UNIVERSITY OF JOHANNESBURG

How to cite this thesis

Surname, Initial(s). (2012) Title of the thesis or dissertation. PhD. (Chemistry)/ M.Sc. (Physics)/ M.A. (Philosophy)/M.Com. (Finance) etc. [Unpublished]: University of Johannesburg. Retrieved from: https://ujcontent.uj.ac.za/vital/access/manager/Index?site_name=Research%20Output (Accessed: Date).

WORK-FAMILY CONFLICT AND WORK ENGAGEMENT AMONG WORKING MOTHERS: THE MODERATING ROLES OF NEUROTICISM AND CONSCIENTIOUSNESS

by

Tracy Jane Opie

MINOR DISSERTATION

Submitted in the fulfillment of the requirements for the degree

MAGISTER COMMERCII

in

INDUSTRIAL PSYCHOLOGY

in the

FACULTY OF MANAGEMENT

at the

UNIVERSITY OF JOHANNESBURG

Supervisor: Dr Carolina Henn

November 2011

Acknowledgements

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

ABSTRACT

Orientation - Working women are finding it increasingly challenging to establish a balance between work and family life. This often results in work-family conflict which may affect their well-being.

Research purpose - The current study utilised the Job Demand-Resources Model to investigate the effects of work-family conflict on a positive work-related well-being outcome, namely work engagement. The study also explored the moderating role of personality traits, including conscientiousness and neuroticism, on the relationship between work-family conflict and work engagement.

Motivation for the study: There is limited research regarding the impact of work-family conflict on South African working mothers.

Research design, approach, and method: A quantitative, cross-sectional survey design was used. The sample (*N*=267) was comprised of working mothers from several organisations. Data was gathered using the Work-to-Family Conflict Questionnaire (Netemeyer, Boles & McMurrian, 1996), the Basic Traits Inventory (BTI) (Taylor & De Bruin, 2005) and the Utrecht Work Engagement Scale (UWES-9) (Schaufeli, Salanova, González-Romá & Bakker, 2002).

Main finding: The results indicated that work-family conflict negatively predicts work engagement. Conscientiousness positively predicts work engagement, and neuroticism negatively predicts work engagement. A significant interaction effect was found for conscientiousness but not for neuroticism. The findings showed that for participants with high levels of conscientiousness, work engagement decreases significantly more with an increase in work-family conflict than for participants with low levels of conscientiousness.

Practical/managerial implications: The study contributes to the limited information available on work-family conflict among South African mothers and validates certain aspects of the JD-R Model. Practically, organisations should consider those individuals who have high levels of conscientiousness and low levels of neuroticism in the selection and placement of employees. In addition, organisations have a responsibility to provide conscientious women, particularly mothers, with adequate support to ensure that work-family conflict does not adversely impact their levels of work engagement.

Key words: work-family conflict, work engagement, conscientiousness, neuroticism, the Job Demands-Resources Model

TABLE OF CONTENTS

Page

List of tables

UNIVERSITY
OF
JOHANNESBURG

List of figures

CHAPTER 1: INTRODUCTION

1.1 Introduction

This chapter provides a background to the study and introduces the variables of interest in the current study. A problem statement is presented and the objective of the study is defined. Finally, an overview of the layout of the dissertation is provided.

1.2 Background to the Study

It is becoming increasingly challenging for individuals to establish a balance between work and family life (Mostert, 2008). The modern world of work, characterised by constant change and economic uncertainty (Burke & Cooper, 2004), has resulted in greater demands being placed on employees (Koekemoer & Mostert, 2010b). Organisations require their employees to be emotionally and cognitively committed to their work in order to remain competitive in the twenty-first century (Rothmann & Rothmann, 2010). As a result, employees are working longer hours and experiencing greater demands at work (Lewis & Cooper, 2005). This increased pressure to perform has made it more challenging for employees to fulfil their family responsibilities.

The challenge of balancing the demands associated with work and family life has become especially prevalent among women. In recent decades, women's participation in the workforce has grown considerably (Barker, 2003), and this global phenomenon has created a situation in which the demands women have to meet are becoming increasingly greater. Women seek employment as work provides a sense of identity (Theunissen, Van Vuuren, & Visser, 2003; Thompson & Bunderson, 2001), and structure to their lives. It also fulfils their economic needs and desires (Haworth & Lewis, 2005). Moreover, women are pursuing opportunities to participate in the labour force as work facilitates the achievement of self-

esteem, status, and the development of meaningful relationships with others (Lewis, Rapoport, & Gambles, 2003). Within the South African context, legislation may further account for the increase of women in the world of work (Lewis-Enright, Crafford, & Crous, 2009). The Employment Equity Act No. 55 of 1998 (Government Gazette, 1998) was promulgated in order to achieve equity in the workplace.

Women are, however, still expected to perform their traditional roles, namely those of mother and wife (Biernat & Wortman, 1991). Women are largely responsible for childcare and domestic duties associated with such roles (Biernat & Wortman, 1991; Lewis-Enright et al., 2009; MacDonald, 2004). Simultaneously performing the role of an employee, parent, and spouse may result in stress and conflict (Eagle, Icenogle, Maes, & Miles, 1998; Theunissen et al., 2003). In fact, pressure to meet these demands makes work-family conflict almost unavoidable (Mauno, Kinnunen, & Ruokolainen, 2006).

The phenomenon of work-family conflict has received considerable research attention (Koekemoer & Mostert, 2010a; McLellan & Uys, 2009; Mostert, 2008; Theunissen et al., 2003; Wallis & Price, 2003) in recent years, owing to the significant impact it may have on the health and well-being of individuals as well as on organisational outcomes (Bellavia & Frone, 2005; Greenhaus & Beutell, 1985; Hassan, Dollard, & Winefield, 2010; Mitchelson, 2009; Poelmans, O'Driscoll, & Beham, 2005; Rotondo, Carlson, & Kincaid, 2003). This study focuses on the impact of work-family conflict on a work-related well-being outcome, namely work engagement.

As the focus in psychology has shifted towards a more positive model with an emphasis on human flourishing and optimal functioning (Seligman & Csikszentmihalyi, 2000; Wayne, Randal, & Stevens, 2006), interest in engagement, a positive well-being outcome, has grown considerably. Work engagement is "a positive, fulfilling, affective-

motivational state of work-related well-being" (Bakker, Schaufeli, Leiter, & Taris, 2008, p.188). Engaged employees identify with their work, experience high levels of energy, total concentration, and dedication, and are deeply involved in their work (Khan, 1990; Schaufeli, Salanova, González-Romá, & Bakker, 2002). Work engagement has been linked to several positive organisational outcomes, namely commitment, job satisfaction, motivation, low turnover intention, and productivity (Bakker, Demerouti, & Schaufeli, 2003; Bakker et al., 2008; Hakanen, Schaufeli, & Bakker, 2006).

Some studies have found that the experience of work-family conflict is impacted by personality (Bruck & Allen, 2003; Herbst, Coetzee, & Visser, 2007; Koolaee & Sheykhi, 2011; McLellan & Uys, 2009; Noor, 2002; Thomson & De Bruin, 2007). Two personality traits that have been consistently linked to work-family conflict include conscientiousness and neuroticism. Conscientiousness has shown significant negative correlations with work-family conflict (Wayne et al., 2004). Neuroticism, on the other hand, has shown a positive relationship with work-family conflict (Andreassi, 2011; Bruck & Allen, 2003; Wayne, Musisca, & Fleeson, 2004). Apart from its relationships with work-family conflict, research has also shown that personality influences work engagement (work engagement correlates positively with conscientiousness and negatively with neuroticism) (Jeong, Hyun, & Swanger, 2009; Langelaan, Bakker, Van Doornen, & Schaufeli, 2006).

In order to determine whether work-family conflict is a predictor of work engagement and to assess the impact of personality factors on these variables, the Job Demands-Resources (JD-R) Model (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001) was utilised. The JD-R Model examines how employee well-being may be produced by two sets of working conditions, namely job demands and job resources (Tims & Bakker, 2010). Bakker, Demerouti, and Euwema (2005) argue that the interaction between job demands and job resources may be of greater importance than main effects in predicting employee well-

being. Job and personal resources (a recent addition to the JD-R Model) are thought to buffer the effects of job demands on well-being outcomes (Tremblay & Messervey, 2011). In their study on work and organisation-based resources as moderators of work-family conflict, well-being, and job attitudes, Mauno et al. (2006) utilised the JD-R Model. More specifically, work-family conflict was conceptualised as a job demand in an expansion of the JD-R Model of Demerouti et al. (2001) (Bakker, Van Veldhoven, & Xanthopoulou, 2010; Mauno et al., 2006). Similarly, in the current study, work-family conflict was conceptualised as a demand and its impact on work engagement investigated. In addition, personality was conceptualised as a personal resource and was expected to buffer the relationship between work-family conflict and work engagement. More specifically, the moderating role of two personality traits, namely conscientiousness and neuroticism, was explored.

1.3 Problem Statement

Women are experiencing conflict as a result of increasing demands in both the work and family domains (Franks, Schurink, & Fourie, 2006; MacDonald, 2004). Several studies have found a link between work-family conflict and health and well-being outcomes (Ahmad, 2010; Bellavia & Frone, 2005; Mitchelson, 2009; Streich, Casper, & Salvaggio, 2008). Literature also suggests that personality may influence well-being (Jeong et al., 2009; Langelaan et al., 2006; Mostert & Rothmann, 2006). Few studies have investigated the specific variables in the current study and, moreover, no study has been conducted within the South African context.

1.4 Objective

The objective of the study is firstly, to determine the main effects of work-family conflict and personality (specifically, conscientiousness and neuroticism) on work engagement

and, secondly, to determine the moderating effects of personality on the relationship between work-family conflict and work engagement.

1.5 Research Questions

This study aimed to answer the following research questions:

1. Does work-family conflict predict work engagement? (main effect)

2. Does conscientiousness predict work engagement? (main effect)

3. Does conscientiousness moderate the relationship between work-family conflict and work engagement? (interaction effect)

4. Does neuroticism predict work engagement? (main effect)

5. Does neuroticism moderate the relationship between work-family conflict and work engagement? (interaction effect)

1.6 Layout of Dissertation

Chapter 2 provides an overview of the literature relevant to the current study. Findings related to well-being of working women, work-family conflict, conscientiousness, and neuroticism, and the relationships among these variables are presented. The study is framed with in the Job-Demands Resources Model, and basic tenets of the model are therefore also discussed in Chapter 2. Chapter 3 addresses the methodology utilised in the study. The research question is defined, the design of the study is discussed, and the process followed and the sampling techniques utilised are outlined. The data gathering instruments and their reliabilities are discussed, the statistical analysis is outlined and ethical considerations are explored. Following this, Chapter 4 provides a description of the sample, an overview of descriptive statistics, and presents the results of the study. A discussion on

the main findings of the study is provided in Chapter 5. Finally, Chapter 6 presents a broad overview of the study, the key findings, the implications of these findings, the limitations of the study, and recommendations for future research.

1.7 Summary

This chapter provided an introduction and a broad background to the study. All the variables relevant to the current study were introduced and briefly discussed. In addition, the chapter introduced the problem statement and clearly defined the research questions. Following this, an overview of the layout of the dissertation was provided.

CHAPTER 2: LITERATURE STUDY

2.1 Introduction

The previous chapter provided a broad background to the study and introduced the research problem. This chapter provides an overview of the current literature in terms of the variables of interest in the study. Findings relating to work-family conflict in general, and particularly pertaining to working women and working mothers, are presented. An overview of the Job Demands-Resources Model, with an emphasis on work engagement as the outcome variable, provides a theoretical backdrop for the study. Existing research findings regarding the roles of conscientiousness and neuroticism in work-related well-being and, in particular, in work-family conflict and work engagement are also addressed.

2.2 The Dilemma of Work and Family

Work and family constitute two of the most important aspects of an adult's life (Theunissen et al., 2003). Already in the 1960's and 1970's, the challenges posed by the relationship between these two facets generated considerable research interest (McLellan & Uys, 2009). Barnett (1999) is of the opinion that the concept of *work and family* continued to gain research attention in the 1980's - an era in which the boundaries between work and family were more distinct than they are today. Interest in the spheres of work and family life continued to rise in the 1990's, with researchers tending to focus on the differences in stress levels between genders, work-family conflict, and coping (Phillips & Imhoff, 1997). During this time, the research emphasis was on the relationship between negative well-being outcomes (such as burnout, stress, and strain), and individual-, family-, and work factors (McLelland & Uys, 2009).

In the 21st century, the phenomenon of work and family is more prevalent than ever before. As a result of an increasingly competitive labour force, employees are faced with

higher demands and increasing pressure to perform (Lewis et al., 2003). In addition, the desire to constantly upgrade household standards has resulted in many individuals working harder to fulfil their increasing economic needs (Polach, 2003). Technological and telecommunications advancements, including cellular phones, pagers, portable computers, and the internet, have further impacted the work-family interface, as employees have become more mobile and are able to work longer hours and from a variety of locations (Pery-Jenkins, Repetti, & Crouter, 2000; Polach, 2003). Subsequently, the boundaries between family and work domains have become considerably blurred, which makes it increasingly challenging for individuals to find a balance between these two spheres of life (Koekemoer & Mostert, 2010a).

