya, M., Ma, D., Koestner, R., Lydon, J. & Mclure, J. (2011). Attachment moderates the effects of autonomy-supportive and controlling interpersonal primes on intrinsic motivation. *Canadian Journal of Behavioural Science*, 44, 278-287. doi:10.1037/a0025828

- Morgan, B. & de Bruin, K. (2010). The relationship between the big five personality traits and burnout in South African university students. *South African Journal of Psychology, 40*(2), 182–191. Retrieved from: [http //0-web.ebscohost.com.ujlink.uj.ac.za/ehost/pdfviewer/pdfviewer?sid=f0739b3c-d904-4d9c-bb22-f8a49c920bfd%40sessionmgr112&vid=18&hid=110](http://0-web.ebscohost.com.ujlink.uj.ac.za/ehost/pdfviewer/pdfviewer?sid=f0739b3c-d904-4d9c-bb22-f8a49c920bfd%40sessionmgr112&vid=18&hid=110)
- Moshoeu, A. N. (2017). A model of personality traits and work-life balance as determinants of employee engagement. (Unpublished MA dissertation). University of South Africa.
- Mostert, K. & Rothmann, S. (2006). Work-related well-being in the South African Police Service. *Journal of Criminal Justice, 34*, 479–491. <http://dx.doi.org/10.1016/j.jcrimjus.2006.09.003>
- Motowidlo, S.P., Packard, J.-S. & Manning, M. (1986). Occupational stress: Its causes and consequences for job performance. *Journal of Applied Psychology, 71*, 618-629.
- Mroczek, D. & Almeida, D. (2004). The effect of daily stress, personality, and age on daily negative affect. *Journal of Personality, 72*(2), 355-378.
- Murray, R (2011). Managing your stress. *A guide for nurses, Royal College of Nursing*. www.rcn.org.uk. (Accessed 24 April 2013)
- National Institute of Mental Health. (2015). Fact sheet on stress. Retrieved from <http://www.nimh.nih.gov/health/publications/stress/index.shtml>
- Nelson, T.M. (2012). *Industrial and organisational psychology in South Africa: Research and practice*. Unpublished master's dissertation, University of Witwatersrand, Johannesburg, South Africa.
- Netemeyer, R. G., Boles, J.S. & McMurrian, R. (1996). Development and validation of work-family conflict and family-work conflict scales. *Journal of Applied Psychology, 81*: 400-410.
- Nohe, C. & Sonntag, K. (2014). Work–family conflict, social support, and turnover intentions: A longitudinal study. *Journal of Vocational Behavior, 85*(1), 1-12. <http://dx.doi.org/10.1016/j.jvb.2014.03.007>
- Norman, W. T. (1963). Towards an adequate taxonomy of personality attributes: Replicated factor structure in peer nomination personality ratings. *Journal of Abnormal Social Psychology, 66*, 574 – 583.

- O'Driscoll, M. P., Ilgen, D. R. & Hildreth, K. (1992). Time devoted to job and off-job activities, interrole conflict, and affective experiences. *Journal of Applied Psychology, 77*, 272-279.
- Oosthuizen, J. & Mostert, K. (2010). Reasons and strategies associated with positive interaction between work and home amongst managers: An exploratory study. *South African Journal of Industrial Psychology, 36*(1), 1–13. <https://doi.org/10.4102/sajip.v36i1.877>
- Opie, T. & Henn, C.M. (2013). Work-family conflict and work engagement among mothers: Conscientiousness and neuroticism as moderators. *SA Journal of Industrial Psychology/SA Tydskrif* , 39(1), Art.#1082, 12 pages. <http://dx.doi.org/10.4102/sajip>.
- Overdale, S. & Gardner, D. (2012). Social support and coping adaptability in initial military training. *Military Psychology, 24*, 312-330.
- Parahoo K. (2006) *Nursing Research: Principles, Process and Issues, 2nd edn. Palgrave Macmillan, Houndsmill.*
- Parks-Leduc, L., Feldman, G., & Bardi, A. (2014). Personality traits and personal values: A meta-analysis. *Personality and Social Psychology Review, 19*, 3–29, doi: 10.1177/1088868314538548
- Pervin, L. A. & Cervone, D. (2010). *Personality: Theory and research* (11th ed). New York, NY: Wiley.
- Pietersen, J. and Maree, K. 2012, 'Standardisation of a questionnaire', in Maree, K. (Ed.), *First Steps in Research*, First Edition, Pretoria: Van Schaik, 215-222.
- Polit D.F. & Beck C.T. (2010). *Essentials of Nursing Research: Appraising Evidence for Nursing Practice*, 7th edn. Wolters Kluwer Health / Lippincott Williams & Wilkins, Philadelphia
- Poon, J.M.L. (2013). Relationships among perceived career support, affective commitment, and work engagement. *International Journal of Psychology, 48*(6), 1148-1155. doi:10.1080/00207594.2013.768768
- Porter, G. (1996). Organizational impact of workaholism: Suggestions for researching the negative outcomes of excessive work. *Journal of Occupational Health Psychology, 1*(1), 70-84. doi: 10.1037/1076-8998.1.1.70
- Powell, G. N. & Greenhaus, J. H. (2010). Sex, gender, and the work-tofamily interface: Exploring negative and positive interdependencies. *Academy of Management Journal, 53*, 513–534.

