

The copyright of this thesis rests with the University of Cape Town. No quotation from it or information derived from it is to be published without full acknowledgement of the source. The thesis is to be used for private study or non-commercial research purposes only.



UNIVERSITY OF CAPE TOWN

**WORK-FAMILY CONFLICT AND TURNOVER INTENTION AMONGST
BLUE-COLLAR WORKERS: DOES RESILIENCE PLAY A ROLE?**

YASHFA MOHAMED-KOHLER

MHMYAS008

A dissertation submitted in partial fulfillment of the requirements for the award of the
Degree of Master of Commerce in Organisational Psychology

Faculty of Commerce
University of Cape Town
2010

COMPULSORY DECLARATION:

This paper has not been previously submitted in the whole, or in part, for the award of any degree. It is my own work. Each significant contribution to this paper has been cited and referenced.

Signature: 

Date: *16 MAY 2011*

Abstract

This study examined work-family conflict as a predictor of turnover intention, and the moderating role that resilience may have had on this relationship. Participants were blue-collar workers ($N = 136$) within the chemical-specialty industry in the Western Cape. Exploratory factor analysis illustrated the unidimensionality of work-family conflict, however there was a strong theoretical argument to treat work-family conflict as separate dimensions for further analysis. Higher levels of strain-based conflict were reported by female blue-collar workers than by male blue-collar workers. Simple regression analysis showed that strain-based conflict explained a significant proportion of the variance in turnover intention; however time-based conflict was found not to predict turnover intention in this model. The results for the moderating effect of resilience on the relationship between strain-based conflict and turnover intention were not significant. Implications for management working in blue-collar environments are discussed.

Acknowledgements

To my supervisor, Ameeta Jaga, thank you for your helpful insights and support during this research process.

Thank you to the Organisational Psychology Department of the University of Cape Town for providing the guidance and assistance needed throughout the year.

Lastly, thank you to the participating organisation for granting permission to complete the study, and to their employees who completed the questionnaires.

Table of Contents

Abstract.....	i
Acknowledgements.....	ii
List of Tables.....	v
Chapter 1: Introduction.....	1
Aims of Study and Contributions to Research.....	3
Structure of the Dissertation.....	4
Chapter 2: Literature Review.....	5
Literature Search Procedure.....	5
Theoretical Framework.....	5
Work-family Conflict.....	6
Gender and Work-family Conflict.....	9
Work-family Conflict and Blue-Collar Workers.....	10
Turnover Intention.....	11
Resilience.....	15
Research Objectives and Propositions.....	16
Contributions to Research.....	17
Chapter 3: Method.....	18
Research Design.....	18
Participants.....	19
Procedure.....	20
Measures.....	22
Data Analysis Techniques.....	24

Chapter 4: Results	25
Factor Analysis	25
Reliability Analysis	28
Descriptive Statistics	29
Correlation Analysis	30
T-test Analysis	30
Regression Analysis	31
Final Notes	33
Chapter 5: Discussion	34
The Dimensionality of Work-family Conflict	34
Work-family Conflict and Turnover Intention	35
Gender	38
Resilience	40
Contributions	40
Limitations and Future Recommendations	41
Management Implications	43
Conclusion	46
References	47-59
Questionnaire	60-61

List of Tables

Table 1: <i>Studies Reflecting the Relationship between Work-family Conflict and Turnover Intention</i>	13
Table 2: <i>Work-family Conflict Scale</i>	26
Table 3: <i>Turnover Intention Scale</i>	27
Table 4: <i>Resilience Scale</i>	28
Table 5: <i>Mean, Standard Deviation and Correlation Analysis for Indicators</i>	29
Table 6: <i>Descriptive Statistics for Summary Scales</i>	29
Table 7: <i>Regression for all Independent Variables</i>	32
Table 8: <i>The Interaction Effect of Strain-based Conflict and Resilience</i>	33

Chapter 1: Introduction

Changes in the composition of the worker profile have increased the complexity of the work-family interface. Traditionally, women were the homemakers and men the breadwinners. A contemporary view has emerged where female participation in the work environment is viewed as acceptable and possibly even the norm, resulting in a need for men to assume greater family responsibilities. In taking on both work and household roles, men and women may experience increased stress as a result of the multiple role demands. For example, stressors within the workplace may leave individuals with less time and energy for family obligations.

Economic factors could potentially contribute to further conflict experienced by individuals in managing the work-family relationship. Challenging economic climates, such as recessionary, retrenchment and company closure environments, may limit the wage earners' ability to provide financial support for their families, therefore heightening stress levels of the entire family (Joplin, Shaffer, Francesco, & Lau, 2003). More specifically, job loss often increases financial constraints and marital conflict, contributing to higher overall family stress (Kalil, Ziol-Guest, & Epstein, 2010). Workers who are able to retain their jobs are not exempt from the impact of work-related stress on the family. This is because employers generally expect higher performance and longer working hours from these employees in order to maintain productivity, profit margins and company growth. These demands place high levels of work pressures on employees, and may therefore have a negative impact on family life (Hyman & Summers, 2004). Another economic factor contextualising work-family conflict relates to the inclusion of developing countries in the global economy. This is because the globalisation of the marketplace has increased the prominence of the work domain in traditional societies, giving rise to complex work-life patterns such as work-family conflict (Wang, Lawler, & Shi, 2010).

In South Africa, the work-family context has been particularly influenced by gender and economic factors. The birth of a non-sexist democracy in 1994 has increased the number of women in the workplace, but it may have also left many mothers conflicted between work and family roles (Rikert & Taute, 2009). The countless men who are underskilled, uneducated and earn low incomes, are often susceptible to feelings of failure at being unable to be the primary source of income in the household, and may therefore distance themselves physically or emotionally from their families (Ramphele, 2002). The country also faces high levels of unemployment that causes employees to work excessively in response to their job insecurities (de Klerk & Mostert, 2010), potentially impacting on family life.

There is a paucity of research on the work-family interface in South Africa, particularly among blue-collar workers. Studies on this topic have focused on professions such as educators (Wentzel, Buys, & Mostert, 2009), call centre workers (Potgieter & Bernard, 2010) and entrepreneurs (Schindehutte, Morris, & Brennan, 2003). However, little literature on the work-family interface has examined the work-family conflict experienced by blue-collar workers. In comparison to white-collar workers, blue-collar workers generally receive a lower income and may be more likely to have stereotypical gender beliefs (Grandey, Cordeiro, & Michael, 2007), thereby possibly creating tension between the work and family domain. In addition, flexible work practices are less evident in blue-collar work (Major, Klein, & Ehrhart, 2002), placing further constraints on such workers to manage their multiple role demands.

Individuals may consider leaving the organisation should work-family conflict become too overwhelming for them (Greenhaus, Collins, Singh, & Parasuraman, 1997), either to find alternative employment or to pursue non-work related activities. Although action is not necessarily taken to leave the work place, even thinking about leaving the organisation may promote distress, or hamper work performance. Should the individual eventually decide to leave, the organisation could be faced with financial consequences. These costs are generally higher in unionised environments, and have been to the

investment in recruitment and training (Dale-Olsen, 2006). The loss of valued skills and experience may further compromise organisational effectiveness.

As a growing number of organisations view their workers as critical to the success of their business, organisations should be aware of the factors influencing their intention to leave. Intrinsic factors such as resilience may influence an individual's ability to manage the challenges that they may face, thereby reducing negative outcomes. Resilience represents an individual's ability to bounce back from difficulties and conflict (Luthans, 2002). This positive view suggests that individuals are not helpless during adversity and have the ability to use their strengths to overcome their difficulties.

According to Luthans, van Wyk, and Walumbwa (2004), there have been complex cultural and economic changes in post-apartheid South Africa. They attribute the increase in cultural complexity to the anti-discriminatory laws and affirmative action policies that have diversified the racial and religious composition of the workforce. The removal of sanctions has led to an increased exposure of organisations to international competition, contributing to substantial changes in the economy. The potential challenges resulting from these and earlier mentioned complexities, is what increases the relevance of the study of resilience in the South African workplace. Since resilience may be viewed as a type of coping and adapting mechanism, it is likely to influence the extent to which work-family conflict impacts turnover intention.

Aims of Study and Contributions to Research

The purpose of this study is to examine the relationship between work-family conflict and turnover intention, and the extent to which resilience moderates this relationship for blue-collar workers in South Africa. The majority of work-family literature has focused on white collar samples leaving a gap in our understanding of this interface in the blue-collar context. This study aims to contribute to the body of knowledge in this area. The findings of this study should contribute to an improved understanding of the impact of work-family conflict on an individual's intention to leave the workplace. Due to the stressful

environments experienced by many organisations, research into the role of resilience may have important positive significance for employees and employers (Luthans, 2002). Therefore, research into the role of resilience would provide useful insights for organisations in dealing with challenging circumstances such as the influence of work-family conflict on turnover intention (Dutton & Glynn, 2008).

Structure of the Dissertation

Chapter 1 presents an introduction to the research topic and the broader context which encapsulates it. This chapter provides the aims of the study and outlines the structure of the dissertation. Chapter Two reviews the literature on work-family conflict, turnover intention and resilience. The method used to investigate the research propositions is explained in Chapter Three. This chapter describes the research design, participants, procedure, measures and data analysis techniques used. Chapter Four presents the results based on the statistical data analysis. Finally, Chapter Five discusses the results of the study in relation to broader research.