2.3 Women in the Workplace

The challenge of establishing a balance within the work-family interface is becoming increasingly prevalent among women (Franks et al., 2006). This is not unexpected, given the recent influx of women into the labour force, which is a global trend (Elloy & Smith, 2003). For example, the United States of America (US Census Bureau, 2005) and Australia (Australian Bureau of Statistics, 2001) have reported increasing numbers of women joining the workforce. South Africa is no exception to this global phenomenon (Patel, Govender, Paruk, & Ramgoon, 2006). Data obtained from editions of the Quarterly Labour Force Survey by Statistics South Africa indicate that female employment in South Africa increased from 48 percent in 1995 to 64 percent in 2001 (Casale, 2004). According to the Statistics South Africa (2010), the female share of wage employment (excluding agriculture) has increased in recent years and in 2010, constituted 45 percent. Furthermore, it is expected that the female labour force in South Africa will grow more rapidly than its male counterpart in the years to come (Franks et al., 2006).

Within the South African context, several factors have contributed to the rise in the number of women of the labour force. Legislation partly accounts for the increase in opportunities for women in the working world. According to Lewis-Enright et al. (2009), gender equality issues have formed part of legislature and social discourse in South Africa in the last decade. South Africa's ruling party, the African National Congress (ANC), promulgated the Employment Equity Act No. 55 of 1998 (Government Gazette, 1998) in an attempt to create equality within the country's employment landscape. The Employment Equity Act is an affirmative action policy aimed at overcoming the negative effects of discrimination caused by the Apartheid regime. The Employment Equity Act states that it aims "to achieve equity in the workplace" by a) promoting equal opportunity and fair treatment in employment through the elimination of unfair discrimination and b) implementing affirmative action measures to redress the disadvantages in employment experienced by designated groups (including people of colour, women, and the disabled) in order to ensure their equitable representation in all occupational categories and levels in the workforce (Government Gazette, 1998). In addition to legislation, the number of women in the South African labour force has increased as a result of the harsh economic climate. Women are entering the labour market to contribute to the income of the household and fulfil their increasing economic needs (Casale & Posel, 2002; Herbst et al., 2007).

Joining the work force has created additional challenges for women, as it requires of them to meet the demands of multiple life roles (Franks et al., 2006). In addition to overcoming the pressures related to their work role, women also continue to assume responsibility for duties associated with the traditional roles of women in society, namely those of wife and mother (Biernat & Wortman, 1991; MacDonald, 2004). According to Franks et al. (2006), the most common role for a woman remains that of mother. This may be owing to the fact that the family role has traditionally been viewed as central to a woman's

identity (Eagle et al., 1998) and that a woman's body enables her to bear children (Lewis-Enright et al., 2009). Moreover, women are socialised from childhood to accept the role of homemaker and nurturer, whereas men are traditionally expected to accept the role of breadwinner (Franks et al., 2006; Patel et al., 2006).

Some studies have found support for the idea that the traditional Western family structure is changing and that the stereotypical roles of men as the breadwinners and women as the homemakers are evolving (Nickols, 1994; Pleck, 1993). More specifically, men are beginning to assume greater responsibility for parenting and household duties, while women are entering the labour force and accepting work roles (Theunissen et al., 2003). However, in their study on exploring the social construction of life roles of career-orientated women, Franks et al. (2006) found that young women still seem to hold the traditional view of women in society. In fact, Johnson and Mortimer (2000) found that women today still consider family and nurturing roles to be the most important of their multiple life roles. It seems that, despite advances being made in terms of equality for women in the workplace, South African women continue to consider their family as their most important priority and, moreover, still carry the bulk of responsibility for household duties (Franks et al., 2006; Lewis-Enright et al., 2009).

The well-being of women may be adversely impacted as a result of women trying to invest time, energy, and resources into multiple life roles (Weber, 1999). Women are confronted with the challenge of managing their time effectively so as to ensure that they perform their family role as well as their newly acquired work role (Franks et al., 2006). An imbalance in either of the two roles is likely to create role conflict (McLellan & Uys, 2009). According to Weber (1999), performing work and domestic and family duties may be overwhelming and subsequently affect the overall health and wellbeing of women. Given the possible negative outcomes of work-family conflict, it is understandable that the phenomenon

has received considerable research attention in recent years. It also forms the main focus of this study. In the current study, work-family conflict was conceptualised as a demand in terms of the JD-R Model (Demerouti et al., 2001). To provide a context for a discussion of current researching findings in terms of work-family conflict, a discussion of the JD-R Model follows.

2.4 The Job Demands-Resources Model

The JD-R Model (Demerouti et al., 2001) was developed as an improvement on older models that describe the relationships between job characteristics, such as the Job Characteristics Model (Hackman & Oldham, 1976), the Job Demands-Control Model (Kasarek, 1979), and the Effort-Reward Imbalance Model (Siegrist, 1996). These earlier models considered only limited numbers of job characteristics (Bakker & Demerouti, 2007; Van den Broeck, Vansteenkiste, De Witte & Lens, 2008). The JD-R Model is based on the assumption that employee well-being may be produced by two sets of working conditions, namely job demands and job resources (Tims & Bakker, 2010). This implies that every work environment can be captured in one overall model and that the model can thus be used to assess any type of job (Bakker & Demerouti, 2007; Van Den Broeck et al., 2008; Tims & Bakker, 2010). The JD-R Model is therefore more flexible, rigorous, and comprehensive than previous job-design models, and has become the preferred model for explaining and predicting employee well-being (for example, work engagement and burnout) in terms of job characteristics (De Braine & Roodt, 2011).

There are two main assumptions in the JD-R model. The first is that all job characteristics associated with the work environment can be classified into two categories, namely job demands and job resources (Prieto, Soria, Martínez, & Schaufeli, 2008; Mauno et al., 2006). Job demands refer to "…those physical, psychological, social, or organisational

aspects of the job that require sustained physical and/or psychological (cognitive and emotional) effort and are therefore associated with certain physiological and/or psychological costs" (Bakker, Demerouti, & Verbeke, 2004, p.86). Job demands are not inherently negative however, if an individual does not possess adequate resources to deal with the demands, these job demands may turn into job stressors (Prieto et. al., 2008) and negatively impact employee well-being (e.g., work engagement) (Doi, 2005) and organisational outcomes (e.g., reduced job performance) (Lang, Thomas, Bliese, & Adler, 2007). Examples of job demands include role overload, unfavourable environmental conditions, emotional demands, time constraints, and high work pressure (Bakker & Demerouti, 2007). Work-family conflict was conceptualised as a job demand in past studies (Bakker et al., 2010; Mauno et al., 2006).

Job resources encompass the social, psychological, physical, and organisational aspects that reduce the costs associated with job demands, facilitate the achievement of work goals, and stimulate personal growth and development (Bakker & Demerouti, 2007). Job resources such as job security, team climate, role clarity, and autonomy are therefore valuable in their own right and essential in combating the negative effects of job demands (Bakker et al., 2004). Job resources may be located at task level (e.g., task identity), at the level of organisation of work (e.g., participation in decision-making), at an interpersonal level (e.g., supervisor support) or at an organisational level (e.g. career opportunities) (Bakker & Demerouti, 2007; Tims & Bakker, 2010). Several studies have found that job resources are strong predictors of work engagement (Bakker et al., 2008; Mauno et al., 2007).

The JD-R Model was recently expanded to include personal resources (Demerouti & Bakker, 2011), which refers to individuals' self-evaluations that enable them to control and influence their environment (Hobfoll, Johnson, Ennis, & Jackson, 2003). Prieto et al., (2008, p. 355) define personal resources as "people's mental characteristics which reduce the negative impact of demands on psychological well-being." Personal resources are commonly

associated with resilience and may include factors such as self-efficacy, proactive personality, optimism, and compassion satisfaction (Robertson & Cooper, 2010; Schaufeli, Bakker, & Salanova, 2006; Tremblay & Masservey, 2011). Some studies have found that self-efficacy (a personal resource) assists individuals in overcoming the stress associated with performing multiple roles (Amatea & Fong, 1991; Martire, Stephens, & Townsend, 1998; Rosenfield, 1989; Thomas & Ganster, 1995).

The second assumption of the JD-R Model is that it consists of dual psychological processes that may cause either job strain or motivation (Bakker & Demerouti, 2007). According to De Braine and Roodt (2011), the model's ability to understand these two parallel processes that influence employee well-being constitutes a major strength of the JD-R Model. The first process, referred to as the health impairment process, relates to excessive job demands that may deplete an employee's resources and subsequently produce job strain (Prieto et. al., 2008). The second process is based on the premise that job resources have a motivational potential that may lead to positive outcomes such as increased job satisfaction and work engagement (Bakker & Demerouti, 2007). Within the motivation process, job resources may affect well-being extrinsically by assisting an individual to achieve his or her work goals, or intrinsically through the facilitation of growth, learning, and development (Hakanen et al., 2006). Evidence exists that shows support for the dual processes of the JD-R Model (Bakker & Demerouti, 2007).

In addition to measuring the main effects of job demands and job resources, the JD-R Model predicts that the interaction between job demands and job resources will impact employee motivation and job strain (Demerouti et al., 2001; Bakker & Demerouti, 2007). More specifically, the JD-R Model predicts that job resources will buffer the effects of job demands on job strain. This assumption is based on the Job Demands Control (JDC) Model (Kasarek, 1979), which focuses on two dimensions of the work environment, namely job

demands and job control, but expands the model through the assumption that "*several*

different job resources can play the role of buffer for *several* different job demands" (Bakker

et al., 2004, p.89). The buffer hypothesis is consistent with the opinion of Kahn and Byosiere

(1992) that an interaction effect can occur between any pair of variables in the stress-strain

relationship. Research regarding interaction effects is limited (Mauno et al., 2006; Poelmans

et al., 2005), although some studies have found empirical evidence to support the interactive

effects of job demands and job resources (Bakker & Demerouti, 2007). Several studies have

found that job resources (such as social support and job control) moderate the relationship

between stress and well-being (Bakker et al., 2004; Mauno et al., 2006; Md-Sidin & Ismail,

2010).

A number of studies have investigated interaction effects, but conflicting results were

produced (Mäkikangas & Kinnunen, 2003; Mitchelson, 2009; Trembaly & Messervey, 2011;

Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2007). Conscientiousness, a personal

resource, was found to moderate the relationship between work engagement and work

interference with family (Halbesleben, Harvey, & Bolino, 2009). Trembaly and Messervey

(2011) found that the relationship between job demands and various health-related and

organisational outcomes is buffered by personal resources such as self-efficacy,

organisational based self-esteem, and optimism. Similarly, other studies found that personal

resources, namely optimism and self-efficacy, moderate the relationship between job

demands and health outcomes (Mäkikangas et al., 2003; Van Yperen & Snijders, 2000).

However, these findings were not supported by Xanthopoulou, Bakker, Demerouti and

Schaufeli (2007) in their study on the role of personal resources (self-efficacy, organisation-

based self-esteem, and optimism) as buffers in the relationship between job demands and

engagement. Rather, the findings of the latter study suggested that personal resources partly

mediate the relationship between job demands and engagement. In their study on the role of

personality in the JD-R Model, Bakker et al. (2010) found little support for the indirect effects of neuroticism on the relationship between job demands (work-home conflict and work pressure) and health impairment. However, the total effect of neuroticism on the relationship was high. It is therefore apparent that more research is needed in order to gain an enhanced understanding of the moderating role of personal resources within the JD-R Model.

Recently, an additional proposition of the JD-R Model was established. According to Demerouti and Bakker (2011), job resources may significantly impact motivation or work engagement when job demands are high. This assumption is representative of the coping hypothesis, which implies that individuals are most likely to utilise resources as coping mechanisms during challenging and stressful conditions (Bakker, Hakanen, Demerouti, & Xanthopoulou, 2007; Bakker et al., 2010). The proposition is premised on the idea that resources become increasingly salient under demanding conditions.

Figure 1 depicts the basic JD-R Model. The model was adapted to include the variables utilised in the current study. As can be seen from Figure 1, work-family conflict was conceptualised as a job demand. Moreover, personality constitutes a personal resource and work engagement encompasses the well-being outcome investigated in the current study. Each of the variables are discussed in the remainder of this chapter.