- Primecz, H., Kiss, Cs., Toarniczky, A., Csillag, S., Szilas, R., Bácsi, K., Milassin, A. (2014): Magyarországi „munkavállaló-barát” (employee friendly) szervezetek – Valóság vagy utópia (avagy mit tanulhatunk tőlük?). *Vezetéstudomány*, 45. (10): 2-16.
- Radhakrishnan, R. and Jins, J. P (2012). A Study on Gender Differences in Stress Faced by Life Insurance Marketing Employees. *Asia-Pacific Journal of Management*, 8, 77-85.
- Ram, N., Khoso, I., Shah, A. A., Chandio, F. R. & Shaikih, F. (2011). Role Conflict and Role Ambiguity as Factors in Work Stress among Managers: A Case Study of Manufacturing Sector in Pakistan. *Asian Social Science*, 7(2).
- Rantanen, J., Kinnunen, U., Feldt, T. & Pulkkinen, L. (2008). Work–family conflict and psychological well-being: Stability and cross-lagged relations within one- and six-year follow-ups. *Journal of Vocational Behavior*. 73. 37-51. 10.1016/j.jvb.2008.01.001.
- Rantanen, J., Pulkkinen, L. & Kinnunen, U. (2005). The Big Five personality dimensions and work-family conflict, and psychological distress: A longitudinal review. *Journal of Individual Differences*, 26, 155 – 166.
- Rantanen, J., Kinnunen, U. & Pulkkinen, L. (2013). The role of personality and role engagement in work-family balance. *Horizons of Psychology*, 22, 14-26
- Rosberger, R. (2014). National Personality Profiles and Innovation: The Role of Cultural Practices. *Creativity and Innovation Management*. 23. 10.1111/caim.12075.
- Rothmann, S. 2002. ‘Burnout and engagement: A fortigenic perspective’. Inaugural lecture presented at the North-West University, Potchefstroom.
- Rothmann, S., & Rothmann, J.C. (2007). *The South African Employee Health and Wellness Survey (SAEHWS)*. User manual. (4th edn.). Potchefstroom, South Africa: Afriforte.
- Rothmann, I. I. & Cooper, C. (2008). *Organisational Psychology*. London: Sage.
- Rothman, S. & Barkhuizen, N. (2008). Burnout of academic staff in South African higher education institutions. *South African Journal of Higher Education*, 22 (2), 439-456.
- Rothmann, S. & Rothmann, S. (2010). Factors associated with employee engagement in South Africa. *South African Journal of Industrial Psychology* 36(2), 1-12.