Chapter 2: Literature Review

This chapter initially describes the search procedure used for the literature review. The main theoretical framework in which the study is rooted is then outlined and explained. Work-family is presented as the main construct in the review. Turnover intention as an outcome of work-family conflict is then explained, followed by the moderating role of resilience.

Literature Search Procedure

The literature search procedure entailed the use of a range of electronic database search engines, particularly Ebscohost and Google Scholar. Search terms used for work-family conflict were 'work-family conflict', 'work-family spillover', and 'work-interference with family'. Search terms used for turnover intention included 'turnover intention', 'intention to quit', and 'intention to leave'. 'Resilience', 'hardiness' and 'cope', were the search terms used to search for resilience.

Theoretical Framework

Role theory has predominantly been used to explain the work-family interface. Two key perspectives have been grounded in role theory. A negative conflict perspective explained by scarcity theory, suggests that engaging in multiple roles may result in dissatisfaction and distress. An alternative positive perspective, explained by role accumulation theory suggests that engaging in multiple roles can be beneficial. This study focuses on the conflict perspective.

Scarcity theory.

The theoretical framework underpinning the conflict perspective is scarcity theory. The basic premise of scarcity theory is that individuals have limited energy, and as their numbers of roles increase, they have less time and energy to fulfill their obligations

(Barnett & Baruch, 1985). This may result in role demands being only partially fulfilled, resulting in stress and dissatisfaction (Goode, 1960). When individuals are unsuccessful in fulfilling their multiple role obligations, role strain may result. Role strain is described as the difficulty experienced when fulfilling the demands within a role (Goode, 1960). Goode (1960) identified three sources of role strain. These are: (1) when individuals experience strain from conflicting obligations, (2) when there are inconsistent activities within those role obligations, and (3) when there is a clash in the timing and location of different role demands. Therefore, when individuals have more than one role, such as work and family, conflict between those roles may arise. Work-family conflict is one construct emerging from scarcity theory. Other similar constructs have been termed work-family interference (Greenhaus & Beutell) and negative spillover (Bartolome & Evans, 1980).

Work-family Conflict

Work-family conflict is defined as a form of inter-role conflict where pressures arising from the work and family domain are incompatible (Greenhaus & Beutell, 1985; Kahn, Wolfe, Quinn, Snoek, & Rosenthal, 1964). This implies that the pressures of work and family roles do not accommodate each other. Greenhaus and Beutell (1985) proposed that work-family conflict is multidimensional comprising of three dimensions, namely time-based, strain-based and behaviour-based conflict.

Time-based conflict.

Time-based conflict refers to the time spent in one role which impedes the time spent in another role (Greenhaus & Beutell, 1985). A meta-analysis by Steiber (2009) indicated that time-based demands are generally more strongly associated with time-based conflict than other predictors. For example, long working hours (Major et al., 2002) have been positively associated with time-based conflict. However, a longitudinal study by Britt and Dawson (2005) found that working hours was only a concurrent predictor of work-family conflict. Therefore, a lapse in time may weaken the effects of long working hours on an

individual's complete experience of work-family conflict. Overtime work has also been positively associated with work-family conflict (Jansen, Kant, Kristensen, & Nijhuis, 2003). The effects of overtime work may be particularly significant for individuals who perceive that overtime work has gone unnoticed (Balmforth & Gardner, 2006). Furthermore, a lack of flexibility in structured work hours may lead to additional time-related factors that contribute to work-family conflict. A study by Hughes and Parkes (2007) showed that time control moderated the relationship between the amount of hours worked and work-family conflict. Using a different perspective on time, Cardenas, Major, and Bernas (2004) purport that individuals who are mentally preoccupied with thoughts of work, despite being with their families, also experience time-based conflict. From the above review, it is evident that a number of studies have found that time-related factors are salient in the study of work-family conflict (Michel, Jacqueline, Mitchelson, & Cullen, 2010).

Strain-based conflict.

Strain-based conflict occurs when strain, often in the form of exhaustion, arises in one role making it challenging for the individual to fulfill the requirements of his/her other role (Greenhaus & Beutell, 1985). For example, an individual may overexert him/herself in order to meet work requirements, and this may result in him/her going home feeling tired and irritable. The actual sources of strain in the work-home interface may take various forms such as role overload and role ambiguity. Role overload occurs when individuals are unable to cope with the amount of work that they are responsible for in a particular role (Higgins, Duxbury, & Irving, 1992). However, role ambiguity occurs when an individual is uncertain about the outcomes of his/her behaviour within a role (Kahn et al., 1964), possibly impacting their stress levels. Therefore an individual who is uncertain of the success of his/her work performance may experience role ambiguity. Voydanoff (2004) provides a contrasting view on strain-based conflict. She proposes that the process through which strain-based conflict occurs is related to the way in which strain is psychologically experienced by the individual. For example, individuals who

experience strain in the workplace, have a triggered psychological response which is then translated into attitudes and actions that may hinder performance in the home. Therefore, since individuals differ in how they psychologically process strain in the workplace, it is possible that they may differ in the way that they transfer their strain to the home.

Behaviour-based conflict.

The third form of work-family conflict identified by Greenhaus and Beutell (1985) is behaviour-based conflict. This occurs when behaviours expected in one role, are unsuited for the behaviours expected within the other role. For example, an individual with a work role that requires firm and objective behaviours, may have difficulty adapting to the expectation of being a nurturing parent on returning to the family (Greenhaus & Beutell, 1985). Behaviour-based conflict has been the least studied dimension of work-family conflict when compared to time-based conflict and strain-based conflict (Chen, Powell, & Greenhaus, 2009). Where it has been studied, results have yielded little empirical evidence for it (Parasuraman, Greenhaus, & Granrose, 1992). Kelloway, Gottlieb, and Barham (1999) argued that this may be a result of behaviour-based conflict being difficult to operationalise. For these reasons behaviour-based conflict will not be included in this study.

Work-family conflict has generally been viewed as a bi-directional construct (Greenhaus & Beutell, 1985; Gutek, Searle, & Klepa, 1991). The direction of work-to-family conflict has however been more frequently studied than family-to-work conflict. In cases where both directions have been studied, it has been found that work-to-family conflict is more commonly experienced than family-to-work conflict (Frone, Russell, & Cooper, 1992 b; Kinnunen & Mauno, 1998). Clark (2000) argued that this may be because the boundaries of the family domain are easier to cross than those of work (Clarke, 2000). Another reason why more studies have focused on work-to-family conflict is because the negative effects experienced by the individual are greater than when family-to-work conflict is experienced (Frone, 2003). Since the determinants of work-to-family conflict fall mostly

within the work domain, work-related factors are normally studied as predictors of the construct (Frone, Yardley, & Morkel, 1997; Greenhaus & Beutell, 1985).

Gender and Work-family Conflict

Studies on the role of gender in work-family conflict are plenteous, and research examining gender influences on work-family conflict has produced varied findings (Ahmad & Omar, 2008; Barnett & Hyde, 2001; Donald & Linington, 2008; Kaur, 2008; Mannon, Minnotte, & Brower, 2007; Shelton, 2006). Some studies have found no differences between males and females in their reported levels of work-family conflict (Eagle, Miles, & Icenogle 1997; Voydanoff, 1988). Others have found that certain variables may influence differences in men and women's experiences of work-family conflict. Gronlund (2007) for example, found that women who have more control over their work do not experience more work-family conflict than men, even when their jobs are highly demanding.

On the contrary, the view that women experience more work-family conflict than men has been supported. Several such studies have found a positive correlation between females and work-family conflict (McElwain, Korabik, & Rosin, 2005; Voydanoff, 2004). Gutek et al. (1991) found that females reported higher levels of work-family conflict than men, despite spending the same amount of time at work. In this instance the experience of time demands may be more salient for females than for men. Other studies, such as those conducted by Cinamon (2006) and by Livingston, Burley, and Springer (1996), found that females are more likely to anticipate work-family conflict than men. These studies provide support for the argument that gender may influence an individual's experience of work-family conflict. In summary, it is believed that women are more likely to experience work-family conflict than men.

Work-family Conflict and Blue-collar Work

Most work-family conflict studies have focused on white-collar workers (Frone, Russell, & Cooper, 1992a; Korabic, Lero, & Ayman, 2003). Yet little is known about blue-collar workers' experience of the work family interface, and the generalisability of previous studies may be questionable (Burke & Greenglass, 1987). Studies attribute the weaker role of work-family conflict for blue-collar workers to several factors. According to Maume and Houston (2001), the productivity output of blue-collar workers is easier to measure than for white-collar workers. White-collar workers often then attempt to prove their performance by the number of hours worked (Ouchi, 1977). However, studies on blue-collar samples have found significant results when examining work-family conflict with outcomes of family distress (Frone et al., 1992a) and sickness-related absenteeism (Väänänen et al., 2008). This implies that work-family conflict also results in negative outcomes for blue-collar workers, in both their work and family roles. The limited literature on work-family conflict experienced by blue-collar workers necessitates further attention.