Figure 1 Job Demands-Resources Model
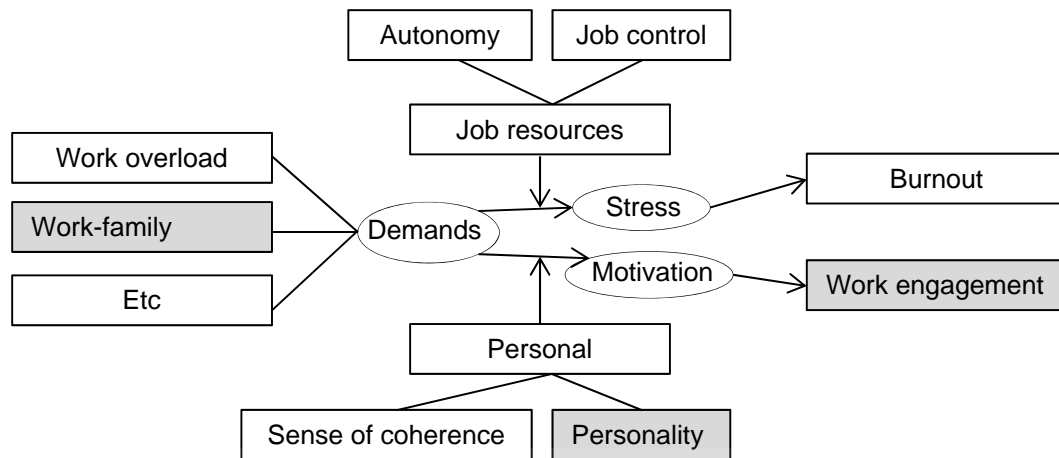
* Adapted from Demerouti et al., 2001

** Arrows do not indicate causality, but only direction of prediction

2.5 Work-Family Conflict

Several definitions of work-family conflict exist, most of which have reconceptualised work-family conflict from a unidimensional to a multidimensional construct (Greenhaus & Beutell, 1985). The multidimensional theory emanated from the belief that the boundary separating work and family domains is permeable (Rotondo et al., 2003). One's work role can interfere with one's family role, and family pressures may interfere with one's responsibilities at work (Mitchelson, 2009). Work-family conflict is thus a bidirectional construct.

Work-family conflict occurs more frequently and has a greater impact on well-being than family-work conflict (Bellavia & Frone, 2005; Greenhaus & Parasuraman, 1999; Mauno et al., 2006). According to Greenhaus and Parasuraman (1999), this may be explained as individuals have more latitude in changing family schedules than they have in changing work schedules. Poelmans et al. (2005) support this notion as they argue that individuals have greater flexibility in fulfilling family commitments than work commitments and

responsibilities. Furthermore, individuals may not have the discretion to modify their work demands, as these are dictated by employment contracts, management, and organisational rules and regulations. This study focuses on work-family conflict, rather than family-work conflict, as it has a greater impact on well-being (cf. Mauno et al., 2006).

As mentioned earlier, previous studies conceptualised work-family conflict as a job demand in an expansion of the JD-R Model (Bakker et al., 2010; Mauno et al., 2006). Work-family conflict is defined as "a form of inter role conflict, in which the demands of work and family roles are incompatible in some respect, so that participation in one role is more difficult because of participation in another role" (Greenhaus & Beutell, 1985, p. 77). From a demands/resources perspective, work-family conflict is considered a cognitive evaluation of work and family resources and demands (Voydanoff, 2004). Furthermore, it is also described in terms of the scarcity hypothesis, which is based on the assumption that time and energy are fixed. The hypothesis predicts that involvement in one domain (e.g., work) limits the participation in another (e.g., family), which inevitably results in conflict (Greenhaus & Parasuraman, 1999; Hassan et al., 2010). The current study focuses on the definition developed by Netemeyer, Boles and McMurrian (2006) in which work-family conflict is defined as "…a form of interrole conflict in which the general demands of, time devoted to, and strain created by the job interfere with performing family-related responsibilities" (p.401).

Work-family conflict may originate under various conditions and occur in multiple forms (Carlson, Kacmar, & Williams, 2000). More specifically, work-family conflict is comprised of time-based, strain-based or behaviour-based conflict (Greenhaus & Beutell, 1985). Greenhaus and Beutell (1985) explain that time-based conflict occurs when the time devoted to one role makes participation in another role more difficult, strain-based conflict arises when strain from one role interferes with participation and performance in another, and

behaviour-based strain occurs when behaviours performed in one role interfere with the behavioural expectations of another role in a different domain of life.

2.5.1 Consequences of work-family conflict

All forms of work-family conflict can have an overwhelming impact on the functioning and well-being of individuals, families, organisations, and societies (Hassan, et al., 2010). Research has shown that work-family conflict may negatively impact the satisfaction (namely job-, family-, marital-, and life satisfaction), health, and behaviour of an individual in both the work- and family domains (Mitchelson, 2009; Poelmans et al., 2005; Rotondo et al., 2003; Streich et al., 2008). Adverse health effects may include physical and psychological problems such as depression, anxiety, mood disorders, and substance abuse (Bellavia & Frone, 2005; Mitchelson, 2009). In addition, work-family conflict may also result in dysfunctional behavioural outcomes such as destructive parenting, alcohol consumption, and withdrawal from work or family responsibilities (Cinamon, 2009; Greenhaus & Parasuraman, 1999). In terms of organisational outcomes, studies have found support for a strong positive relationship between work-family conflict and job burnout (Ahmad, 2010; Reinardy, 2007) and a strong negative relationship between work-family conflict and job satisfaction (Allen, Herst, Bruck, & Sutton, 2000; Hassan et al., 2010), organisational commitment, and performance (Streich et al., 2008).

2.5.2 Work-family conflict among women

The well-being of women may be affected to a greater extent than that of men, given that women experience significantly greater levels of work-family conflict than their male counterparts (McElwain, Korabik, & Rosin, 2005; Greenhaus & Parasuraman, 1999). Some studies have found that female employees are more likely to experience strain associated with conflicting roles than men (Poelmans et al., 2005; Rotondo et al., 2003). Moreover, marital

status seems to have an effect on the experience of work-family conflict, with married women reporting higher work-family conflict than their unmarried counterparts (Geurts & Demerouti, 2003). Parental status may further impact the experience of work-family conflict, as a number of studies have shown that work-family conflict is exacerbated among employed mothers (Brown, 2010; Freudenburg & Davidson, 2007; Losoncz & Bortolotto, 2009). Mothers are also more likely to experience work-family conflict as they progress up the corporate ladder, which suggests that assuming a managerial position may further increase work-family conflict (Brown, 2010).

Several studies have proposed possible reasons why work-family conflict is more prevalent among women, and, in particular, working mothers, than among men. One assumption is that women spend more time, collectively, on work and family activities than men (Greenhaus & Parasuraman, 1999). More specifically, women spend approximately twice as much time performing childcare, family, and household duties than men (Yoder, 2000). This may be owing to the common perception that women are primarily responsible for childcare and household duties (Bergman, Ahmad, & Stewart, 2008). Women also typically emphasise nurturance, care-giving, and personal relationships, and subsequently assume most of the responsibility for family duties (Streich et al., 2008). Ultimately, women experience greater family demands than men and are therefore subjected to greater inter-role conflict, which produces increased work-family conflict. Although men are assuming greater responsibility for family and household duties, women still carry the brunt of it (Douglas & Michaels, 2004; Greenhaus & Parasuraman, 1999; Mostert, 2008). This was supported in Yoder's (2000) study, in which employed mothers have reported greater role overload than employed fathers.

As mentioned earlier, several negative outcomes, such as stress and burnout, have been linked to work-family conflict. With an increasing emphasis on positive psychology,

positive outcomes of job characteristics have become a focus point of research in terms of the JD-R Model. One of the positive outcomes that has received much research attention is work engagement. It was therefore decided to investigate the relationship between work-family conflict and work engagement among working mothers in the current study.

2.6 Work Engagement

As mentioned earlier, the concept of work engagement has attracted increasing attention in recent years due to the shift in psychology from emphasising weaknesses and malfunctioning towards a more positive approach, which focuses on human strengths, happiness, and optimal functioning (Seligman & Csikszentmihalyi, 2000). According to Rothmann and Rothmann (2010), modern organisations require their employees to be engaged in their work and committed to high standards of performance in order for the organisations to remain competitive in the current world of work.

Various conceptualisations of engagement have been developed over the years, namely state, trait, and behavioural engagement (Macey & Schneider, 2008). In terms of state engagement, Khan (1990, p.694) conceptualised engagement as " harnessing organisation members' selves to their work roles: in engagement, people employ and express themselves physically, cognitively, emotionally and mentally during role performances." Engaged employees are thought to experience psychological presence at work, which becomes incorporated into their identities (Kahn, 1992). Maslach and Leiter (1997) are of the opinion that engagement entails energy, efficacy, and involvement. Schaufeli et al. (2002, p. 74) conceptualise engagement as "a positive, fulfilling, work related state of mind that is characterised by vigour, dedication and absorption". Engaged employees are characterised by high levels of energy and being enthusiastic and immersed in their work (Bakker & Demerouti, 2008). Taking into account the various conceptualisations of engagement,

Rothmann and Rothmann (2010) are of the opinion that employee engagement is comprised of three dimensions, namely a physical component (being physically involved in a task), a cognitive component (experiencing absorption and involvement), and an emotional component (showing commitment and dedication).

The current study utilises the most recent and commonly used, well-validated definition provided by Schaufeli et al. (2002), according to which work engagement is characterised by vigour, absorption and dedication. According to Bakker and Demerouti (2009), *vigour* involves mental resilience and high energy levels. *Absorption* refers to an attachment and feelings of being engrossed in one's work, as well as total concentration. The final component of work engagement, namely *dedication*, is characterised by feelings of significance, enthusiasm, challenge, and ultimately, a strong involvement in one's work (De Braine & Roodt, 2011). Dedication is considered to be the opposite of cynicism, which is a dimension of burnout (González-Romá, Schaufeli, Bakker, & Lloret, 2006). Therefore, work engagement and burnout are often viewed as polar opposites along a continuum comprised of underlying sub-constructs of energy and identification (González-Romá et al., 2006). However, Schaufeli et al. (2002) are of the opinion that, although engagement is negatively related to burnout, it is a distinct, independent concept in its own right.

Work engagement has been associated with several positive individual and organisational outcomes. Engaged workers show initiative and motivation, display proactive behaviours, and are fully immersed in their work (Bakker & Demerouti, 2009; Macey & Schneider, 2008; Sonnentag, 2003). In addition, employees who are engaged in their work frequently experience positive emotions such as enthusiasm, passion, interest, and happiness (Schaufeli & Van Rhenen, 2006). Engaged employees are characterised by high levels of energy and a strong identification with their work (Bakker & Demerouti, 2008). A recent study found a positive association between work engagement and perceived positive

relationships, personal initiative, learning, health, and well-being (Schaufeli, Taris, & Van Rhenen, 2009; Sonnetag, 2003). At an organisational level, employee engagement is a predictor of productivity, job satisfaction, commitment, and low turnover intentions in employees, and organisations' customer satisfaction, shareholder value, and financial performance (Bakker et al., 2003; Bakker et al., 2008; Richmond, 2006).

2.6.1 Work engagement, job demands, and job resources

Literature regarding the relationship between work engagement and demands is limited (Rothmann & Jordaan, 2006). One study found that engaged employees are better able to handle job demands (Schaufeli et al., 2009); however, more research is needed to verify this finding and better understand the relationship between demands, particularly between work-family conflict and engagement. On the other hand, several studies have explored the relationship between work engagement and resources, and strong support was found for the hypothesis that work engagement is significantly influenced by job resources (Schaufeli & Bakker, 2004). In a South African study, the resources of growth opportunities in the job, organisational support, and advancement opportunities were identified as significant predictors of work engagement (Rothmann & Jordaan; 2006). Furthermore, the hypothesis that job resources predict work engagement, especially when demands are high, has also been supported by research (Bakker et al., 2007). Several studies have found that personal resources (e.g., proactive personality, and mental and emotional competencies) also act as significant predictors of work engagement (Bakker et al., 2008; Prieto et al., 2008; Robertson & Cooper, 2010; Schaufeli et al., 2006). It was therefore decided to investigate the role of selected personality traits in the relationship between work-family conflict and work-engagement in the current study, given the extremely limited number of findings regarding the role of personality in the relationship between work-family conflict and work engagement.

2.6.2 Work engagement and personality

Personality has been found to have an impact on the extent to which an individual is engaged in his/her work (Langelaan et al., 2006). A study conducted by Jeong et al. (2009) on the effects of personality and work engagement found a link between high conscientiousness coupled with low neuroticism (emotionally stability) and work engagement. Another study revealed that work engagement is predicted by conscientiousness, emotional stability, and low stress due to demands (Mostert & Rothmann, 2006). Similarly, a positive association was found between enhanced levels of dedication and absorption (components of work engagement) and the personal resource of proactive personality (Robertson & Cooper, 2010). In addition, several studies have found a positive relationship between neuroticism and burnout (often considered the opposite of work engagement) (Langelaan et al., 2006; Morgan & De Bruin, 2010).