- Salanova, M., Llorens, S., Cifre, E., Martínez, I.M. & Schaufeli, W.B. (2003). Perceived collective efficacy, subjective well-being and task performance among electronic work groups. *Small Group Research*, 34, 43-73.
- Schaufeli, W.B. & Bakker, A.B. (2001). Werk en welbevinden: Naar een positieve benadering in de Arbeids -en Gezondheidspsychologie [Work and well-being: Towards a positive Occupational Health Psychology]. *Gedrag & Organisatie*, 14, 229-253.
- Schaufeli, W.B. & Bakker, A.B. (2010). Defining and measuring work engagement: Bringing clarity to the concept. In A.B. Bakker & M.P. Leiter (Eds.), *Work engagement: A handbook of essential theory and research* (pp. 10-24). New York: Psychology Press.
- Schaufeli, W. B., Salanova, M., Gonzalez-Romá, V. & Bakker, A. B. (2002). The measurement of engagement and burnout: A confirmative analytic approach. *Journal of Happiness Studies*, 3, 71-92.
- Schaufeli, W.B., Taris, T.W. & Van Rhenen, W. (2003). Workaholism, burnout and engagement: Three of a kind or three different kinds of employee well-being? Submitted for publication.
- Schneider, T. R., Rench, T. A., Lyons, J. B. & Riffle, R. R. (2012). The influence of neuroticism, extraversion and openness on stress responses. *Stress and Health*, 28(2), 102-110
- Schreuder, D & Coetzee, M. (2010). An overview of industrial and organisational psychology research in South Africa: a preliminary study. *SA Journal of Industrial Psychology*, 36(1), 1-11. Retrieved March 13, 2019, from http://www.scielo.org.za/scielo.php?script=sci_arttext&pid=S2071-07632010000100016&lng=en&tlng=en.
- Seligman, M. E. P. & Csikszentmihalyi, M. (2000). Positive Psychology: An introduction. *American Psychology*, 55(1)5-14.
- Setia, M. S. (2016). Methodology Series Module 3: Cross-sectional Studies. *Indian Journal of Dermatology*, 61(3), 261–264. <http://doi.org/10.4103/0019-5154.182410>
- Shaffer, M. A., Joplin, J. R. & Hsu, Y. S., (2011). Expanding the boundaries of work-family research: A review and agenda for future research. *International Journal of Cross Cultural Management*, 11(2), 221-268. doi:10.1177/1470595811398800
- SHL. (2013). *OPQ32r technical manual*. Thames Ditton, UK: SHL Group Ltd.

- Sidani, Y. M. & Al Hakim, Z. T. (2012). Work–family conflicts and job attitudes of single women: A developing country perspective. *The International Journal of Human Resource Management*, 23(7), 1376-1393.
- Singh, A. P. & Kumar -Dubey, A. (2011). Role of Stress and Locus of Control in Job Satisfaction Among Middle Managers. *IUP Journal of Organizational Behavior*, 10(1), 42-56
- Skinner, N. and Pocock, B. (2008), 'Work, life and workplace culture: The Australian Work and Life Index 2008', University of South Australia, Centre for Work and Life
- Skomorovsky, A. (2014). Deployment stress and well-being among military spouses: The role of social support. *Military Psychology*, 26(1), 44–54.
doi:10.1037/mil0000029
- Smoktunowicz, E., Lesnierowska, M., Cieslak, R. & Benight, C. C. (2017). Effects of contextual and personal resources on work–family interface. In A. S. Antoniou & C.
- Smoot, S.M. (2005). *The meditational role of coping in the relationship between personality and work-family conflict*. Retrieved from http://etd.auburn.edu/etd/bitstream/handle/10415/530/SMOOT_STACEY_10.pdf?sequence
- Sonnentag, S. (2003). Recovery, work engagement, and proactive behaviour: A new look at the interface between non-work and work. *Journal of Applied Psychology*, 88(3), 518-528.
- Sonnentag, S., Mojza, E. J., Binnewies, C. & Scholl, A. (2008). Being engaged at work and detached at home: A week-level study on work engagement, psychological detachment, and affect. *Work and Stress*, 22(3), 257-276. doi: 10.1080/02678370802379440
- Statistics South Africa (2018). [How do women fare in the South African labour market?](http://www.statssa.gov.za/?p=11375) Retrieved from <http://www.statssa.gov.za/?p=11375>
- Storm, K. & Rothmann, S. (2003). A psychometric analysis of the Utrecht Work Engagement Scale in the South African police service. *South African Journal of Industrial Psychology*, 29(4), 62–70.
- Sutherland, R., De Bruin, G. P. & Crous, F. (2007). The relation between conscientiousness, empowerment and performance. *SA Journal of Industrial Psychology*, 5(2), 60-67.