Antecedents of work-family conflict.

Although this study does not focus on the antecedents of work-family conflict, a brief review of the causes of work-family conflict for blue-collar workers should provide a greater awareness of the factors influencing the construct in this context.

Numerous time-related factors appear to influence work-family conflict amongst blue-collar workers. These factors include shift-work, overtime-work and commuting time to work (Jansen et al., 2003), long working hours, working on non-working days and having to work at short notice (Steiber, 1999). The challenges of shift work manifests when job schedules do not conform to the standard hours of 8 a.m. to 5 p.m., or when a work week does not conform to the standard days of Monday to Friday (Grosswald, 2003). Shift work is most often carried out by blue-collar workers (Deutsch, 1999). Therefore blue-collar workers may be more likely to experience time-based conflict due to shift work.

Antecedents of strain-based work-family conflict include having several work demands, difficulties with co-workers or supervisors, as well as working in physically demanding jobs (Jansen et al., 2003). When an individual has many work demands, they may experience stress and frustration at not being able to fulfill all the demands expected of them. These stressors may be transferred into the individual's home role. Work-family conflict may further be perpetuated by individuals not being able to fulfill their work obligations due to strained working relationships with colleagues and supervisors. Furthermore, physical demands at work may leave the individual with little energy to fulfill family role activities, thus creating work-family conflict. The negative impact on the individual's family life may cause them to reevaluate their work-family relationship. In an effort to reduce the conflict experienced, the individual may consider leaving their work role.

Outcomes of work-family conflict.

Studies have shown that work-family conflict leads to negative outcomes such as decreased job satisfaction (Anderson, Coffey, & Byerly, 2002; Cardenas et al., 2004), decreased work performance (Netemeyer, Maxham, & Pullig, 2005; Shelton, 2006), reduced organisational commitment (Akintayo, 2010), and increased turnover intention. Turnover intention has been found to be the strongest cognitive determinant of turnover (Lee & Mowday, 1987; Michaels & Spector, 1982; O' Reilly & Caldwell, 1981), and therefore a need to focus on this construct exists. Thus for the purposes of this study, only literature on turnover intention as an outcome of work-family conflict will be reviewed.

Turnover Intention

Turnover intention is defined as the conscious and purposeful aim of an employee's desire to leave the workplace (Tett & Meyer, 1993). The process of turnover intention involves individuals reflecting on the sources of their stress, and then considering how the possibility of leaving their work could lessen their stress (Cardenas, Major et al.,

2004). According to Rosin and Korabic (1995), this source of stress is mostly related to work influences.

Individuals who experience work-family conflict may feel that their time and energy resources are placed under pressure. Hobfoll (1989) argued that individuals endeavor to maintain and protect their resources, and when they feel that their resources are placed at risk, they feel threatened. This perspective on resources is rooted in conservation of resources theory, which suggests that resources can take the form of objects, circumstances, personal characteristics, and energies that act as a means to attain further resources, also viewed by Hobfoll. In an attempt to protect the resources required to fulfill family demands, individuals experiencing work-family conflict may consider leaving the organisation (Grandey & Cropanzano, 1999). This view has been supported in various studies, and a review of the literature reflecting turnover intention as an outcome of work-family conflict is presented in Table 1.

According to Allen et al.'s (2009) study on blue-collar workers, individuals who do not perceive that their current work situation will improve in the future are more likely to leave the workplace. Before they intend to leave the workplace, they may however first want to search for alternatives (Mobley, 1977), consider changing positions (Arnold & Feldman, 1982), or they may simply intend to leave the organisation. The process of turnover intention involves individuals reflecting on the source of their stress, and then considering how the possibility of leaving their work could lessen their stress (Cardenas et al., 2004). Therefore turnover intention is likely to be a result of work-related stressors. Since the determinants of work-family conflict lie mostly in the work domain (Frone et al., 1997; Greenhaus & Beutell, 1985), it is therefore plausible that work-family conflict may lead to turnover intention (Greenhaus, Parasuraman, & Collins, 2001).

Table 1*Studies Reflecting the Relationship between Work-family Conflict and Turnover.*

Author	Sample type	Findings
Anderson et al. (2002)	Combination	Significant
Balmforth & Gardner (2006)	White-collar	Not significant
Boyar, Maertz, Pearson, & Keough (2003)	Unknown	Significant
DiTomaso, Post, Farris, & Cordero, (2003)	White-collar	Not significant
Forma (2009)	Unknown	Significant
Good, Page, & Young (1996).	White-collar	Significant
Greenhaus et al. (1997)	White-collar	Significant
Greehaus et al. (2001)	White-collar	Significant. Career involvement moderates the relationship.
Haar (2004)	Combination	Significant
Karatepe & Uladag (2008)	White-collar	Significant
Porter & Ayman (2010)	White-collar	Significant. Work flexibility moderates the relationship.
Rode, Rehg, Near, & Underhill (2007)	White-collar	Significant. Job and life satisfaction mediates the relationship.
Shaffer, Harrison, Gilley, & Luk (2001)	White-collar	Significant. Affective commitment moderates the relationship.
Spector et al. (2007)	White-collar	Significant. Culture moderates the relationship.
Wang, Lawler, Walumbwa, & Shi (2004)	White-collar	Significant. Culture moderates the relationship.

Furthermore, it is evident from Table 1 that a number of variables moderate the relationship between work-family conflict and turnover intention. Lawler et al. (2004) found that the relationship between work-family conflict and turnover intention was moderated by culture. They found that the relationship between work-family conflict and turnover intention was stronger amongst individuals who rated idiocentrism highly. Similarly, cross-country research conducted by Spector et al. (2007) found that the relationship between work-family conflict and turnover intention was stronger amongst Anglo countries that were considered individualistic. These studies show that factors that do not directly concern work and family, may moderate the relationship between work-family conflict and turnover-intention.

Despite the many moderators of the relationship between work-family conflict and turnover intention, work related moderators still have a great bearing on work-family conflict. Porter and Ayman (2010) found that an increase in work flexibility weakened the relationship between work-family conflict and turnover intention. Similarly, an increase in job satisfaction has been found to weaken the relationship between work-family conflict and turnover intention (Rode, Rehg, Near, & Underhil, 2007). Greenhaus et al. (2001) found that the relationship between work-family conflict and turnover intention was weaker in individuals with less career involvement. This may be because individuals who are less involved in their careers may not be as exposed to work stressors.

Despite threats to time and energy resources, individuals may be able to use personal characteristics to cope with work stressors and thus such personal resources may act as moderator variables. According to conservation of resources theory, individuals are able to use personal characteristics or resources to prevent threats to other resources (such as time or energy) (Hobfoll, 1989). Therefore the ability to withstand the many tribulations in the workplace may be attributed to the personal characteristics of an individual. One such personal resource is resilience, which will in turn be discussed.

Resilience

Resilience has often been conceptualised as a stable trait (Cohn, Fredrickson, Brown, Mikels, & Conway, 2009), which individuals inherently either possess or lack. According to this trait perspective, resilience reflects an individual's resourcefulness, strength of character and their adaptability to respond to changing situations (Block & Block, 1980).

Recently opinions have shifted and researchers have started to view resilience as more of a dynamic construct where resilience can be learnt and developed (Masten, 2001). Therefore resilience may be viewed as a state, rather than a trait, which means that an individual's capabilities could change over time (Luthans, 2002). This implies that resilience is not only a unique quality possessed by a select few, but that resilience can be utilised by most individuals (Masten, 2001). From this positive perspective, resilience is defined as an individual's capacity to bounce back beyond adversity, thereby improving one's position after exposure to challenges (Luthans, Youssef, & Avolio, 2007). Studies utilising this perspective, go beyond the reactive capacity of resilience referred to in traditional conceptualisations. Here individuals who show resilience do not only respond to the immediate need to overcome from adversity, but also positively adjust so that they are in a better position than before being presented by the challenge (Luthans, 2002).

In line with conservation of resources theory, resilience is seen as a resource that should be studied as a moderator within specific categories of stressors (Hobfoll, 1989). Since this theory views work-family variables as a category of study (Grandey & Cropanzano, 1999), further support is provided for the study of the influence of resilience on work-family conflict.

Bernas and Major (2000), who have also viewed resilience as a resource found that resilience was negatively related with work-family conflict. A study conducted by Avey, Hughes, Norman, and Luthans (2007), found that resilience was negatively related to turnover intention. Therefore, higher levels of resilience enabled these individuals to adjust to challenges that would normally have led to thoughts of leaving the workplace.

Even though studies were not found regarding the moderating role of resilience on the relationship between work-family conflict and turnover intention, it has been linked to the individual constructs.

Research Objective and Propositions

The aim of this study is to examine the relationship between work-family conflict and turnover intention, and the moderating role of resilience on this relationship. In addition, it examines whether women experience more time-based conflict and strain-based conflict respectively, than men in a blue-collar environment. Based on a review of the literature, the following propositions will be investigated:

Proposition 1. Work-family conflict has two dimensions, time-based conflict and strain-based conflict.

Proposition 2a. Time-based conflict explains a significant proportion of the variance in turnover intention amongst blue-collar workers.