2.7 Personality Traits, Job Characteristics, and Well-being Outcomes

Personality, defined as "consistent behaviour patterns and intrapersonal processes originating within the individual" (Burger, 2004, p. 4) may be explained using trait theories in which personality is described as a combination of traits. A trait is defined as "a dimension of personality used to categorise people according to the degree to which they manifest a particular characteristic" (Burger, 2004, p. 166). Several studies have found evidence which indicates that the broad spectrum of personality traits can be distinguished into five personality dimensions (Burger, 2004; McCrae & Costa, 1995), known as the Big Five. The five personality traits are: agreeableness, conscientiousness, extraversion, neuroticism and openness to experience (McCrae & Costa, 1995). Some studies have found that experience of work-family conflict is impacted by personality (Bruck & Allen, 2003; Herbst et al., 2007; McLellan & Uys, 2009; Noor, 2002; Thomson & De Bruin, 2007). More

specifically, literature shows that conscientiousness and neuroticism are commonly associated with work-family conflict (Andreassi, 2011; Bruck & Allen, 2003; Thomson & De Bruin, 2007; Wayne et al., 2004). The current study therefore focused on two of the five personality traits, namely conscientiousness and neuroticism.

2.7.1 Conscientiousness

Conscientiousness refers to the degree of effectiveness and efficiency with which a person plans, organises, and carries out tasks (Taylor & De Bruin, 2006), and includes an individual's degree of self-discipline, control, order, dutifulness, effort, prudence, and need for achievement (Maltby, Day & Macaskill, 2010; Taylor & De Bruin, 2006). Digman (1990) describes a conscientious person as dependable, hardworking, determined, disciplined, orderly, and strong willed. Moreover, conscientiousness has been associated with enhanced time- and stress management skills (Westerman & Simmons, 2007).

Evidence shows that conscientiousness is a predictor of health and well-being outcomes (Jeong et al., 2009; Mostert & Rothmann, 2006; Wayne et al., 2004). Several studies have found a negative relationship between conscientiousness and work-family conflict (Smoot, 2005; Wayne et al., 2004). Bruck and Allen (2003) are of the opinion that, as a result of their planning and organising skills, conscientious individuals are less likely to experience work-family conflict. In contrast, individual initiative (a component of personality theoretically similar to conscientiousness) was found to be positively related to job stress and work-family conflict (Bolino & Turnley, 2003). Literature supports the main effect of conscientiousness on work engagement (Jeong et al., 2009; Mostert & Rothmann, 2006). In terms of interaction effects, Halbesleben, Harvey and Bolino (2009) found that conscientiousness moderates the relationship between work-family conflict and work engagement by acting as a buffer. Witt and Carlson (2006) found an interaction effect for

conscientiousness, with higher family-work conflict being associated with lower levels of job performance for those participants who had high levels of conscientiousness.

2.7.2 Neuroticism

Neuroticism refers to "a person's emotional stability and the general tendency to experience negative affect in response to their environment" (Taylor & De Bruin, 2006, p. 4). Neurotic individuals have the tendency to be easily upset and are sensitive to criticism. They often experience feelings of guilt, sadness, hopelessness, worry and tension, and tend to be emotionally volatile (Maltby et al., 2010; Taylor & De Bruin, 2006). Individuals with low levels of neuroticism are emotionally stable, even-tempered, calm, secure, well-adjusted, and tolerant of stress (Burger, 2004; Costa & McCrae, 1992).

Several studies have found a positive relationship between neuroticism and work-family conflict. Current literature shows that neuroticism has main and moderating effects on well-being outcomes. In terms of main effects, neuroticism is positively related to work-family conflict (Bryant, 2010; Koolaee & Sheykhi, 2011; Smoot, 2005; Wayne et al., 2004). Another study found a negative relationship between emotional stability (low neuroticism) and the experience of interpersonal stressors (Dijkstra, Van Dierendonck, Evers, & De Dreu, 2005). Moreover, negative affectivity (a component of neuroticism) was found to significantly relate to work-family conflict (Bruck, 2003). In terms of moderator effects, Van den Berg and Feij (2003) found evidence to support the moderating role of emotional stability (low neuroticism) in the relationship between job characteristics (demands and resources) and work behaviour. Based on these findings, it was predicted in the current study that neuroticism would moderate (amplify) the relationship between work-family conflict and work engagement.

The literature shows a number of studies that have explored the negative outcomes of work-family conflict, but fewer studies that have investigated the impact of work-family conflict on positive work-related well-being outcomes such as work engagement. Similarly, several studies have investigated the role of personality and personal resources on work-related well-being outcomes. However, very little research has been conducted in terms of the moderating role of personality in the relationship between job characteristics and well-being outcomes. Furthermore, the majority of studies occurred in countries other than South Africa. The current study aims to supplement the existing database in terms of the role of two personality traits, namely conscientiousness and neuroticism, in the relationship between work-family conflict and work engagement among working mothers in South Africa.

2.8 Research Questions

The study investigates the following five specific research questions:

1. Does work-family conflict predict work engagement? (main effect)

2. Does conscientiousness predict work engagement? (main effect)

3. Does conscientiousness moderate the relationship between work-family conflict and work engagement? (interaction effect)

4. Does neuroticism predict work engagement? (main effect)

5. Does neuroticism moderate the relationship between work-family conflict and work engagement? (interaction effect)

2.9 Summary

This chapter provided an overview of the current literature associated with the phenomenon of work and family. The rise in the number of women in the labour force and

well-being of working women were addressed. Moreover, the JD-R Model was introduced, and the variables in the current study, namely work-family conflict, work engagement, and personality traits were discussed. Finally, the research questions in the current study were stated. The following chapter addresses the methodology utilised in the study.

CHAPTER 3: RESEARCH DESIGN

3.1 Introduction

In Chapter 2, an overview of existing literature regarding the variables of interest in the study was provided. The chapter highlighted that the study aims to determine the possible main and interaction effects of conscientiousness and neuroticism in the relationship between work-family conflict and work engagement. This chapter discusses the research method, sampling procedures, instrumentation and statistical analyses that were utilised. Ethical considerations are also addressed.

3.2 Research Questions

In following the JD-R Model, work-family conflict was conceptualised as a demand, conscientiousness and neuroticism as personal resources, and work engagement as a positive well-being outcome.

The study's objective was twofold. The first objective was to determine the main effects of work-family conflict, conscientiousness and neuroticism on work engagement. To this end, the following research questions were investigated:

1. Does work-family conflict predict work engagement?
2. Does conscientiousness significantly predict work engagement?
3. Does neuroticism significantly predict work engagement?

The second objective aimed to explore the moderating roles of conscientiousness and neuroticism on the relationship between work-family conflict and work engagement. In this regard, the following research questions were investigated:

4. Does conscientiousness moderate the relationship between work-family conflict and work engagement?

5. Does neuroticism moderate the relationship between work-family conflict and work engagement?

The independent variables were: work-family conflict, conscientiousness, and neuroticism, and the dependent variable was work engagement.

3.3 Research Design

A quantitative, cross-sectional, survey design was utilised for this study.

3.4 Research Method

3.4.1 Participants

Convenience sampling was applied in the selection of participants. Questionnaires were sent out to all employees on the participating organisations' databases. All participants were therefore working individuals. For the purposes of this study only working women with children were included in the final sample. To enlarge the sample, hard copies of the questionnaire were also distributed to working mothers through snowball sampling.

3.4.2 Procedure

The current study formed part of a larger study on well-being at work. Several organisations were approached by two researchers and requested to participate in a study on well-being in the workplace. Only the data relevant to the current study was utilised by the researcher. The organisations who agreed to partake in the study sent their employees a link to the online format of the questionnaire via electronic mail. As mentioned, hard copies were also distributed. Once all the data were captured, a sample of 984 participants was achieved.

However, this sample included male participants as well as women with no children. The data was thus refined to include only women with children, yielding a sample size of 339 participants. After removal of cases with missing values, the final sample consisted of 267 participants.

3.4.3 Measuring instruments

A biographical questionnaire obtained information regarding gender, ethnicity, home language, marital status, number of children, age, and level of education. In addition, participants were requested to indicate whether they worked full-time or part-time, and whether they were self-employed or worked for an employer. In terms of the measurement of the research constructs, the following instruments were employed:

Work-to-Family Conflict Questionnaire (Netemeyer et al., 1996). This questionnaire measures the extent to which work demands interfere with family life. It consists of a five-point Likert-type scale with responses ranging from *strongly agree* to *strongly disagree*. The questionnaire is comprised of five items. Sample items include "My job produces strain that makes it difficult to fulfil family duties" and "The demands of my work interfere with my home and family life". According to Netemeyer et al. (1996), the Cronbach alpha coefficient was .86 which reveals satisfactory internal consistency reliability. In addition, the instrument showed high internal consistency reliability in a South African study on time-based constraints and work-family conflict among working mothers, where the Cronbach alpha coefficient was .92 (Braghin, 2009).

Basic Traits Inventory (BTI) (Taylor & De Bruin, 2005). The BTI measures the Big Five factors of personality. The BTI was developed in South Africa, and evidence exists that supports its cross-cultural validity (Taylor & De Bruin, 2005). The BTI consists of 193 items that measure the five factors of personality. Furthermore, each factor is comprised of four to

five facets that assess various aspects of each factor. Participants are expected to respond to a five-point Likert-type scale with responses ranging from *strongly disagree* to *strongly agree*. A sample item for Conscientiousness involves "I plan tasks before doing them" and a sample item for Neuroticism includes "I find it difficult to control my feelings". According to Taylor and De Bruin (2005), internal consistency reliability is satisfactory, as alpha coefficients were .85 or higher for all five personality factors. The current study utilised the Neuroticism and Conscientiousness sub-scales. The reliability coefficients for the subscales of conscientiousness ($\alpha = .93$) and neuroticism ($\alpha = .92$) were found to be satisfactory (Taylor & De Bruin, 2005).

Utrecht Work Engagement Scale (UWES-9) (Schaufeli et. al., 2002). Work engagement was measured using the nine-item version of the Utrecht Work Engagement Scale. Globally, UWES is a valuable tool for the measurement of work engagement as it has been validated in several countries around the world, including South Africa (Bakker & Demerouti, 2008; Storm & Rothmann, 2003). The nine-item version of UWES (UWES-9) measures the three dimensions of work engagement, namely vigour (VI), dedication (DE), and absorption (AB), using three items for each dimension (Bakker & Demerouti, 2008). Each item measures a dimension using a seven-point scale with 0= *no, that is not correct* and 6= *yes, that is correct*. Sample items include: "At my work, I feel bursting with energy" (VI), "My job inspires me" (DE), and "I am immersed in my work" (AB).

The current study utilised a single score of work engagement, as Schaufeli and Bakker (2003) are of the opinion that a total score may be more valuable in empirical studies due to the high correlations between dimensions. Moreover, in a study conducted by Sonnentag (2003), a one-factor model was found to yield a better fit of the data than a three-factor model. The use of a one-factor model was validated in a South African study conducted by

Storm and Rothmann (2003) on the psychometric analysis of the Utrecht Work Engagement

Scale in the South African Police service.

3.4.4 Statistical analysis

Correlations were calculated to determine whether significant relationships existed

between the variables, and where such relationships existed, the strength and direction of the

relationships were determined. Moderated hierarchical multiple regressions were conducted

to test the hypotheses.

Two separate moderated hierarchical regressions were conducted, one each for

conscientiousness and neuroticism. In the first step of each regression, demographic

variables (marital status, age, level of education, and number of children) were entered in

order to control for these variables. Categorical control variables (marital status and

educational status) were collapsed into two categories in each case, and dummy coded. In

the second step, work-family conflict was entered. A significant change in R^2 at this step

indicated that work-family conflict significantly predicted the dependent variable (direct

effect). In the third step the personality variable was entered (conscientiousness or

neuroticism). A significant change in R^2 in the third step indicated that the independent

personality variable significantly predicted the dependent variable. Following this, the

product term (Work-familyconflictXConscientiousness and Work-

familyconflictXNeuroticism) was added in the fourth step. A significant change in R^2 in the

fourth step indicated that the personality variable moderated the relationship between work-

family conflict and the dependent variable. A relaxed criterion of p < .10 (Aguinis, 1995;

Aiken & West, 1991) was used to determine significant interaction effects.

3.4.5 Ethical considerations

Several issues were taken into account to ensure that the study was conducted in an ethical manner. A cover letter was attached to the front of the questionnaire, which explained to participants that the purpose of the study was to gain an enhanced understanding of the well-being of working mothers. Furthermore, participants were informed that participation was completely voluntary and that they could withdraw from the study at any point. Anonymity and privacy were assured as participants were not required to identify themselves. Moreover, confidentiality was maintained as it was ensured that only the two researchers and their supervisors would have access to the obtained data. Finally, participants were informed that it would not be possible to provide individual feedback, but that a copy of the final research report could be requested.

3.5 Summary

This chapter focused on the methodology utilised in the current study. The research questions were addressed, and the design of the study was considered. Furthermore, the research process followed and the sampling method applied were mentioned. The data-gathering instruments and their reliabilities as well as the statistical analysis used in the study were discussed. Following this, several ethical considerations were listed.

CHAPTER 4: RESULTS

4.1 Introduction

The previous chapter addressed the research design utilised in the study. This chapter presents the results of the study. Firstly, the sample is described and descriptive statistics are presented. Following this, the results of the two moderated hierarchical regression analyses are provided.