- Swickert, R. J., Rosentreter, C. J., Hittner, J. B. & Mushrush, J. E. (2002). Extraversion, social support processes, and stress. *Personality and Individual Differences*, 32(5), 877-891.
- Taylor, N. (2008). The construction of a South African five factor personality questionnaire (Doctoral dissertation).
- Taylor, N. & De Bruin, G.P. (2006). *Basic Traits Inventory*. Johannesburg, SA: Jopie Van Rooyen and Partners.
- Temane, Q. M. & Wissing, M. P. (2008). The role of personality factors in the dynamics of context and psychological well-being. *Journal of Psychology in Africa*, 18(1), 105-114.
- Templer, K. J. (2012). Five-factor model of personality and job satisfaction: The importance of agreeableness in a tight and collectivistic Asian society. *Applied Psychology: An International Review*, 61(1), 114-129.
- Theunissen, B., Van Vuuren, L.J. & Visser, D. (2003). Communication of job-related information and work-family conflict in dual-career couples. *South African Journal of Industrial Psychology*, 29(1), 18–25. Retrieved from <http://www.sajip.co.za/index.php/sajip/article/view/81/78>
- Truss, C., Shantz, A., Soane, E., Alfes, K. & Delbridge, R. (2013). Employee engagement, organisational performance and individual well-being: exploring the evidence, developing the theory. *The International Journal of Human Resource Management*, 24(14), 2657-2669. doi:10.1080/09585192.2013.798921
- Tucker, M.M. & Kelley, M.L. (2009). Social support and life stress as related to the psychological distress of single enlisted navy mothers. *Military Psychology*, 21(Suppl. 2), S82-S97.
- Van den Broeck, A., De Cuyper, N., De Witte, H. & Vansteenkiste, M. (2010). Not all job demands are equal: Differentiating job hindrances and job challenges in the Job Demands-Resources model. *European Journal of Work and Organizational Psychology*, 19(6), 735-759. doi: 10.1080/13594320903223839
- Van der Colff, J.J. & Rothmann, S. (2009). Occupational stress, sense of coherence, coping, burnout and work engagement of registered nurses in South Africa. *SA Journal of Industrial Psychology*. 35(1), 1-10. doi: 10.4102/sajip.v35i1.423
- Vuuren, L.J., 2010, 'Industrial psychology: Goodness of fit? Fit for goodness?', *South African Journal of Industrial Psychology* 36(2), 1–16. <http://dx.doi.org/10.4102/sajip.v36i2.939>

- Waite, M. & Hawker, S. (2009). *Oxford dictionary and thesaurus paperback*. New York, New York: Oxford.
- Wallace, J. E. (1997). It's about time: A study of hours worked and work spillover among law firm lawyers. *Journal of Vocational Behavior*, 50(2), 227-248.
- Wayne, J.H., Musisca, N. & Fleeson, W. (2004). Considering the role of personality in the work family experience. *Journal of Vocational Behavior*, 64, 108-130. [http://dx.doi.org/10.1016/S0001-8791\(03\)00035-6](http://dx.doi.org/10.1016/S0001-8791(03)00035-6)
- Westerman, J.W. & Simmons, B.L. (2007). The effects of work environment on the personality performance relationship: An exploratory study. *Journal of Managerial Issues*, 19, 288–305. Retrieved from <http://www.jstor.org/pss/40604568>
- Whitley, D.M., Fuller-Thomson, E. & Brennenstuhl, S. (2015). Health characteristics of solo grandparent caregivers and single parents: A comparative profile using the Behaviour Risk Factor Surveillance Survey. *Hindawi Publishing Corporation Current Gerontology and Geriatrics Research*, 2015(630717), 1-10.
- Wollard, K. K. & Shuck, B. (2011). Antecedents to employee engagement: A structured review of the literature. *Advances in Developing Human Resources*, 13(4), 429-446. doi:10.1177/1523422311431220
- Xiao, Y. & Cooke, F.L. (2012). Work-life balance in China? Social policy, employer strategy and individual coping mechanisms, *Asia Pacific Journal of Human Resources*, 50 (1), pp. 6-22.
- Yalabik, Z. Y., Popaitoon, P., Chowne, J. A. & Rayton, B. A. (2013). Work engagement as a mediator between employee attitudes and outcomes. *The International Journal of Human Resource Management*, 24(14), 2799-2823. doi:10.1080/09585192.2013.763844
- Zigarmi, D., Nimon, K., Houson, D., Witt, D. & Diehl, J. (2009). Beyond engagement: Toward a framework and operational definition for employee work passion. *Human Resource Development Review*, 8, 300–326.