Proposition 2b. Strain-based conflict explains a significant proportion of the variance in turnover intention amongst blue-collar workers.

Proposition 3a. Women will experience higher levels of time-based conflict than men.

Proposition 3b. Women will experience higher levels of strain-based conflict than men.

Proposition 4a. Resilience will moderate the relationship between time-based conflict and turnover intention among blue-collar workers.

Proposition 4b. Resilience will moderate the relationship between strain-based conflict and turnover intention among blue-collar workers.

Contributions to Research

The limited research on the relationship between work-family conflict and turnover intention (Shaffer et al., 2001) necessitates the need to study this relationship. Since existing research has predominantly focused on white-collar workers (Frone et al., 1992a; Korabic et al., 2003), this study will help explore the relevance of this relationship for blue-collar workers. The investigation on whether women experience higher levels of time-based conflict and strain-based conflict than men, provide further insight into the role of gender in the study of work-family conflict. There has been limited research on resilience in the workplace (Avolio, Avey, & Norman, 2007), particularly within the field of work-family conflict. This study serves to fill the gap in theoretical knowledge by specifically studying the moderating effects of resilience on the relationship between work-family conflict and turnover intention. Since no South African studies were found that combined work-family conflict, turnover intention as well as resilience, this study will make a significant contribution to the South African literature examining these constructs.

Chapter 3: Method

This study examines the relationship between work-family conflict and turnover intention, and the extent that resilience moderates this relationship. The following chapter describes the method employed for replication purposes. It comprises of five sections, namely research design, participants, procedure, measures and data analysis techniques.

Research design

This study employed a descriptive research design to guide the research process. This is because the study was intended to carry out a more accurate research investigation, and therefore took into account the reliability and validity of observations (Terre Blanch, Durrheim, & Painter, 2008). A quantitative approach was adopted to ensure that the data collected was able to be measured numerically, which then made it more acceptable to make generalisations from the sample to the population (Hair, Babin, Money, & Samouel, 2003). A cross-sectional time-dimension was used in order to study the variables, based on participants' responses at a particular point in time. This was a more practical option, as limited time was made available by the participating organisation in which data could be collected.

A survey of the sample using self-report questionnaires was used to collect data. This type of data collection method was selected so that participants completing the questionnaires would be more willing to report sensitive information (Babbie & Mouton, 2002). It was furthermore a timely manner in which data could be collected.

Participants

This study was conducted within the chemical-specialty industry at an international coatings organisation. Two of its business units, a paint manufacturer as well a paint-brush manufacturer participated. Time constraints limited this study to the Western Cape. The two units had a total blue-collar staff complement of approximately 180 workers.

One hundred and fifty four questionnaires were distributed to these workers, and one hundred and forty five participants responded, enabling a response rate of 94.16%. An acceptable response rate is 50%, and a response rate of 75% is considered very good (Babbie & Mouton, 2002). Thus the response rate achieved was particularly high. There are several possible reasons for the high response rate. Firstly, participants were informed by their managers a week in advance about the upcoming data collection, and were therefore less likely to be confused or anxious on the day. Secondly, participants were given time off from work to complete the questionnaire. Since their work expectations for that period were not likely to be compromised, they may have been more inclined to participate. Another possible reason for the high response rate was that the researcher was present at the data collection, and further emphasised the voluntary and anonymous nature of the study to participants. The researcher controlled the return of the questionnaires by providing a sealed box for participants to insert the completed questionnaires, and by physically supervising this process. . The researcher also explained the study to participants and assisted them where needed. These conditions could explain the high response rate of participants. Nine of the returned questionnaires were not used as they contained large proportions of incomplete responses.

The average age of participants ranged from 21 to 61 years old ($M = 39.61$; $SD = 9.82$). Seventy percent of the participants were male, and twenty seven percent of the participants were female. Forty nine percent of the participants were married or living with a partner. Thirty percent of the participants were single. Those who were parents made up seventy one percent of the sample. Parents had an average of 3 children. Twenty six percent of the parents' children were under the age of six years old. Thirty seven percent of participants had between 1 and 10 family dependents living with them ($M = 1.18$; $SD = 1.94$), who did not form part of the nuclear family. The average participant worked for 14 years at the organisation ($SD = 10.54$) and worked a 37 hour week ($SD = 11.37$). The commuting time of participants travelling between work and home ranged from 2 minutes to 120 minutes ($M = 49.17$; $SD = 38.76$). The education levels reported by participants consisted of degrees (2%), diplomas (6%), NQF certificates (7%),

Matriculation certificates (29%), NQF Matriculation certificates (4%), and those who had a lower education level than Matriculation-level education (32%).

Procedure

The data collection took place at a paint manufacturing unit as well as a paint brush manufacturing unit, which both formed part of a larger organisation. Approval to conduct the study was obtained from the human resources manager at the paint manufacturing unit, and the managing director at the paint brush manufacturing unit. Ethics clearance was obtained from the Commerce Faculty Research Committee at the University of Cape Town, and copies of the clearances were given to both authorisers.

A non-probability convenience sampling method was used, as the selected sample was readily available to participate in the study and could provide the type of information required (Hair et al., 2003). Time constraints necessitated this type of sampling method and once the appropriate permission and access were granted, the sample could immediately be accessed.

A pilot study was carried out at the paint manufacturing unit using a work team consisting of 11 participants. The face validity, clarity of questions, ease of comprehension, and overall experience of completing the questionnaire were evaluated. Even though confidentiality was assured by the researcher prior to distributing the questionnaires, one participant had asked whether anybody within the organisation would be able to view the completed questionnaires. They were reassured of the anonymity and confidentiality, and they proceeded to complete the questionnaire. Based on this feedback, the cover page of the questionnaire was amended by physically highlighting the text related to anonymity. The researcher also decided to place additional verbal emphasis on participants' anonymity during the actual data collection. .

One of the participants in the pilot study reported that they had an NQF level Matriculation certificate, but that they were unsure of whether to tick the 'Matric' option

or the 'NQF certificates' option. For this reason the questionnaire used for the data collection included a 'NQF level Matric' option. An additional adaptation was that the 'NQF certificates' option was changed to 'additional NQF certificates'. Despite English not being the first language of some of the participants, the level and understanding of the questions was reported to be acceptable by the pilot sample. The human resources manager at the paint manufacturing unit confirmed that English was the preferred language when completing questionnaires amongst the unit's blue-collar workers. This information was based on their past experiences, where blue-collar workers were offered questionnaires in their home language, but had chosen to answer the English questionnaires.

Although the paint brush unit did not form part of the pilot study, provisions for language preferences were made for them. Their human resources manager recommended that their questionnaires be translated into Afrikaans, as the majority of the blue-collar workers that they employed were Afrikaans speaking. It was decided that both English and Afrikaans questionnaires be available to all the participants in the study. The translation of the questionnaire was outsourced. Items were back-translated to check for equivalence. Consideration was given to the lower educational level of the blue-collar sample.

The human resources manager at the paint brush unit further indicated that there were approximately five blue-collar workers who had difficulty reading. She also mentioned that these workers expressed that they wanted to be included in the study. In order to be inclusive of potential participants and sensitive to the needs of the sample, it was decided to accommodate them. Therefore the option was given to these participants to have a colleague or the researcher assist them in completing their questionnaires. All the participants showed a preference for having a colleague individually assist them in completing the questionnaire. Once all the adjustments after the pilot study had been made, communication about the data collection proceeded.

The Human Resources Managers at both business units informed their supervisors of the study at least a week prior to the data collection, so that they could communicate this to their team members. One work group at a time completed the questionnaire to enable participants who were shift workers to be included, and to minimise disruption to work flow. The cover letter was read out to participants, and they had an opportunity to read it again and ask questions. The cover page provided the researchers name, affiliated academic institution and contact details. The aim of the study which was related to the researcher's academic requirements was included. A brief explanation of the research topic was given. Confidentiality was assured and it stated that participants could participate at their free will, and that no penalty would be held against them should they decide not to continue participating in the process. An opportunity was then given to ask any questions.

Participants were assisted with any questions before and during the completion of the questionnaire. Once completed, they were required to insert their questionnaire into a sealed box to protect anonymity. The organisation had scheduled thirty minutes for each group to complete the questionnaire; however no time limit was given to the participants. This was to ensure that they had sufficient time to complete the questionnaire. Ultimately none of the participants used the full thirty minutes, and most participants took 10 minutes to complete the questionnaire.

Measures

Three measures were used, and the main reason for selecting them was that they did not have an excessive amount of items. This was an important consideration as the blue-collar sample had a fixed work schedule. Since many blue-collar workers work on shifts, a short questionnaire would have had minimal disruption to their work flow. A 5-point Likert Scale was used for all the measures. Respondents rated the extent of their agreement ranging from 1 (strongly disagree) to 5 (strongly agree).

Work-family conflict. A six-item scale developed by Carlson, Kacmar, and Williams (2000) was used to measure work-family conflict. This measure was used because it represented the two dimensions of work-family conflict that were being investigated, namely time-based conflict and strain-based conflict. Three items measured time-based conflict, and three items measured strain-based conflict. An example of a time-based conflict item was *'My work keeps me from my family more than I would like'*. A strain based-item used was *'Due to all the pressures at work, sometimes when I come home I am too stressed to do the things I enjoy'*. The Cronbach alpha reliability reported by Carlson et al. (2000) was high ($\alpha = .870$).