4.2 Description of Sample

The total sample was comprised of 267 working mothers. The mean age of the participants was 39.03 years (SD=9.63). In terms of number of children, 38.2% of the participants had one child, 45.3% had two children, and 16.5% had 3 or more children. With regards to marital status, 59.2% of the participants were married, 14.2% were single, 12.7% were engaged or in a relationship, and the remainder were divorced, separated, or remarried. The majority of the sample was white (53.9%), followed by 23.6% Black, 16.5% Coloured, and 5,2% Indian. Participants with a grade 12 education dominated the sample (62.9%), followed by a Bachelors Degree/diploma/BTech (30.3%). A small percentage of participants possessed an honours, Master's or doctoral degree. The sample was dominated by participants who worked full-time (95.5%) and participants who worked for an employer (96.3%).

4.3 Descriptive Statistics

Table 4.1 illustrates the mean, standard deviation, Cronbach alpha coefficients, and Pearson's intercorrelation of variables.

Table 4.1 *Descriptive statistics and Pearson's intercorrelation of variables*

	Measures	Mean	SD	α	1	2	3
1.	Work engagement	38.11	10.44	.93	1		
2.	WorkFamilyConflict	12.94	5.40	.96	-.19**	1	
3.	Neuroticism	30.89	9.70	.92	-.20**	.23**	1
4.	Conscientiousness	48.53	6.20	.89	.34**	-.03	-.23**

It can be seen in Table 4.1 that work-family conflict displayed a significant negative correlation with work engagement ($r = -.19$, $p < .01$). Neuroticism displayed a significant negative correlation with work engagement ($r = -.20$, $p < .01$) and a significant positive correlation with work-family conflict ($r = .23$, $p < .01$). Conscientiousness displayed a significant positive correlation with work engagement ($r = .34$, $p < .01$) and a negative significant correlation with neuroticism ($r = -.23$, $p < .01$).

4.4. Regression Analyses

Moderated hierarchical regression analyses were performed to investigate the research questions. The data were analysed to determine whether the assumptions of multiple regression were satisfied. To address the issue of multicollinearity, scores were centred (Aiken & West, 1991) and the correlations of the variables, Tolerance and VIF were inspected. The Normal Probability Plot (P-P) of the Regression Standardised Residual showed no major deviations from normality, and the Scatterplot of the standardised residuals indicated no violation of the assumptions. Mahalanobis distances were inspected to check for outliers, and Cook's Distance was examined to ensure that no cases were problematic. Thus, there was no violation of the assumptions of outliers, normality, linearity, homoscedasticity, or independence of residuals.

Two moderated hierarchical regressions were performed. The first regression analysis was aimed at determining main effects for conscientiousness in relation to work engagement. The moderating role of conscientiousness on the relationship between work-family conflict and work engagement was also analysed. The second regression analysis was aimed at determining main effects for neuroticism in relation to work engagement. In addition, the interaction effects of neuroticism on the relationship between work-family conflict and work engagement were explored. As mentioned, categorical control variables (marital status and educational status) were collapsed into two categories in each case, and dummy coded.

4.4.1. Work-family conflict, work engagement, and conscientiousness

The first regression analysis was aimed at determining main and interaction effects for conscientiousness in relation to work engagement. Table 4.2 shows the results of the moderated hierarchical regression analysis.

Table 4.2 *Hierarchical Regression Analysis Predicting Work Engagement from Work-Family Conflict*

Variable	Step 1	Step 2	Step 3	Step 4
	Unstandardised Regression Coefficients (*b*)			
Constant	29.83	29.18	31.15	30.74
Number of children	1.51	1.84**	1.67**	1.55
Age	0.17**	0.16**	0.11	0.12
Education	-1.16	-1.23	-0.76	-0.84
Marital status	-0.35	0.18	0.02	0.04
Work Family Conflict		-0.41***	-0.39***	-0.36***
Conscientiousness			0.52****	0.49****
WorkFamilyConflictXCon				-0.04*
Model R^2	.05***	.09***	.19****	.20*
Model ΔR^2	.05***	.04***	.09****	.01*

Notes **** $p < .001$, *** $p < .01$, ** $p < .05$, * $p < .1$

Table 4.2 indicates that in the first step, demographic variables, including number of children, education, marital status, and age, were controlled for. The total variance explained by these variables was 5.1% [$R^2 = 0.51$, $F(4, 262) = 3.53$, $p < .01$]. According to the unstandardised coefficients, age was the only variable that made a statistically significant contribution ($b = .17$ $t = 2.32$, $p < .05$). In the second step, work-family conflict was entered.

The result was significant, and accounted for an additional 4.3% of variance [$\Delta R^2 = 0.04$, ΔF (1, 261) = 12.33, $p < .01$]. Thus, work-family conflict has a main effect on work engagement. In the third step, conscientiousness was entered, which accounted for an additional 9.2% of total variance [$\Delta R^2 = 0.09$, ΔF (1, 260) = 29.27, $p < .001$]. The product term *WorkFamilyConflictXConscientiousness* was entered in step four. The result was statistically significant [$\Delta R^2 = 0.01$, ΔF (1, 259) = 3.79, $p < .10$] and accounted for an additional 1.2% of the variance. It can therefore be concluded that conscientiousness moderates the relationship between work-family conflict and work engagement. The final model was significant [$R^2 = 0.20$, F (7, 259) = 9.10, $p < .001$] and explained 19.7% of variance.

The interaction effect is illustrated in Figure 2.

Figure 2 Regression analysis of the effect of work-family conflict on work engagement at three levels of conscientiousness
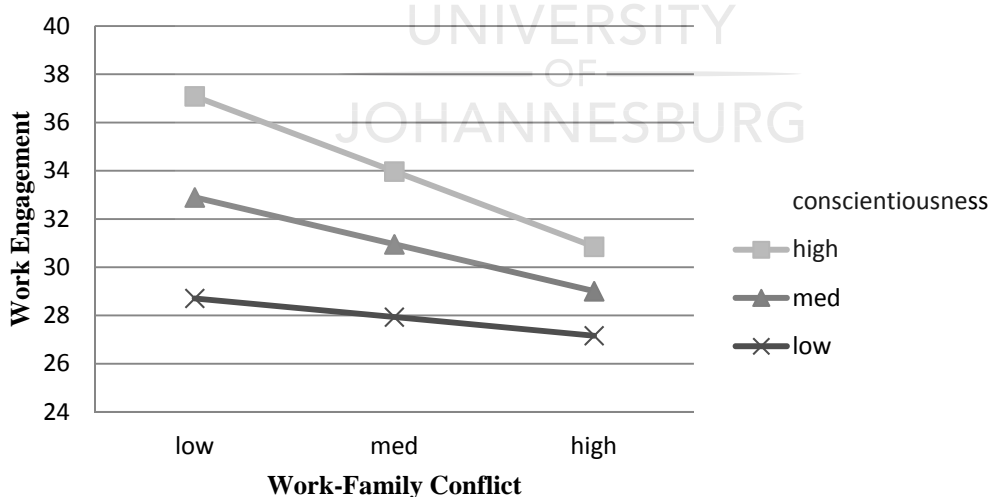
From Figure 2 it can be concluded that, irrespective of the extent of work-family conflict, the work-engagement of those with high levels of conscientiousness is higher than for those with medium levels of conscientiousness. Those with medium levels of

conscientiousness, in turn, have higher levels of work engagement than those with low levels of conscientiousness. Similarly, irrespective of the extent of conscientiousness, those with low levels of work-family conflict are, on average, more engaged in their work than those with medium levels of work-family conflict, while those with medium levels of work-family conflict are more engaged in their work than those with high levels of work-family conflict.

There is, however, a significant interaction between the extent of work-family conflict and the extent of conscientiousness in terms of work engagement. Figure 2 shows that, for those with a high level of conscientiousness, the decrease in work engagement that is associated with increased work-family conflict is more prominent than the corresponding decrease for those with medium or low levels of conscientiousness. Indeed, for those with low levels of conscientiousness, only a slight decrease in work-engagement is associated with increased levels of work-family conflict. It can therefore be concluded that a high level of conscientiousness does not buffer the negative impact of work-family conflict, but, in fact, exacerbates it.

4.4.2. Work-family conflict, work engagement, and neuroticism

The second regression analysis was aimed at determining main and interaction effects for neuroticism in relation to work engagement. Table 4.3 shows the results of the moderated hierarchical regression analysis.

Table 4.3 *Hierarchical Regression Analysis Predicting Work Engagement from Work-Family*

Conflict, Neuroticism and WorkFamilyConflictXNeuroticism

Variable	Step 1	Step 2	Step 3	Step 4
	Unstandardised regression coefficient (*b*)			
Constant	29.83	29.18	29.37	29.12
Number of children	1.51	1.84*	1.94*	1.86*
Age	0.17*	0.16*	0.14*	0.15*
Education	-1.16	-1.23	-0.39	-0.42
Marital status	-0.35	0.18	0.00	0.08
Work Family Conflict		-0.41**	-0.33**	-0.34**
Neuroticism			-0.17*	-0.18*
WorkFamilyConflictXNeu				.01
Model R^2	.05**	.09**	.12*	.12
Model ΔR^2	.05**	.04**	.02*	.00

Notes *** $p < .001$, ** $p < .01$, * $p < .05$

Table 4.3 shows that in the first step, demographic variables, including number of

children, education, marital status, and age were controlled for. The total variance explained

by these variables was 5.1% [$R^2 = 0.51$, $F (4, 262) = 3.53$, $p < .01$]. According to the

unstandardised coefficients, age was the only variable that made a statistically significant

contribution ($b = 0.17$, $t = 2.32$, $p < .05$). In the second step, work-family conflict was

entered. The result was significant and accounted for an additional 4.3% of variance [$\Delta R^2 =$

0.04, ΔF (1, 261) = 12.33, $p < .01$]. Thus, work family conflict had a main effect on work engagement. In the third step, neuroticism was entered, which accounted for an additional 2.1% variance and was statistically significant [ΔR^2 = 0.02, ΔF (1, 260) = 6.22, $p < .05$]. In the fourth and final step, the product term *WorkFamilyConflictXNeuroticism* was entered. This accounted for an additional 0.2% variance [ΔR^2 = 0.00, ΔF (1, 259) = .59, $p > .10$]. However this finding was not significant, thus neuroticism does not moderate the relationship between work-family conflict and work engagement.

4.5 Summary

This chapter presented the results of the study. The sample was described and descriptive statistics were presented. Results confirmed that an increase in work-family conflict significantly predicts a decrease in work engagement. Conscientiousness positively predicts work engagement. Results showed that conscientiousness exacerbates the relationship between work-family conflict and work engagement. Neuroticism negatively predicts work engagement however, no support was found for the moderating role of neuroticism on the relationship between work-family conflict and work engagement. The following chapter provides a discussion on the above-mentioned findings.

CHAPTER 5: DISCUSSION

5.1 Introduction

This chapter provides a discussion on the results presented in the previous chapter. The main findings of the study are discussed and the extent to which the findings in the current study are consistent with existing literature is explored. Possible reasons for unexpected findings are provided.

5.2 Work-Family Conflict and Work Engagement

The results of the current study confirm that work-family conflict is a significant predictor of work engagement, with higher levels of work-family conflict correlating with lower levels of work engagement. This finding is consistent with existing literature, as previous studies found a negative relationship between work-family conflict and various organisational outcomes, namely job satisfaction, organisational commitment, and performance (Allen et al., 2000; Hassan et al., 2010; Streich, et al., 2008). More specifically, other studies have found a significant positive relationship between work-family conflict and burnout (Ahmad, 2010; Reinardy, 2007). This finding is especially relevant as burnout is negatively related to work engagement (Schaufeli et al., 2002).

As previously mentioned, engaged employees experience high energy levels, feelings of being engrossed in their work, enthusiasm, commitment, dedication, and total concentration (Bakker & Demerouti, 2008; De Braine & Roodt, 2011; Rothmann & Rothmann, 2010). It was therefore expected that individuals experiencing conflict as a result of incompatible demands in their work and family lives may be less engaged in their work. From the results of the current study, it can be concluded that the stress associated with work-family conflict may prevent individuals from achieving optimal concentration and dedicating

the necessary time and energy to their work roles. Essentially, work-family conflict is likely to reduce the extent to which an individual is engaged in his/her work.

5.3 Work-Family Conflict, Work Engagement, and Conscientiousness

The current study found that conscientiousness is a significant predictor of work engagement. The main effects of conscientiousness on work engagement were expected, as several studies have found that personality influences the extent to which individuals are engaged in their work (Langelaan et al., 2006). More specifically, conscientiousness has been shown to significantly predict work engagement (Jeong et al., 2009; Mostert & Rothmann, 2006). A previous study found that work engagement is strongly influenced by resources (Schaufeli & Bakker, 2004). Resources may constitute job resources (e.g., autonomy) or personal resources (e.g., personality), and evidence exists in current literature which shows that personal resources act as significant predictors of work engagement (Schaufeli et al., 2006; Robertson & Cooper, 2010).