ANNEXURE 1: TURNITIN REPORT

Who women are helps them to cope and to be engaged at work

ORIGINALITY REPORT



PRIMARY SOURCES

1	open.uct.ac.za Internet Source	4%
2	ujdigispace.uj.ac.za Internet Source	2%
3	www.sajip.co.za Internet Source	2%
4	Submitted to University of South Africa Student Paper	2%
5	repository.up.ac.za Internet Source	2%
6	uir.unisa.ac.za Internet Source	1%
7	scholar.sun.ac.za Internet Source	1%
8	sajip.co.za Internet Source	1%
9	ir.canterbury.ac.nz	

ANNEXURE 2: ETHICAL CLEARANCE

UNISA CEMS/IOP RESEARCH ETHICS REVIEW COMMITTEE

11 September 2018

Dear Mrs Nthabeleng Mdluli,

**Decision: Ethics Approval from
21 August 2018 to 21 August
2021**

NHREC Registration # : (if applicable)
ERC Reference # : 2018_CEMS/IOP_ 014
Name : Mrs Nthabeleng Mdluli
Student # : 35291087
Staff # : N/A

Researcher(s): Name: Mrs Nthabeleng Mdluli
Address: 1912 Malmesbury Street, Modelpark, Witbank, 1035
E-mail address, telephone: 081 791 3209, mdhlulni@hotmail.com
Supervisor (s): Prof S Grobler
E-mail address, telephone: grobis@unisa.ac.za, +27 12 429-8272

**The role of personality in work-family conflict, stress and work-engagement
amongst working women.**

Qualification: Post graduate degree-Masters

Thank you for the application for research ethics clearance by the Unisa CEMS/IOP Research Ethics Review Committee for the above mentioned research. Ethics approval is granted for **Three** years.

The low risk application was reviewed by the CEMS/IOP Research Ethics Review Committee on the 21st August 2018 in compliance with the Unisa Policy on Research Ethics and the Standard Operating Procedure on Research Ethics Risk Assessment. The decision was approved on 21st August 2018.

The proposed research may now commence with the provisions that:

1. The researcher(s) will ensure that the research project adheres to the values and principles expressed in the UNISA Policy on Research Ethics.
2. Any adverse circumstance arising in the undertaking of the research project that is relevant to the ethicality of the study should be communicated in writing to the Unisa CEMS/IOP Research Ethics Review Committee.



3. The researcher(s) will conduct the study according to the methods and procedures set out in the approved application.
4. Any changes that can affect the study-related risks for the research participants, particularly in terms of assurances made with regards to the protection of participants' privacy and the confidentiality of the data, should be reported to the Committee in writing, accompanied by a progress report.
5. The researcher will ensure that the research project adheres to any applicable national legislation, professional codes of conduct, institutional guidelines and scientific standards relevant to the specific field of study. Adherence to the following South African legislation is important, if applicable: Protection of Personal Information Act, no 4 of 2013; Children's act no 38 of 2005 and the National Health Act, no 61 of 2003.
6. Only de-identified research data may be used for secondary research purposes in future on condition that the research objectives are similar to those of the original research. Secondary use of identifiable human research data require additional ethics clearance.
7. No field work activities may continue after the expiry date (21st August 2021). Submission of a completed research ethics progress report will constitute an application for renewal of Ethics Research Committee approval.

Note:

*The reference number **2018_CEMS/IOP_014** should be clearly indicated on all forms of communication with the intended research participants, as well as with the Committee.*

Yours sincerely,



Signature
Chair of IOP ERC
E-mail: ynieka2@unisa.ac.za
Tel: (012) 429-8231



Signature
Executive Dean : CEMS
E-mail: mogalet@unisa.ac.za
Tel: (012) 429-4805



University of South Africa
Pretoria Street, Muckleneuk Ridge, City of Johannesburg
PO Box 392, UNISA 0003 South Africa
Telephone: +27 12 429 3111 Facsimile: +27 12 429 4150
www.unisa.ac.za

Certificate of Editing
R.J. Thompson
Editing and proofreading of theses and manuscripts

18 April 2019
6 Banton Road, Robertsham, Johannesburg, 2091
E-mail: rjthompson84@hotmail.com
richardt@regenesys.co.za
Cell. 082-890-5264

To whom it may concern:

This is to certify that I, Richard James Thompson, identity number 630722 5095 085, am employed as a language editor by Regenesys Business School, 4 Pybus Road, Sandton.

In my spare time, I do private language-editing work.

In that capacity I have edited the text of Ms Nthabeleng Mdhuli's UNISA M. Com. dissertation, "Who women are helps them to cope and to be engaged at work."

The dissertation conforms to the requirements of the APA 6 style guide.

If there are any queries, please contact me at the above address or phone number.

Yours faithfully



Richard Thompson