Turnover intention. A five-item scale adapted by Wayne, Shore, and Liden (1997) was used to measure turnover intention. Three of the items were originally developed by Landau and Hammer (1986). One of the items was originally developed Nadler, Jenkins, Cammann, and Lawler (1975). Wayne et al. (1997) used all of these items and included an additional item which they developed. This item stated *'I think I will be working at (company name) five years from now'*. The study by Wayne et al. (1997) reported a high Cronbach alpha reliability ($\alpha = .890$).

Resilience. A six-item resilience scale developed by Smith et al. (2008) was used to measure resilience. A sample item was *'I usually come through difficult times with little trouble'*. Four samples were used in the study by Smith et al. (2008). The internal consistency they found was good, with Cronbach's alpha ranging from .80 - .91 (samples 1 to 4 = .840, .870, .800, .910, respectively).

The reported Cronbach alpha reliabilities for all three scales indicated good levels of internal consistency. This meant that these summated scales could be used again with a high possibility of scores being repeated (Hair et al., 2003), providing good motivation for using them.

Data Analysis Techniques

The data collected from participants using the described measures was coded, and then captured into Microsoft Office Excel. Statistica (version 9) was used to conduct the factor analysis. SPSS (version 18) was used for the descriptive statistics, reliability analysis, correlation analysis, and simple regression analysis. The results of these analyses will be presented in the following chapter.

Chapter 4: Results

Section one of this chapter uses a factor analysis to explore the dimensionality of the work-family conflict construct with respect to time-based conflict and strain-based conflict. Section two reports on the reliability analysis for the inter-item correlations of the time-based conflict, strain-based conflict, turnover intention, and resilience scales. Section three presents the descriptive statistics for the summary scales. Section four examines the extent of the linear relationship between the variables, using a correlation analysis. Section five uses a basic data analysis to report on the differences in results for men and women, using a comparison of means as well as a T test. Section six uses a multiple regression analysis to investigate whether the independent variables explain a significant proportion of the variance in turnover intention. The interaction effects of resilience as a potential moderator, is then presented. The chapter concludes with a summary of the findings related to the propositions.

Factor Analysis

The extent that a scale and listed items measure a construct, known as construct validity, can be determined by using factor analysis (Mouton & Marais, 1994). Exploratory factor analysis was performed on all three scales. Hair et al's. (2003) recommendations were used to determine acceptable (+/ .300), moderately important (+/ .500), and very important (+/ .700) loadings.

Work-family conflict scale.

Exploratory factor analysis was performed on the work-family conflict scale to see whether work-family conflict is made up of separate time-based and strain-based dimensions. Principal-axis factor analysis was used. Only one factor was extracted, with an eigen value greater than 1.000, and a total variance of 52%. Loadings ranged between moderately important (.590) to very important (.795). Since only one factor was extracted, Proposition 1 which stated that work-family conflict has separate time and

strain dimensions was therefore not supported. Despite the unidimensionality of work-family conflict, it was still considered important to investigate the individual effects of time-based conflict and strain-based conflict. Research has shown that time-based conflict and strain-based conflict have unique functions in the experience of work-family conflict (Haar, 2004). This provided a good motivation to study time-based conflict and strain-based conflict separately, which is presented in later analyses.

Table 2

Work-family Conflict Scale

	WFC
WFC1	0.590
WFC2	0.695
WFC3	0.765
WFC4	0.768
WFC5	0.795
WFC6	0.696
Eigenvalue	3.121
Individual total variance (percent)	52.02%
Cumulative total variance (percent)	52.02%

Notes. *N* = 136 after casewise deletion of missing data; Principal factor analysis; Each items' significance loadings presented in bold face; WFC = work-family conflict.

Turnover intention scale.

Principal-axis extraction revealed one factor with an eigen value greater than 1.000 accounting for 43% of the variance. Most of the loadings for the items ranged between moderately important (.594) to very important (.801). Item five "I think I will be working at this company five years from now" was a concern as it loaded below the level considered acceptable (.194). It was decided to retain the item to see what results would be presented for it at a later stage during the reliability analysis.

Table 3*Turnover Intention Scale*

	TOI
TOI1	0.736
TOI2	0.594
TOI3	0.801
TOI4	0.755
TOI5 RS	0.194
Eigenvalue	2.145
Individual variance (percent)	42.90%
Cumulative total variance (percent)	42.90%

Notes. *N* = 136 after casewise deletion of missing data; Principal factor analysis; Each items' significance loadings are presented in bold face; TOI = turnover intention; RS = reverse scored.

Resilience scale.

Principal-axis extraction with varimax normalised rotation yielded two items with eigen values greater than 1.000, accounting for 25.2% and 21.5% of the total variance respectively. The positively worded items loaded above the level considered acceptable on Factor 1. The loadings for these items ranged between moderately important (.615) and very important (.790). The negatively worded items loaded higher than the level considered acceptable on Factor 2. The loadings for these items ranged between moderately important (.575) and very important (.739). It was possible that the participants answered the positively items in the same way as those of the negatively worded items. For this reason it was decided to only use the positively worded items for further analysis. A minimum of three items is considered acceptable for summated scales (Hair et al., 2003), therefore further analysis could still have been conducted on the retained items. According to Babbie and Mouton (2002) negatively worded items are more likely to be misinterpreted by participants. For this reason it was decided to only use Factor 1 which represented the positively worded items, in further analysis.

Table 4*Resilience Scale*

	RES FACTOR 1	RES FACTOR 2
RES1 RS	0.014	0.575
RES2	0.631	-0.132
RES3 RS	-0.051	0.739
RES4	0.790	-0.088
RES5 RS	-0.032	0.686
RES6	0.615	0.151
Eigenvalues	1.511	1.288
Individual total variance (percent)	25.19%	21.47%
Cumulative total variance (percent)	25.19%	46.66%

Notes. *N* = 136 after casewise deletion of missing data; Principal factor analysis with varimax normalised data; Each items' significance loadings are presented in bold face; RES = resilience; RS = reverse scored.

Reliability Analysis

A reliability analysis was conducted on the summated scales, and evaluated using Cronbach's coefficient alpha (α). Researchers generally consider an alpha value of .700 as a minimum for indicating an acceptable level of reliability, and values of .800 to < .900 are considered very good (Hair, 2003). This criterion was used for the reliability analysis. The Cronbach's coefficient alpha for the time-based conflict subscale ($\alpha = .810$), and the strain-based subscale ($\alpha = .840$) surpassed the level of acceptance. The resilience scale met the conventional level of acceptance ($\alpha = .700$). The turnover intention scale presented an acceptable level of internal consistency ($\alpha = .730$). However it was decided to remove item 5 which presented earlier concerns in the factor analysis. This was because its removal allowed the reliability to increase the coefficient alpha (.810).

Table 5*Mean, Standard Deviation, and Correlation Analysis for Indicators*

<i>Variable</i>	<i>M</i>	<i>SD</i>	<i>TBC</i>	<i>SBC</i>	<i>TOI</i>	<i>RES</i>
<i>TBC</i>	2.436	.976	-			
<i>SBC</i>	2.705	1.044	.604**	-		
<i>TOI</i>	2.420	1.021	.253**	.464**	-	
<i>RES</i>	3.290	.812	-.028	-.073	-.017	-

Note. *N* = 136 after casewise deletion of missing data; * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$; Cronbach's Alpha reflected on the diagonal; *M* = mean; *SD* = standard deviation; *TBC* = time-based conflict; *SBC* = strain-based conflict; *TOI* = turnover intention; *RES* = resilience.

Descriptive Statistics

The distribution of the scores were analysed by conducting descriptive statistics on the summary scales. Table 6 reflects the means (*M*) and standard deviation (*SD*) for the scales. A mean of 2.436 reflected almost a medium level of time-based conflict (*SD* = .976). Reported levels of strain-based conflict were higher with a mean of 2.705 (*SD* = 1.044). The mean score for turnover intention was lower than the two work-family conflict subscales (*M* = 2.420; *SD* = 1.021). Resilience presented the highest mean scores for the summary variables (*M* = 3.290; *SD* = .812).

Table 6*Descriptive Statistics for Summary Scales*

<i>Variables</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Skewness</i>	<i>Kurtosis</i>
Time-based conflict	136	2.436	.976	.290	-.779
Strain-based conflict	136	2.705	1.044	.315	-.807
Turnover intention	136	2.420	1.021	.429	-.375
Resilience	136	3.290	.812	-.400	-.071

Note. *N* = Number of respondents after casewise deletion of missing data; *M* = Mean; *SD* = standard deviation.

Correlation Analysis

Pearson Product Moment correlation analysis was used to measure the strength of the relationship between the variables. Casewise deletion of missing data was employed to avoid validity being compromised (Hair et al., 2003). The strength of the correlation between variables was evaluated to see whether they were weak ($r = -.10$ to $-.29$), moderate ($r = -.30$ to $-.49$) or strong ($r = -.50$ to -1.0) (Cohen, 1988). Table 5 represents a correlation matrix with significance levels ($*p < .05$; $**p < .01$; $***p < .001$).