A previous research finding indicated that conscientiousness moderates the relationship between work-family conflict and work engagement by acting as a buffer (Halbesleben et al., 2009). Conscientious individuals are described as disciplined, dependable, self-controlled, orderly, organised, and strong-willed (Digman, 1990; Taylor & De Bruin, 2006), and effective in managing time and stress (Westerman & Simmons, 2007). Thus, Bruck and Allen (2003) argue that, although conscientious individuals may be more involved in their roles, their planning and organising skills are likely to reduce the extent to which work-family conflict occurs. As a similar finding was expected, the finding of the current study in this regard was surprising.

Although a significant interaction effect was found for conscientiousness on the relationship between work-family conflict and work engagement, this was not a buffering

effect. It was found that an increase in work-family conflict is more strongly associated with a decrease in work engagement for participants with high levels of conscientiousness than for individuals with low levels of conscientiousness. Rather than acting as a buffer, conscientiousness exacerbates the negative impact of increased work-family conflict on work engagement. Although unexpected, this finding is in line with a previous study conducted by Witt and Carlson (2006), in which the negative relationship between family-work conflict and job performance was more prominent for individuals with high rather than low levels of conscientiousness. The negative effects of conscientiousness were further illustrated in a study conducted by Bolino and Turnley (2003), in which individual initiative (a component of personality theoretically similar to conscientiousness) was positively associated with role overload, job stress, and work–family conflict. Bolino and Turnley (2003) argue that women emphasise their family role more than men, and thus find it more challenging to make a trade-off between work and family responsibilities. The results of their study revealed that gender plays a moderating role in the relationship between individual initiative and work-family conflict, with a stronger relationship existing for women than for men (Bolino & Turnley, 2003).

Two factors seem to combine to render women particularly vulnerable to the negative effects of work-family conflict. Firstly, women still carry the bulk of household responsibilities and place a greater emphasis on their family roles (Franks et al., 2006; MacDonald, 2004). Secondly, conscientious individuals tend to be hard-working and are likely to invest considerable time and effort into their work role. It thus seems plausible that work-family conflict will adversely impact the work engagement of women to a greater extent for those with high levels of conscientiousness, as opposed to those with low levels of conscientiousness. An additional perspective is that conscientiousness may be an antecedent, rather than a moderator, of work-family conflict (Bruck, 2003) in the JD-R model, therefore

causing those with high levels of conscientiousness to perceive their work-family conflict as more severe.

5.4 Work-Family Conflict, Work Engagement, and Neuroticism

The current study found that neuroticism negatively predicts work engagement. The finding regarding the main effects of neuroticism on work engagement was expected, as a previous study found that work engagement is linked to low neuroticism (Jeong et al., 2009). Another study found that work engagement is characterised by low neuroticism when combined with high levels of mobility and extraversion (Langelaan, et al., 2006). Furthermore, literature shows that neuroticism is positively related to burnout (a well-being outcome often viewed as the opposite of work engagement) (Langelaan et al., 2006; Morgan & De Bruin, 2010).

In terms of interaction effects, the current study found no support for the moderating role of neuroticism on the relationship between work-family conflict and work engagement. This was unexpected as a previous study found that low neuroticism moderates the relationship between job characteristics (demands and resources) and work behaviours (including work stress, job satisfaction, work self-efficacy, and propensity to leave) (Van Den Berg & Feij, 2003). Furthermore, it was expected that neuroticism would moderate the relationship between work-family conflict and work engagement owing to the fact that neurotic individuals tend to be emotionally unstable, anxious, and intolerant of stress (Costa & McCrae, 1992; Maltby et al., 2010). It was thus expected that those with high levels of neuroticism would experience difficulty in managing the conflicting demands associated with work and family life, and subsequently struggle to remain engaged in their work.

5.5 Summary

This chapter presented a discussion on the findings of the current study. The results confirmed that an increase in work-family conflict significantly predicts a decrease in work engagement, which was expected. Another finding in line with current literature is that Conscientiousness positively predicts work engagement. Unexpectedly, results showed that conscientiousness exacerbates, rather than buffers, the relationship between work-family conflict and work engagement. However, this finding is consistent with previous studies which have explored the possible negative effects of conscientiousness. With regards to neuroticism, it was found to negatively predict work engagement, which was expected. Given the findings of previous studies, it was unexpected that no support was found for the moderating role of neuroticism on the relationship between work-family conflict and work engagement. Implications of the findings, limitations of the study, and recommendations for future research are discussed in Chapter 6.

CHAPTER 6: CONCLUSIONS AND RECOMMENDATIONS

6.1 Introduction

This chapter provides a broad overview of the study. The main findings of the study and the implications thereof are discussed. Limitations regarding the research are mentioned, and finally, recommendations for future research are made.

6.2 Reason for Undertaking Research

As a result of the intensification of work challenges, progressively greater demands are placed on employees, and they are finding it increasingly challenging to establish a balance between the work and family domains. This challenge is especially prevalent among women, and particularly working mothers, owing to the fact that women are still responsible for the bulk of household and childcare duties. The inability to effectively manage the demands associated with several life roles may result in work-family conflict and, ultimately, adversely impact performance at work. However, organisations require a healthy and productive workforce in order to survive and remain sustainable in the current harsh economic climate.

Given a paucity of available information in terms of the impact of work-family conflict on South African working mothers in particular, this study investigated the role that personality plays in the relationship between work-family conflict and the positive, work-related well-being outcome of work engagement. More specifically, the current study explored the moderating role of conscientiousness and neuroticism in the relationship between work-family conflict and work engagement. It is hoped that the results of this study will provide organisations with an enhanced understanding of the factors that impact the well-being of their female workforce, in particular, working mothers.

6.3 Summary of the Findings

Work-family conflict negatively predicts work engagement, which is in line with the literature and was therefore an expected finding. Results also showed that conscientiousness positively predicts work engagement, and neuroticism negatively predicts work engagement. These findings are also in line with current literature. In terms of interaction effects, a significant interaction effect was found for conscientiousness but not for neuroticism. The findings showed that, for participants with high levels of conscientiousness, work engagement decreases significantly more with an increase in work-family conflict than for participants with lower levels of conscientiousness. Thus, perceptions of increased work-family conflict have a greater negative impact on participants with high levels of conscientiousness. Conscientiousness therefore does not act as a buffer in the relationship between work-family conflict and work engagement, but rather exacerbates the negative effect of work-family conflict on work engagement.

6.4 Implications of the Study

The study contributes to the limited information available on work-family conflict among South African working mothers. It also contributes to the theory through the validation of aspects of the JD-R Model. In terms of personality factors, the study shows that individuals with high levels of conscientiousness and low levels of neuroticism are significantly more engaged employees than those with low levels of conscientiousness and high levels of neuroticism. This should be taken into account in the selection and placement of employees. The study also confirmed the negative effect of work-family conflict on work engagement. More significantly, work-family conflict is particularly severe for those women who are most desirable to organisations, i.e. those with high levels of conscientiousness. This finding has implications for both working mothers as well as organisations. It is

advisable that working mothers be aware of the potentially negative effects of work-family conflict and seek support at home as well as at work. From an organisational perspective, organisations have a responsibility to offer their employees sufficient support so as to reduce the negative effects associated with work-family conflict amongst valuable employees.

6.5 Limitations of the Study

The current study has some limitations. As a cross-sectional research design was utilised, it did not allow for the measurement of changing variables over time, which made it difficult to determine causal relationships between variables. A further limitation involves the use of self-report questionnaires, as they are often associated with method variance, which may impact the reliability and validity of a study (Van der Colff & Rothmann, 2009). In addition, convenience sampling was applied and, thus, the findings of the study may not be generalisable across all job levels and occupations.

6.6 Recommendations for Future Research

It is recommended that future studies utilise a longitudinal research design in order to determine cause and effect relationships between variables. In addition, it is advisable to use a larger sample size in order to enhance the external validity of the study. Participants should be selected from a variety of organisations and job categories in order to improve the generalisability of the findings. The study could be expanded to include all working women, and not only working mothers. Moreover, a comparative study between males and females could be done. A further recommendation is to investigate the impact of the other personality traits, e.g., extraversion and agreeablenesss, and social support at work and at home on the relationship between work-family conflict and work engagement. The impact of work-family conflict on negative outcomes, such as burnout or emotional exhaustion, can also be explored.

6.7 Conclusion

Few studies have considered the impact of work-family conflict on South African working mothers. In the twenty-first century, working women and especially mothers are finding it increasingly challenging to establish a balance between work and family life. This often results in work-family conflict which may affect well-being. The current study therefore utilised the Job Demand-Resources Model to investigate the effects of work-family conflict on a positive work-related well-being outcome, namely work engagement. The moderating role of conscientiousness and neuroticism on the relationship between work-family conflict and work engagement was also investigated. A quantitative, cross-sectional survey design was used and data was gathered using the Work-to-Family Conflict Questionnaire (Netemeyer et al., 1996), the Basic Traits Inventory (BTI) (Taylor & De Bruin, 2005) and the Utrecht Work Engagement Scale (UWES-9) (Schaufeli et al., 2002).

The results indicated that work-family conflict negatively predicts work engagement. Conscientiousness positively predicts work engagement, and neuroticism negatively predicts work engagement. In terms of interaction effects, a significant interaction effect was found for conscientiousness but not for neuroticism. Unexpectedly, conscientiousness was found to exacerbate, rather than buffer, the relationship between work-family conflict and work engagement.

The findings of the current study contribute to the limited information available in terms of work-family conflict among South African mothers and validate certain aspects of the JD-R model. Practically, organisations should consider those that are high in conscientiousness and low in neuroticism in the selection and placement of employees. In addition, organisations have a responsibility to provide conscientious women, particularly mothers, with adequate support to ensure that the negative effects of work-family conflict do

not adversely impact their levels of work engagement. In addition, working mothers should also be alerted to the negative effects of work-family conflict and seek support at home and at work to ensure that they can perform their work and family roles optimally.

Reference List

Aguinis, H. (1995). Statistical power problems with moderated regression in management
research. *Journal of Management Research, 21*, 1141 - 1158. doi:
10.1177/014920639502100607

Ahmad, A. (2010). Work family conflict among junior physicians: Its mediating role in the
relationship between role overload and emotional exhaustion. *Journal of Social
Sciences, 6*(2), 265-271. Retrieved from http://0-
web.ebscohost.com.ujlink.uj.ac.za/ehost/pdfviewer/pdfviewer?sid=f0739b3c-d904-
4d9c-bb22-f8a49c920bfd%40sessionmgr112&vid=5&hid=110

Aiken, L. S. & West, S. G. (1991). *Multiple regression: Testing and interpreting
interactions.* Newbury Park, CA: Sage.

Allen, T., Herst, D., Bruck, C., & Sutton, M. (2000). Consequences associated with work-
family conflict: A review and agenda for future research. *Journal of Occupational
Health Psychology, 5,* 278-308. doi: 10.1037/1076-8998.5.2.278

Amatea, E. S. & Fong, M. L. (1991). The impact of role stressors and personal resources on
the stress experience of professional women. *Psychology of Women Quarterly, 15*,
419-30. Retrieved from http://0-
web.ebscohost.com.ujlink.uj.ac.za/ehost/pdfviewer/pdfviewer?sid=f0739b3c-d904-
4d9c-bb22-f8a49c920bfd%40sessionmgr112&vid=8&hid=110

Andreassi, J. K. (2011). What the person brings to the table: Personality, coping, and work-
family conflict. *Journal of Family Issues, 32*(11), 1474-1499. doi:
10.1177/0192513X11401815

Australian Bureau of Statistics. (2001). *Labour Force, Australia 2001.* Catalogue 6203.0,
Australian Bureau of Statistics, Canberra.

Bakker, A. B., Boyd, C. M., Dollard, M., Gillespie, N., Winefield, A. H., & Stough, C. (2010). The role of personality in the job demands-resources model: A study of Australian academic staff. *Career Development International, 15*(7), 622-636. doi: 10.1108/13620431011094050

Bakker, A. B., & Demerouti, E. (2007). The Job Demands-Resources Model: State of the art. *Managerial Psychology, 22*(3), 309-328. doi: 10.1108/02683940710733115

Bakker, A. B., & Demerouti, E. (2008). Towards a model of work engagement. *Career Development International*, *13*(3), 209-223. doi: 10.1108/13620430810870476

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. doi: 10.1108/02683940910939313

Bakker, A. B., Demerouti, E., & Euwema, M. C. (2005). Job resources buffer the impact of job demands on burnout. *Journal of Occupational Health Psychology, 10*, 170-180. doi: 10.1037/1076-8998.10.2.170.

Bakker, A. B., Demerouti, E., & Schaufeli, W. B. (2003). Dual processes at work in a call centre: An application of the job demands-resources model. *European Journal of Work and Organizational Psychology, 12*, 393−417.doi:10.1080/13594320344000165

Bakker, A. B., Demerouti, E., & Verbeke, W. (2004). Using the Job-Demands Resources Model to predict burnout and performance. *Human Resource Management, 43*(1), 83-104. doi: 10.1002/hrm

Bakker, A. B., Hakanen, J. J., Demerouti, E., & Xanthopoulou, D. (2007). Job resources boost work engagement, particularly when job demands are high. *Journal of educational psychology, 99*, 274−284. doi:10.1037/0022-0663.99.2.274

Bakker, A. B., Schaufeli, W. B., Leiter, M. P., & Taris, T. (2008). Work engagement: An

   emerging concept in occupational health psychology. *Work & Stress, 22*, 187−200.

   doi: 10.1080/02678370802393649

Bakker, A. B., Van Veldhoven, M. J. P. M., & Xanthopoulou, D. (2010). Beyond the

   Demand-Control model: Thriving on high job demands and resources. *Journal of*

   Personnel Psychology, 9, 3–16. doi:10.1027/1866-5888/a000006

Barker, F. (2003). *The South African labour market* (4th ed.). Pretoria: Van Schaik.

Barnett, R. C. (1999). A new work-life model for the twenty-first century. *The Annals of the*

   American Academy of Political and Social Science, 562(10), 143-158.

   doi:10.1177/000271629956200110

Bellavia, G. M., & Frone, M. R. (2005). Work-family conflict. In J. Barling, E. K. Kelloway,

    M. R. Frone (Eds.). *Handbook of work stress*. (pp. 113-147). Thousand Oaks, CA:

   Sage.

Bergman, B., Ahmad, F., & Stewart, D. E. (2008). Work family balance, stress and salivary

   cortisol in men and women academic physicians. *International Journal of Behaviour*

   Medicine, 15, 54-61. doi: 10.1080/10705500701783942

Biernat, M., & Wortman, C. B. (1991). Sharing of home responsibilities between

   professionally employed women and their husbands. *Journal of Personality and*

   Social Psychology, 60, 844-860. doi: 10.1037/0022-3514.60.6.844

Bolino, M. C., & Turnley, W H. (2003). The personal costs of citizenship behaviour. *Journal*

    of Applied Psychology, 90(4) 740-748. doi: 10.1037/0021-9010.90.4.740

Braghin, C., & Henn, C. (2009). Time-based constraints and work-to-family conflict among

   working mothers. *Unpublished Master's article*.

Brown, L. M. (2010). The relationship between motherhood and professional advancement: Perceptions versus reality. *Employee Relations, 32*(5), 470-494. doi: 10.1108/01425451011061649

Bruck, C. S. (2003). Theoretical antecedents to work-family conflict: A comprehensive approach. *Dissertation Abstracts International: Section B: The Sciences and Engineering, 64(*1-B), 449.

Bruck, C. S., & Allen, T. D. (2003). The relationship between the big five personality traits, negative affectivity, type A behaviour, and work-family conflict. *Journal of Vocational Behaviour, 63*(3), 457-472. doi:10.1016/S0001-8791(02)00040-4

Bryant, R. H. (2010). Personality and work-family conflict: The meditational role of coping styles. *Theses and Dissertations.* Retrieved from http://scholarcommons.usf.edu/etd/1879

Burger, J. M. (Ed.). (2004). *Personality* (6th ed.). Belmont, CA: Wadsworth/Thomson Learning.

Burke, R. J., & Cooper, C. L. (2004). *Leading in turbulent times.* Blackwell, Oxford.

Carlson, D. S., Kacmar, K. M., & Williams, L. J. (2000). Construction and initial validation of a multidimensional measure of work-family conflict. *Journal of Vocational Behaviour, 6*(2), 249-76. doi:10.1006/jvbe.1999.1713

Casale, D. (2004). What has the feminisation of the labour market 'bought' women in South Africa?: Trends in labour force participation, employment and earnings, 1995-2001. *The Journal of Interdisciplinary Economics, 15,* 251-275. Retrieved from http://dspace.cigilibrary.org/jspui/handle/123456789/7548

Casale, D., & Posel, D. (2002). The continued feminisation of the labour force in South Africa: An analysis of recent data and trends. *The South African Journal of Economics, 70*(1), 156-184. doi: 10.1111/j.1813-6982.2002.tb00042.x

Cinamon, R. G. (2009). Anticipated work-family conflict: Effects of role salience and self-efficacy. *Guidance and Counselling, 38*(1), 83-99. doi: 10.1080/03069880903408620

Costa, P. T., & McCrae, R. R. (1992). Normal personality assessment in clinical practice: The Personality Inventory. *Psychological Assessment, 4*, 5-13. doi: 10.1037/1040-

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. doi: 10.4102/sajip.v37i2.889

Demerouti, E., & Bakker, A. B. (2011). The Job-Demands Resources model: Challenges for future research. *South African Journal of Industrial Psychology*, 37(2), 1-9 doi:10.4102/sajip.v37i2.974

Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W.B. (2001). The job demands-resources model of burnout. *Journal of Applied Psychology, 86,* 499–512. doi:10.1037/0021-9010.86.3.499

Digman, J. M. (1990). Personality structure: Emergence of the five factor model. *Annual Review of Psychology, 41*, 417-440. doi: 10.1146/annurev.ps.41.020190.002221

Dijkstra, M. T. M., van Dierendonck, D., Evers, A., & De Dreu, C. K. W. (2005). Conflict and well-being at work: The moderating role of personality. *Journal of Managerial Psychology, 20*(2), 87-104. doi: 10.1108/02683940510579740

Doi, Y. (2005). An epidemiologic review on occupational sleep research among Japanese workers. *Industrial health, 43*, 3−10. doi:10.2486/indhealth.43.3

Douglas, S. & Michaels, M. (2004). *The mommy myth: The idealisation of motherhood and how it has undermined women*. New York, NY: Free Press.

Eagle, B. W., Icenogle, M. L., Maes, J. D., & Miles, E. W. (1998). The importance of employee demographic profiles for understanding experiences of work-family inter-role conflicts. *The Journal of Social Psychology, 138*(6), 690-709. doi: 10.1080/00224549809603255

Elloy, D. F., & Smith, C. R. (2003). Patterns of stress, work-family conflict, role conflict, role ambiguity and overload among dual-career and single-career couples: An Australian study. *Women in Management Review, 10* (1), 55-82. doi: 10.1108/13527600310797531

Franks, K., Schurink, W., & Fourie, L. (2006). Exploring the social construction of life roles of career-oriented women. *South African Journal of Industrial Psychology, 32*(1), 17-24. Retrieved from http://www.sajip.co.za/index.php/sajip/article/view/222/219

Freudenburg, W. R., & Davidson, D. J. (2007). Nuclear families and nuclear risk: The effects of gender, geography, and progeny on attitudes towards a nuclear waste facility. *Rural Sociology, 72*(2), 215-243. doi: 10.1526/003601107781170017

Geurts, S. A. E., & Demerouti, E. (2003). Work/nonwork interface: A review of theories and findings. In M. Schabracq, J. Winnubst, & C. L. Cooper, (Eds.). *Handbook of Work and Health Psychology*, (pp. 279-312). Chichester: John Wiley.

González-Romá, V., Schaufeli, W. B., Bakker, A. B., & Lloret, S. (2006). Burnout and work engagement: Independent factors or opposite poles? *Journal of Vocational Behaviour*, *68*, 165−174. doi:10.1016/j.jvb.2005.01.003

Government Gazette (1998) (Employment Equity Act No. 55 of 1998), Republic of South Africa, Vol. 400, No. 19370. Cape Town, 19 October 1998.

Greenhaus, J. H., & Beutell, N. J. (1985). Sources of conflict between work and family roles. *Academy of Management Review, 10*, 76-88. Retrieved from http://www.jstor.org/pss/258214

Greenhaus, J. H., & Parasuraman, S. (1999). Research on work, family and gender: Current status and future directions. In G. N. Powell. (Ed.). *Handbook of gender & work*. (pp. 391-415). CA: Sage Publications.

Hackman, J. R., & Oldham, G. R. (1976). Motivation through the design of work: Test of a theory. *Organizational Behaviour and Human Performance, 16,* 250–279. doi:10.1016/0030-5073(76)90016-7

Hakanen, J. J., Bakker, A. B., & Schaufeli, W. B. (2006). Burnout and work engagement among teachers. *Journal of School Psychology, 43*, 495−513. doi:10.1016/j

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. doi: 10.1037/a0017595

Hassan, Z., Dollard, M. F., & Winefield, A. H. (2010). Work-family conflict in East vs Western countries. *Cross Cultural Management, 17*(1), 30-49. doi: 10.1108/13527601011016899

Haworth, J., & Lewis, S. (2005). Work, leisure and well-being. *British Journal of Guidance and Counselling, 33*(1), 67–79. doi: 10.1080/03069880412331335902

Herbst, L., Coetzee, S., & Visser, D. (2007). Personality, sense of coherence and the coping of working mothers. *South African Journal of Industrial Psychology, 33*(3), 57-67. Retrieved from http://www.sajip.co.za/index.php/sajip/article/viewArticle/397

Hobfoll, S. E., Jonshon, R. J., Ennis, N., & Jackson, A.P. (2003). Resource loss, resource gain, and emotional outcomes among inner city women. *Journal of Personality and Social Psychology, 84*, 632−643. doi:10.1037/0022-3514.84.3.632

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. doi:10.1016/j.ijhm.2008.06.001

Johnson, M. K., & Mortimer, J. T. (2000). *Work-family orientations and attainments in the early life course*. Thousand Oaks, CA: Sage.

Kahn, W. A. (1990). Psychological conditions of personal engagement and disengagement at work. *Academy of Management Journal*, *33*(4), 692-724. Retrieved from http://www.jstor.org/pss/256287

Kahn, W. A. (1992). To be fully there: Psychological presence at work. *Human Relations*, *45*(4), 321−349. doi:10.1177/001872679204500402

Kahn, D. L., & Byosiere, P. (1992). Stress in organizations. In M. D. Dunnette, & L. M. Hough (Eds.). *Handbook of industrial and organizational psychology* (pp. 571−650). Palo Alto, CA: Consulting Psychologists Press.

Karasek, R. A. (1979). Job demands, job decision latitude, and mental strain: Implications for job redesign. *Administrative Science Quarterly, 24*(2), 285-308. Retrieved from http://www.jstor.org/pss/2392498

Koekemoer, E., & Mostert, K. (2010a). 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. doi: 10.4102/sajip.v36i1.801

Koekemoer, E., & Mostert, K. (2010b). Work-nonwork interference: Preliminary results on the psychometric properties of a new instrument. *South African Journal of Industrial Psychology, 36*(1), 1-13. doi: 10.4102./sajip.v36i1.908

Koolaee, A. K., & Sheykhi, G. (2011). Association between personality traits and work-family conflict among Iranian teachers. *European Psychiatry, 26*(1), 1030-1030. doi: 10.1016/S0924-9338(11)72735-3

Lang, J., Thomas, J. L., Bliese, P. D., & Adler, A. B. (2007). Job Demands and job performance: The mediating effect of psychological and physical strain and the moderating effect of role clarity. *Journal of Occupational Health Psychology, 12*, 116−124. doi:10.1037/1076-8998.12.2.116

Langelaan, S., Bakker, A. B., van Doornen, L. J. P., & Schaufeli, W. B. (2006). Burnout and work engagement: Do individual differences make a difference? *Personality and Individual Differences, 40*(3), 521-532. doi: 10.1016/j.paid.2005.07.009

Lewis, S., & Cooper, C. L. (2005). *Work-life integration: Case studies of organisational change*. Chichester: Wiley.

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. doi: 10.4102/sajip.v35i1.832

Lewis, S., Rapoport, R., & Gambles, R. (2003). Reflections on the integration of paid work and the rest of life. *Journal of Managerial Psychology, 18*, 824–841. doi: 10.1108/02683940310511908

Losoncz, I., & Bortolotto, N. (2009). Work-life balance: the experiences of Australian working mothers. *Family Studies*, 15, 122-138. Retrieved from http://0-web.ebscohost.com.ujlink.uj.ac.za/ehost/pdfviewer/pdfviewer?sid=f0739b3c-d904-4d9c-bb22-f8a49c920bfd%40sessionmgr112&vid=16&hid=110

MacDonald, I. (2004). Women in management: A historical perspective. *Employee Relations, 26*(3), 307–319. doi: 10.1108/01425450410530673

Macey, W. H., & Schneider, B. (2008). The meaning of employee engagement. *Industrial and Organisational Psychology, 1*, 3-30. doi: 10.1111/j.1754-9434.2007.0002.x

Mäkikangas, A., & Kinnunen, U. (2003). Psychosocial work stressors and well-being: Self-esteem and optimism as moderators in a one-year longitudinal sample. *Personality and Individual Differences, 35*, 537−557. doi:10.1016/S0191- 8869(02)00217-9

Maltby, J., Day, L., & Macaskill, A. (2010). *Personality, individual differences and intelligence*. (2nd ed.). Essex: Pearson Education Limited.