Results showed that time-based conflict had a positive association with turnover intention ($r = .253$; $p < 0.01$). Strain-based conflict had a moderately positive relation with turnover intention ($r = .464$; $p < 0.01$). Since time-based conflict and strain-based conflict were positively associated with turnover intention, it was deemed acceptable to continue analyses with both dimensions of work-family conflict.

T-test Analysis

T-test analyses were conducted to test the proposition that women experienced more time-based conflict than men (proposition 3a), and that women experienced more strain-based conflict than men (proposition 3b). A comparison of group means showed that the mean level of time-based conflict for men was only slightly lower at 2.395 ($SD = 1.001$), compared to 2.464 for woman ($SD = .929$). A T-test was then used to determine whether the mean levels of time-based conflict were significantly different for men and women. Results indicated that there was no significant difference in the time-based conflict experienced by men and woman ($t = -.364$; $p = .716$). Therefore proposition 3a was not supported.

An analysis of the group means of strain-based conflict for men was lower ($M = 2.530$; $SD = .966$), than that of women in the sample ($M = 3.131$; $SD = 1.162$). T-test results

indicated that strain-based conflict was significantly higher for women than for men ($t = -3.028; p = < 0.05$). Proposition 3b was therefore supported.

Regression Analysis

Multiple regression analysis was performed on the independent variables. They consisted of time-based conflict, strain-based conflict, resilience, age, tenure, weekly working hours, and commuting time.

All these variables were entered into one regression model to see if any of them explained a significant proportion of variance in turnover intention. The overall model was significant and showed that all the independent variables accounted for a total variance of 23% ($p = < .001$) in explaining turnover intention.

Results indicated that time-based conflict did not explain a significant proportion of variance in turnover intention ($Beta = .052, p = ns$). Therefore proposition 2a was not supported. Since time-based conflict could not explain a significant proportion of variance in turnover intention, it was decided to not include it in further analysis.

However, strain-based conflict explained a significant proportion of the variance in turnover intention ($Beta = .428, p = < .001$). Therefore proposition 2b was supported.

Checks were conducted for multicollinearity. None of the independent variables showed a correlation of more than .7000, as this would have had a negative impact on the moderation effect of resilience on the relationship between strain-based conflict and turnover intention. The maximum Variance Intrinsic Factor (VIF) which is considered acceptable is 5.000; anything higher would have indicated that the variance of the regression coefficients had been overinflated (Hair, 2003). The highest VIF for the independent variables was 2.812, indicating that the variances in the regression coefficients were not higher than what they should have been. Tolerance levels were also checked to see whether the amount of variance in the independent variables was not

explained by other independent variables. Tolerance levels lower than .100 tends to indicate problems with multicollinearity (Hair et al., 2003). All tolerance levels for the independent variables were above .100; therefore multicollinearity was not a concern for the regression analysis in testing the moderation effect of resilience.

Table 7

Regression for all Independent Variables

Model	Unstandardised Coefficients		Standardised Coefficients			Collinearity Statistics	
	B	Std. Error	Beta	t	Sig.	Tol.	VIF
1 (Constant)	1.378	.725		1.900	.060		
Resilience	.085	.112	.065	.760	.449	.962	1.039
Time-based conflict	.054	.108	.052	.499	.619	.651	1.537
Strain-based conflict	.402	.099	.428	4.051	.000	.640	1.563
Age	-.017	.014	-.170	-1.213	.228	.363	2.757
Tenure	.010	.013	.107	.753	.453	.356	2.812
Hours worked	.003	.008	.037	.434	.665	.961	1.040
Commute time	.000	.002	-.017	-.193	.848	.936	1.069

R = .479 R² = .230; Adjusted R² = .180; F = (4.604) p = .000

Notes: N = 116; Dependent variable = Turnover intention

A second regression model was used, adding the interaction effect of strain-based conflict and resilience (Refer table 8). The increase in total variance due to the interaction was not significant (R² = .019, p = .075). Resilience did not moderate the relationship between strain-based conflict and turnover intention; therefore hypothesis 3b was not supported.

Table 8*The Interaction Effect of Strain-based Conflict and Resilience*

	B	SE	T	P
Constant	-.220	.869	-.253	.801
Strain-based conflict	.960	.284	3.386	.001
Resilience	.445	.255	1.746	.832
Interaction	-.151	.084	-1.792	.075
<hr/>				
R ² = .235 Change in R ² = .019 F= 3.212 p = .075				

Note: N = 116 (after casewise deletion of missing data); Dependent variable = turnover intention

Final Notes

Both time-based conflict and strain-based conflict were positively related to turnover intention. However, time-based conflict did not present further significant results in the regression model. Strain-based conflict showed a significant proportion of variance in turnover intention, and women were found to have higher levels of strain-based conflict than men. Resilience did not moderate the relationship between strain-based conflict and turnover intention.

Chapter 5: Discussion

The aim of this study was to gain more understanding into the experience of work-family conflict among blue collar workers. The dimensionality of the construct of work-family conflict was first examined. Secondly the relationship between time-based conflict and turnover intention, as well as the relationship between strain-based conflict and turnover intention, was examined. Thirdly, analyses were conducted to test whether women experienced more strain-based conflict than men. Finally the proposed moderating effect of resilience on the relationship between strain-based conflict and turnover intention was examined. The following chapter discusses the results of these analyses, the study's contributions to research, management implications, limitations and recommendations for future research.

The Dimensionality of Work-family Conflict

Exploratory factor analysis indicated that work-family conflict was a unidimensional construct. Time-based conflict and strain-based conflict were found not to be distinct dimensions. Therefore, proposition 1 was not supported. This may have been because time-based conflict and strain-based conflict are similar in that they are both forms of role strain. These findings are consistent with Martins, Eddleston, and Veiga's (2002) exploratory factor analysis on work-family conflict. They similarly found that time-based conflict and strain-based conflict loaded onto a single factor.

However a vast number of empirical studies have reported work-family conflict as comprising of distinct dimensions. It should also be remembered that even though factor analysis identifies patterns among variables, it does not necessarily have a bearing on the meaning of the variables (Babbie & Mouton, 2002). Therefore based on theoretical evidence, and in order to test the remaining propositions, further analyses were conducted on the two dimensions, time-based conflict and strain-based conflict, as distinct elements of work-family conflict.

Work-family Conflict and Turnover Intention

Work-family conflict was found to have a moderately positive association with turnover intention. Therefore an increase in work-family conflict was related to an increase in respondents' turnover intention. The positive association found between work-family conflict and turnover intention is consistent with other studies (Anderson et al., 2002; Boyar et al., 2003; Greenhaus et al., 2001). The following sections discuss how the two dimensions of work-family conflict were experienced differently by the sample of blue-collar workers.

Time-based conflict and turnover intention.

Pearson product moment correlation analysis showed that time-based conflict had a weak positive association with turnover intention. Therefore an increase in time-based conflict was weakly related to an increase in turnover intention.

Multiple regression analysis was conducted to test whether time-based conflict could explain a significant proportion of the variance in turnover intention. Results indicated that time-based conflict was not a significant predictor of turnover intention. Therefore hypothesis 2a was not supported. There are several possible reasons for these findings:

Blue-collar workers generally complete their work on-site or on duty, and tend to get paid overtime for extra work done (Grandey et al., 2007). Since they are less likely to be working outside their contracted working hours, they may not be as exposed to time demands relating to long working hours. Many blue-collar workers often use public transport, which often operates within fixed times for travel routes between work and home. Shift workers are sometimes provided with transport assistance from their organisations when working irregular hours such as night shift, since public transport is generally not available at that time of the night. Even blue-collar workers who do not work on a shift basis, may have difficulty leaving work later than usual, as local public

transport operating times are sometimes unpredictable. It is therefore possible that the participating organisation did not expect these workers to endure longer working hours.

Frone et al. (1992a) suggested that blue-collar workers attach immense psychological importance to their work. This could partially be attributed to their limited resources. According to Steiber (2009), higher income earning individuals experience more time-based conflict. Reynolds (2003) also maintains that blue-collar workers are less likely to be negatively impacted by time demands because of their lower income levels (Reynolds, 2003). Since the sample came from a lower income and socio-economic status (relative to their white-collar colleagues), time-based conflict may have had a less prominent role on turnover intention outcomes for blue-collar workers.

However the issue of income may be a bit more complex when considering the participants' broader situational factors. Even though they may have fallen in a lower income bracket, they also had access to the organisation's employee reward scheme. They were therefore able to earn an additional income related to organisational performance. The incentive may have allowed them to feel as though the extra time that they put into their work, may have helped them to achieve greater rewards. Therefore they were probably less likely to perceive any arising time demands as negative. Furthermore, their families may have understood that the time spent at work helps to bring in an income for the betterment of the family, and therefore may make accommodations for the family demands.

A further explanation may be attributed to legislation. South African legislation protects worker rights and working conditions. According to the Basic Conditions of Employment Act (1997), working times of organisations are clearly stipulated. In addition, unions generally ensure that the employer is operating in the best interests of its members, and may attempt to regulate work times and time-related expectations. The participating organisation was unionised, which may explain why time-based conflict did not predict turnover intention.