Martire, L. M., Stephens, M. P., & Townsend, A. L. (1998). Emotional support and well-being of midlife women: role-specific mastery as a mediational mechanism. *Psychology and Aging, 13*(3), 396-404. doi: 10.1037/0882-7974.13.3.396

Maslach, C., & Leiter, M. P. (1997). *The truth about burnout: How organizations cause personal stress and what to do about it*. San Francisco, CA: Jossey-Bass.

Mauno, S., Kinnunen, U., & Ruokolainen, M. (2006). Exploring work and organisation based resources as moderators between work-family conflict, well-being and job attitudes. *Work and Stress, 20*(3), 210-233. doi: 10.1080/02678370600999969

McCrae, R. R., & Costa, P. T. (1995). Positive and negative valence within the five-factor model. *Journal of Research in Personality, 29*, 443-460. doi:10.1006/jrpe.1995.1026

McElwain, A. K., Korabik, K., & Rosin, H. M. (2005). An examination of gender differences in work-family conflict. *Canadian Journal of Behavioural Science, 37*, 283-98. doi: 10.1037/h0087263

McLellan, K., & Uys, K. (2009). Balancing dual roles in self-employed women: An exploratory study. *South African Journal of Industrial Psychology, 35*(1), 1-10. doi: 10.4102/sajip.v35i1.416

Md-Sidin, S., Sambasivan, M., & Ismail, I. (2010). Relationship between work-family conflict and quality of life: An investigation into the role of social support. *Managerial Psychology, 25*(1), 58-81. doi: 10.1108/02683941011013876

Mitchelson, J. K. (2009). Seeking the perfect balance: perfectionism and work-family conflict. *Occupational and Organisational Psychology, 82*, 349-367. doi: 10.1348/096317908X314874

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

Mostert, K. (2008). Time-based and strain-based work-family conflict in the South African police service: Examining the relationship with work characteristics and exhaustion. *Acta Criminologica, 21*(3), 1-18. Retrieved from http://0-thor.sabinet.co.za.ujlink.uj.ac.za/WebZ/images/ejour/crim/crim_v21_n3_a2.pdf?sessionid=01-56773-2025531771&format=F

Mostert, K., & Rothmann, S. (2006). Work-related well-being in the South African Police Service. *Journal of Criminal Justice, 34*, 479–491. doi:10.1016/j.jcrimjus.2006.09.003

Netemeyer, R. G., Boles, J. S., & McMurrian, R. (1996). Development and validation of work-family conflict scales. *Journal of Applied Psychology*, *81*, 400-401. doi: 10.1037/0021-9010.81.4.400

Nickols, S. Y. (1994). Work/family stresses. In P. C. McHenry & S. J. Price (Eds.). *Families and change: Coping with stressful events* (pp. 66-87). Thousand Oaks, CA: Sage.

Noor, M. N. (2002). Work-family conflict, locus of control, and women's well-being: Tests of alternate pathways. *Journal of Social Psychology, 142*(5), 645-662. Retrieved from http://www.ncbi.nlm.nih.gov/pubmed/12236473

Patel, C. J., Govender, V., Paruk, Z., & Ramgoon, S. (2006). Working mothers: Family-work conflict, job performance and family/work variables. *South African Journal of Industrial Psychology, 32*(2), 39-45. Retrieved from http://www.sajip.co.za/index.php/sajip/article/view/238/235

Perry-Jenkins, M., Repetti, R. L., & Crouter, A. C. (2000). Work and family in the 1990s. *Journal of Marriage & Family*, *62*(4), 981–999. doi: 10.1111/j.1741-3737.2000.00981.x

Phillips, S. D., & Imhoff, A. R. (1997). Women and career development: A decade of research. *Annual Review of Psychology*, 48. doi: 10.1146/annurev.psych.48.1.31

Pleck, J. H. (1993). Are "family supportive" employer policies relevant to men? In J. C. Hood (Ed.). *Men, work and family*. Newbury Park, CA: Sage.

Poelmans, S. A. Y., O'Driscoll, M., & Beham, B. (2005). An overview of international research on the work-family interface. In S. A. Y. Poelmans (Ed.). *Work and family: an international research perspective*. (pp. 3-46). London: Lawrence Erlbaum Associates.

Polach, J. (2003). HRD's role in work-life integration issues: Moving the workforce to change in mindset. *Human Resource Development International, 6*(1), 57–68. doi: 10.1080/13678860110065936

Prieto, L. L., Soria, M. S., Martínez, I. M., & Schaufeli, W. (2008). Extension of the Job-Demands Resources model in the prediction of burnout and engagement among teachers over time. *Psicothema, 20*(3), 354-360. Retrieved from http://0-web.ebscohost.com.ujlink.uj.ac.za/ehost/pdfviewer/pdfviewer?sid=f0739b3c-d904-4d9c-bb22-f8a49c920bfd%40sessionmgr112&vid=22&hid=110

Reinardy, S. (2007). Beyond the games: A study of the effects of life issues and burnout on newspaper sports editors. *Dissertation Abstracts International: Section A: Humanities and Social Sciences, 67*(11-A), 4021. Retrieved from

http://proquest.umi.com/pqdlink?did=1251841101&Fmt=7&clientId=79356&RQT=3
09&VName=PQD

Richmond, A. (2006). Everyone wants an engaged workforce: How can you create it?.
Workspan, *49*, 36-39. Retrieved from
http://www.wfd.com/PDFS/Engaged%20Workforce%20Amy%20Richman%20Work
span.pdf

Robertson, I. T., & Cooper, C. L. (2010). Full engagement: The integration of employee
engagement and psychological well-being. *Leadership and Organisation
Development Journal, 31*(4), 324-336. doi: 10.1108/01437731011043348

Rosenfield, S. (1989). The effects of women's employment: Personal control and sex
differences in mental health. *Journal of Health and Social Behaviour, 30*, 77-91.
Retrieved from http://www.jstor.org/pss/2136914

Rothmann, S., & Jordaan, G. M. E. (2006) Job demands, job resources and work engagement
of academic staff in South African higher education institutions. *South African
Journal of Industrial Psychology, 32*(4), 87-96. Retrieved from
http://www.sajip.co.za/index.php/sajip/article/view/247/244

Rothmann, S., & Rothmann, S. (2010). Factors associated with employee engagement in
South Africa. *South African Journal of Industrial Psychology,* 36(2),1-12. doi:
10.4102/sajip.v36i2.925

Rotondo, D. M., Carlson, D. S., & Kincaid, J. F. (2003). Coping with multiple dimensions of
work family conflict. *Personnel Review*, *32*(3), 275-296. doi:
10.1108/00483480310467606

Schaufeli, W. B., & Bakker, A. B. (2003). UWES- Utrecht Work Engagement Scale: Test manual. Department of Psychology, Utrecht University. Retrieved from http://www.schaufeli.com/

Schaufeli, W. B., & Bakker, A. B. (2004). Job demands, job resources and their relationship with burnout and engagement: A multi-sample study. *Journal of Organizational Behaviour, 25,* 293-315. doi: 10.1002/job.248

Schaufeli, W. B., Bakker, A. B., & Salanova, M. (2006). The measurement of work engagement with a short questionnaire: A cross-national study. *Education and Psychological Measurement, 66*(4), 701-716. doi: 10.1177/0013164405282471

Schaufeli, W. B., Salanova, M., González-Romá, V., & Bakker, A. B. (2002). The measurement of engagement and burnout: A two sample confirmatory factor analytic approach. *Journal of Happiness, 3*(1), 71-92. Retrieved from http://www.beanmanaged.eu/pdf/articles/arnoldbakker/article_arnold_bakker_77.pdf

Schaufeli, W. B., Taris, T. W., & Van Rhenen, W. (2009). Workaholism, burnout and work engagement: Three of a kind or three different kinds of employee wellbeing. *Applied Psychology: An International Review*, *57*(2), 173-203. doi: 10.1111/j.1464-0597.2007.00285.x

Schaufeli, W. B., & Van Rhenen, W. (2006). About the role of positive and negative emotions in manager's well-being: A study using the Job-Related Affective Well-Being scale (JAWS). *Gedrag & Organisatie*, *18,* 244-323.

Seligman, M. E. P., & Csikszentmihalyi, M. (2000). Positive psychology: An introduction. *American Psychologist, 55*, 5–14. doi: 10.1037/0003-066X.55.1.5

Siegrist J. (1996). Adverse health effects of high effort-low reward conditions. *Journal of Occupational Health Psychology, 1,* 27–41. doi:10.1037/1076-8998.1.1.27

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=1

Sonnentag, S. (2003). Recovery, work engagement, and proactive behaviour: A new look at the interface between non-work and work. *Applied Psychology, 88*(3), 518-28. doi: 10.1037/0021-9010.88.3.518

Statistics South Africa. (2010). *Quarterly Labour force survey March 2010*. Statistical release P0317. Pretoria, South Africa.

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. Retrieved from http://www.sajip.co.za/index.php/sajip/article/view/129/125

Streich, M., Casper, W. J., & Salvaggio, A. N. (2008). Examining couple agreement about work-family conflict. *Managerial Psychology, 23*(3), 252-272. doi: 10.1108/02683940810861374

Taylor, N., & De Bruin, G. P. (2006). *Basic Traits Inventory*. Johannesburg, SA: Jopie Van Rooyen and Partners.

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

Thomas, L. T. & Ganster, D. C. (1995). Impact of family-supportive work variables on work-family conflict and strain: A control perspective. *Journal of Applied Psychology, 80*(1), 6-15. doi: 10.1037/0021-9010.80.1.6

Thompson, J. A., & Bunderson, J. S. (2001). Work-nonwork conflict and the phenomenology of time, beyond the balance metaphor. *Work and Occupations, 28*(1), 17–39. doi: 10.1177/0730888401028001003

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. (2010). Job crafting: Towards a new model of individual job redesign. *South African Journal of Industrial Psychology, 36*(2), 1-9 doi:10.4102/sajip.v36i2.841

Tremblay, M. A., & Messervey, D. (2011). The Job Demands-Resources model: Further evidence for the buffering effect of personal resources. *South African Journal of Industrial Psychology, 37*(2), 1-10. doi: 10.4102/sajip.v37i2.876

US Census Bureau. (2005). *Statistical Abstract of the United States: 2005* (125th ed.). Washington, DC: US Census Bureau

Van Den Berg, P. T., & Feij, J. A. (2003). Complex relationships among personality traits, job characteristics, and work behaviours. *International Journal of Selection and Assessment, 11*(4), 326-340. doi: 10.1111/j.0965-075X.2003.00255.x

Van den Broeck, A., Vansteenkiste, M., De Witte, H., & Lens, W. (2008). Explaining the relationships between job characteristics, burnout, and engagement: The role of basic psychological need satisfaction. *Work & Stress, 22*(3), 277−294. doi:10.1080/02678370802393672

Van der Colff, J. J., & Rothmann, S. (2009). Occupational stress, sense of coherence, coping, burnout and work engagement of registered nurses in South Africa. *South African Journal of Industrial Psychology, 35*(1), 1-10. doi: 10.4102/sajip.v35i1.423

Van Yperen, N. W., & Snijders, T. A. B. (2000). A multilevel analysis of the demands-control model: Is stress at work determined by factors at the group level or the individual level? *Journal of Occupational health Psychology, 5*, 182−190. doi:10.1037/1076-8998.5.1.182

Voydanoff, P. (2004). The effects of work and community resources and demands on family integration. *Journal of Family and Economic Issues, 25*(1), 7-23. doi: 10.1111/j.1741-3737.2004.00028.x

Wallis, T., & Price, L. (2003). The relationship between work-family conflict and central life interests amongst single working mothers. *South African Journal of Industrial Psychology*, 29(1), 26-31. Retrieved from http://www.sajip.co.za/index.php/sajip/article/view/89/87

Wayne, J. H., Musisca, N., & Fleeson, W. (2004). Considering the role of personality in the work-family experience: Relationships of the big five to work-family conflict and

facilitation. *Journal of Vocational Behaviour, 64(*1), 108-130. doi: 10.1016/S0001-8791(03)00035-6

Wayne, J. H., Randal, A. E., & Stevens, J. (2006). The role of identity and work-family support in work-family enrichment and its work-related consequences. *Journal of Vocational Behaviour, 69*, 445-461. Retrieved from http://www.sciencedirect.com/science/article/pii/S0001879106000807

Weber, G. J. (1999). The experiential meaning of well-being for employed mothers. *Western Journal of Nursing Research, 21*(6), 785−796. doi: 10.1177/019394599902100606

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

Witt, L. A., & Carlson, D. S. (2006). The work-family interface and job performance: Moderating effects of conscientiousness and perceived organisational support. *Journal of Occupational Health Psychology, 11*(4), 343-357. doi: 10.1037/1076-8998.11.4.343

Xanthopoulou, D., Bakker, A. B., Demerouti, E., & Schaufeli, W. B. (2007). The role of personal resources in the job demands-resources model. *International Journal of Stress Management, 14*, 121−141. doi:10.1037/1072-5245.14.2.121

Yoder, J. D. (2000). Women and work. In M. Biaggio, & M. Hersen. (Eds.). *Issues in psychology of women*. (pp. 71-93). NY: Kluwer/Plenum Publishers.