The extent to which the organisation was family supportive may have had an additional influence on the lack of a predictive impact of time-based conflict on turnover intention. If an organisation is supportive of their workers' personal lives, then time spent at work is less likely to have a negative impact on family responsibilities (Grandey et al., 2007). This is because a supportive organisation is less likely to place overwhelming time related demands on workers. Therefore it is possible that the participating organisation was supportive of work-family issues, thereby reducing the effects of time-based conflict on turnover intention.

Although there was a weak positive correlation between time-based conflict and turnover intention, time-based conflict still did not explain a significant proportion in the variance of turnover intention. Since time-based conflict did not predict turnover intention, the importance of studying it as a dimension, separately from strain-based conflict, is noteworthy.

Strain-based conflict and turnover intention.

Pearson product moment correlation showed that strain-based conflict was positively associated with turnover intention. Therefore an increase in strain-based conflict was related to an increase in turnover intention. Regression analysis showed that strain-based conflict explained a significant proportion of variance in turnover intention.

A study by Lambert, Hogan, Camp, and Ventura (2006) found that the only dimension of work-family conflict that explained the variance of job stress was strain-based conflict. Therefore individuals with higher levels of strain-based conflict may experience more job stressors. Since work-related stressors are generally the source of work-family conflict, the role of strain-based conflict may be more pronounced.

An explanation for the prominence of strain-based conflict within the sample may be partially due to the way in which the participants considered time-based conflict. This is because individuals occasionally factor in time related stressors when considering their

Most of the men in the sample worked within a business unit where they had access to employee help-lines and assistance programs. The anonymous service allows workers to share their problems with a third party, and receive the necessary advice and counseling. Therefore any stresses or strains that they may have experienced, may have been minimised with the assistance of the trained professionals servicing the helpline. The majority of the women in the sample worked in a business unit that did not provide similar facilities. For these reasons they experienced more strain-based conflict than men.

The blue-collar work environment is a typically male dominated environment in terms of culture and attitudes. Even though most of the women in the sample worked in a predominantly female business unit, the production manager and supervisors were mostly male. Therefore they may have still been exposed to a male-oriented culture.

Women may be more negatively affected by strain-based than men, as they tend to place a greater emphasis on the family role (Naswall, Hellgren, & Sverke, 2008). It is possible that family duties formed part of the woman in the sample. They may therefore have felt the impact of work strain on their families to a greater extent than men. Reduced energy

from the physical demands of blue-collar work may mean that women are especially in turmoil when they cannot devote as much energy to their families as they would like to. Since many blue-collar workers do not have a large amount of financial resources at their disposal, they may not be able to afford the type of childcare facilities that they may desire. Therefore women's experiences of strain-based conflict may be especially severe if they feel that they are unable to depend on caregivers.

This section shows that balancing work and family roles is still a problem for some women in today's workforce. Despite the contemporary view that all women are able to manage work and family responsibilities, this study shows that women still continue to face work related challenges that men may not. This is because contextual and environmental factors have a considerable influence on the lives of working women. The

influx of women into the workforce has also meant that women have had to quickly adapt to balancing their work and family roles. However it may still be early in this process, as it could still take some time before women's situational factors fully allow them to balance work and family roles, or until they are more able to adapt to these situational factors.

Resilience

Resilience did not have the expected moderating effect on time-based conflict and strain-based conflict's respective relationships with turnover intention. The concept of resilience may not be a concept that the sample was able to fully grasp. Even though the pilot study did not present any concerns for the resilience scale, the rest of the sample may have experienced problems responding to the items. It is possible that the items may not have been worded appropriately for blue-collar workers. Items with terms such as 'bounce back', 'snap back', and 'frazzled', may have confused the sample as they may not reflect standard South African English terms. In addition, the negatively worded items of the resilience scale may have been misinterpreted, as suggested in the factor analysis. It is possible that negatively worded items could confuse participants, as they may tend to overlook the negation while reading an item (Babbie & Mouton, 2002).

Contributions

Literature on work-family conflict has been criticised for a lack of theoretically motivated research (Bernas & Major, 2000). This study is rooted in scarcity theory in order to explain the work-family construct. It furthermore applies a conservation of resources theoretical perspective in explaining the turnover outcome, and the potentially moderating role of resilience. This integrated theoretical base allows a richer understanding of the subject matter.

Most studies on work-family conflict have tended to use white-collar samples (Frone et al., 1999a); Korabic et al., 2003). This study examines work-family conflict using a blue-

collar sample, and hence considers a blue-collar perspective when examining the construct. Few studies have examined work-family conflict as a predictor of turnover intention (Boyar et al., 2003; Forma, 2009). Within South Africa this predictive relationship has particularly been understudied. This study therefore contributes to the development of theoretical knowledge in this area. Research has found contradictory results for the role of gender in work-family conflict. This study illustrates the importance of the strain-based conflict dimension of work-family conflict for women. Therefore this study may provide some clarity to the inconsistent results of work-family conflict literature. According to an online literature search on scholarly articles, no other studies have examined the moderating role of resilience on the relationship between work-family conflict and turnover intention. Despite results not being significant, this study highlights the need to understand factors moderating the relationship. This would help provide an improved understanding of the relationship between work-family conflict and turnover intention.

Limitations and Future Recommendations

Although the resilience scale was found to be a reliable measure, the sample may not have understood some of the terms used in the scale. Therefore researchers may want to develop a resilience scale specifically for blue-collar workers. Luthans et al. (2007) found that the combined effects of resilience with other positive constructs such as hope, optimism and efficacy, has a particularly positive impact on workers. Therefore researchers may want to examine the combined effect of resilience with such constructs in order to perhaps achieve more meaningful results. This positive approach places more emphasis on individuals being empowered to take control of their destiny. Therefore the negative outcomes of work-family conflict need not be inevitable for the individual.

The items used to measure time-based conflict were rather general and may not have been specific enough to the time-related demands experienced by the blue-collar workers. Future research using blue-collar samples may want to include items that directly relate to

their time demands such as shift-work. Shift workers are sometimes out of sync with the regular family time cycle, increasing the likelihood of frustration at home (Wilson, Polzer-Debruyen, Chen, & Fernandes, 2007). Therefore this area could be further explored in other studies.

This study did not experience any apparent problems in participants reporting on sensitive matters such as turnover intention. However other studies located within sensitive work environments, may want to study this topic from a different perspective. Researchers in this position may want to study retention instead of turnover intention as an outcome of work-family conflict. Participants may then partake more actively and be more inclined to answer honestly. They may feel more comfortable in discussing reasons to stay at the organisation, as opposed to their intentions to leave, since they may be concerned of being disadvantaged at a later stage at work. This again, is also a positive approach in studying work-family conflict. Retention has generated popular interest among organisations who do not wish to wait until workers are experiencing turnover intention before addressing worker issues.

Blue-collar work often involves physical, sometimes strenuous work activities. The physical demands of blue-collar work can cause workers to have less energy for the family (Greenhaus, Parasuraman, Granrose, Rabinowitz, & Beutell, 1989). Worker safety and environmental hazards may also be relevant factors in the blue-collar context. Future studies may want to look at these physical worker demands in relation to work-family conflict. The type of supervision that blue-collar workers have in their jobs may also make a significant contribution to their experience of work-family conflict. Supervisors who are able to recognise that their staff are experiencing difficulties, may be more inclined to assist them, or refer them to resources that can. Future research may want to explore the role of supervisors in the relationship between work-family conflict and turnover intention amongst blue-collar workers.

Ilies et al., (2007) maintains that researchers should study constructs according to the environment in which they manifest. In work-family conflict, this would be the work environment. However it cannot be ignored that work-family conflict negatively affects the family role. Although work-to-family conflict may be more predictive of turnover intention than family-to-work conflict (Frone, 2003), understanding the perceptions of family members of individuals experiencing work-family conflict may prove useful. Therefore, workers' responses could be compared with responses from family members, thereby providing richer findings.

This study used a cross-sectional design. Future studies may want to take a longitudinal approach to assess whether levels of work-family conflict are sustained. Time-based conflict, strain-based conflict, and turnover intention, have demonstrated longitudinal effects in past research (Kelloway et al., 1999), therefore a longitudinal design may provide a more complete understanding of their long term effects.

The negatively worded items may have contributed to the limitations in this study. One such item reduced the Cronbach's alpha of the original turnover scale during the reliability analysis. In addition, negatively worded items of the resilience scale loaded onto a separate factor during the factor analysis. It is recommended that studies, especially on blue-collar workers, may want to avoid negatively worded items. Lower educational levels associated with blue-collar workers may increase the likelihood of items being misinterpreted.

Management Implications

Research has illustrated that the new generation of workers are more interested in work-family balance, and is not as concerned about exhausting their energies at work (Sprague, 2008). To meet the interest of this emerging group of workers, organisations have to pay particular attention to the work-family issues of their staff. If work-balance is becoming increasingly important to workers, then negative work-family conflict outcomes such as turnover intention has particular significance for these organisations.

Besides the costly possibility of turnover, these organisations may also face other challenges. This is because turnover intention does not always result in turnover (Ahuja, Chudoba, Kacmar, McKnight, & George, 2007). Workers who do not actually leave the organisation may experience a host of outcomes disadvantageous to the organisation. They may plan on changing jobs, taking temporary leave (Forma, 2009), or remain absent from work. If an individual is looking for another job, they may be distracted from their actual work. If workers take excessive or unexpected leave, or if they are absent, it may have a negative impact on productivity. The daily expectations of work requirements, shift schedules, and production cycles, may therefore be compromised. The reduced manpower may also place an extra burden on co-workers, and may therefore further re-enforce strain-based conflict in the workplace.

There are various ways that organisations can ameliorate the effects of work-family conflict, and its effect on turnover intention. Organisations can easily track whether workers are taking large amounts of unexplained leave, or have work-family related grievances, via their human resources records. This could be used to find out whether any work-family issues are affecting personal health, well-being, or disruption to work and family roles. In order to reduce work-family conflict, organisations should adopt work and family support structures (Goff, Mount, & Jamison, 1990), which could in turn lower their workers turnover intention (Boyar et al., 2003). Organisational support may especially be beneficial in reducing the impact of work-family conflict on turnover intention for women. Women may be more inclined than men to talk about their grievances and ask for additional assistance. Therefore organisational support may minimise the negative effects of strain-based conflict that have been found to be specific to women in this study. Although organisational support may seem as an expected suggestion, this type of practice is not always fully developed in many organisations, especially in developing nations (Karatepe & Uladag, 2008; Netemeyer, Brashear-Alejandro, & Boles, 2004). Therefore countries like South Africa may need to pay special attention to the refining of supportive family-friendly structures in the workplace.

Conclusion

Over the last decade, work and family literature has seen a surge of studies examining the work-family construct. This study followed suit, but included the contextually relevant outcome of turnover intention. In addition the understudied role of resilience was examined as a moderator of the relationship; however the results were not significant.

Strain-based conflict was found to predict turnover intention, and this was especially relevant for women. Despite the limitations of this study, it is one of the few, if not the only, in South Africa, that examines the relationship all the constructs. The blue-collar context, within which this study is positioned, makes it particularly noteworthy.

References

- Ahmad, A., & Omar, Z. (2008). Gender differences in work-family conflict and family friendly employment policy practices. *International Journal of the Humanities*, 6(3), 15-26.
- Allen, D., Griffeth, R., Vardaman, J., Aquino, K., Gaertner, S., & Michael, L. (2009). Structural validity and generalisability of a referent cognitions model of turnover intentions. *Applied Psychology: An International Review*, 58(4), 709-728.
- Ahuja, M., Chudoba, K., Kacmar, C., McKnight, D., & George, J. (2007). IT Road warriors: Balancing work-family conflict, job autonomy, and work overload to mitigate turnover intentions. *MIS Quarterly*, 31(1), 1-17.
- Akintayo, D. (2010). Work-family role conflict and organizational commitment among industrial workers in Nigeria. *Journal of Psychology and Counseling*, 2(1), 1-8.
- Allen, D., Weeks, K., & Moffitt, K. (2005). Turnover intentions and voluntary turnover: The moderating roles of self-monitoring, locus of control, proactive personality, and risk aversion. *Journal of Applied Psychology*, 90(5), 980-990.
- Anderson, S., Coffey, B., & Byerly, R. (2002). Formal organizational initiatives and informal workplace practices: Links to work-family conflict and job-related outcomes. *Journal of Management*, 28(6), 787-810.
- Avey, J. B., Hughes, L. W., Norman, S. M., & Luthans, K. W. (2007). Using positivity, transformational leadership and empowerment to combat employee negativity. *Leadership & Organization Development Journal*, 29(2), 110-126.
- Arnold, H., & Feldman, D. (1982). A multivariate analysis of the determinants of job turnover. *Journal of Applied Psychology*, 67(3), 350-360.
- Babbie, E., & Mouton, J. (2002). *The practice of social research*. Cape Town: Oxford University Press Southern Africa.

- Balmforth, K., & Gardner, D. (2006). Conflict and facilitation between work and family: Realizing the outcomes for organizations. *New Zealand Journal of Psychology*, 35(2), 69-76.
- Baltes, B., & Heydens-Gahir, H. (2003). Reduction of work-family conflict through the use of selection, optimization, and compensation behaviors. *Journal of Applied Psychology*, 88(6), 1005-1018.
- Barnett, R., & Baruch, G. (1985). Women's involvement in multiple roles and psychological distress. *Journal of Personality and Social Psychology*, 49(1), 135-145.
- Barnett, R., & Hyde, J. (2001). Women, men, work, and family. *American Psychologist*, 56(10), 781-796.
- Bartolome, F., & Evans, P. A. (1980). Must success cost so much? *Harvard Business Review*, 58(2), 137-148.
- Bernas, K., & Major, D. (2000). Contributors to stress resistance: Testing a model of women's work-family conflict. *Psychology of Women Quarterly*, 24(2), 170-178.
- Block J. H., & Block J. (1980). The role of ego-control and ego resiliency in the organization of behavior. In: Collins WA, editor. *Minnesota Symposium on Child Psychology*, 13, NJ: Hillsdale, 39-101.
- Boyar, S., Maertz Jr., C., Pearson, A., & Keough, S. (2003). Work-family conflict: A model of linkages between work and family domain variables and turnover intentions. *Journal of Managerial Issues*, 15(2), 175.
- Britt, T., & Dawson, C. (2005). Predicting work-family conflict from workload, job attitudes, group attributes, and health: A longitudinal study. *Military Psychology*, 17(3), 203-227.

- Burke, R., & Greenglass, E. (1987). Work and family. *International review of industrial and organizational psychology 1987* (pp. 273-320). Oxford England: John Wiley & Sons. Retrieved from PsycINFO database.
- Cardenas, R., Major, D., & Bernas, K. (2004). Exploring work and family distractions: Antecedents and outcomes. *International Journal of Stress Management, 11*(4), 346-365.
- Carlson, D. S., Kacmar, K. M., & Williams, L.J. (2000). Construction and initial validation measure of multidimensional measure of work-family conflict. *Journal of Vocational Behavior, 56*, 249-276.
- Chen, Z., Powell, G., & Greenhaus, J. (2009). Work-to-family conflict, positive spillover, and boundary management: a person-environment fit approach. *Journal of Vocational Behavior, 74*(1). 82-93.
- Cohen, J. (1988). *Statistical power analysis for behavioural sciences* (2nd Ed.). Hillsdale: Lawrence Erlbaum.
- Cinamon, R. (2006). Anticipated work-family conflict: Effects of gender, self-efficacy, and family background. *Career Development Quarterly, 54*(3), 202-215.
- Clark, S.C. (2000). Work/family border theory: A new theory of work/family balance. *Human Relations, 53*, 747-770.
- Cohn, M., Fredrickson, B., Brown, S., Mikels, J., & Conway, A. (2009). Happiness unpacked: Positive emotions increase life satisfaction by building resilience. *Emotion, 9*(3), 361-368.
- Dale-Olsen, H. (2006). Worker turnover, capital dispersion, and matching. *Labour: Review of Labour Economics & Industrial Relations, 20*(3), 395-431.
- de Klerk, M., & Mostert, K. (2010). Work-home interference: Examining socio demographic predictors in the South African context. *SA Journal Of Human Resource Management, 8*(1), doi:10.4102/sajhrm.v8i1.203.

Deutsch, F. M. (1999). *Halving it all: How equally shared parenting works*. Cambridge, MA: Harvard University Press.

DiTomaso, N., Post, C., Farris, G., & Cordero, R. (2003, January). *Work-family conflict and turnover intentions among scientists and engineers working in R&D*. Paper presented at the American Sociological Association, Atlanta. Retrieved from doi: asa_proceeding_9080.PDF.

Donald, F., & Linington, J. (2008). Work/family border theory and gender role orientation in male managers. *South African Journal of Psychology*, 38(4), 659-671.

Dutton, J. E., Glynn, M. A. (2008). Positive organisational scholarship. In J. Barling & C.L. Cooper (Eds), *The Sage Handbook of Organisational Behaviour* (pp. 693-712). Los Angeles: Sage.

Eagle, B., Miles, E., & Icenogle, M. (2007). Inter-role conflicts and the permeability of work and family domains: Are there gender differences? *Journal of Vocational Behaviour*, 50(2), 168-184.

Forma, P. (2009). Work, family and intentions to withdraw from the workplace. *International Journal of Social Welfare*, 18(2), 183-192.

Frone, M. R. (2003). Work-family balance. In J. C. Quick, & L. E. Tetrick (Eds), *Handbook of Occupational Health Psychology* (pp. 143-162). Washington, DC: American Psychological Association.

Frone, M. R., Russell, M., & Cooper, M. L. (1992 a). Prevalence of work-family conflict: Are work and family boundaries asymmetrically permeable? *Journal of Organizational Behavior*, 13, 723-729.

Frone, M. R., Russell, M., & Cooper, M. L. (1992 b). Antecedents and outcomes of work family conflict: Testing a model of the work-family interface. *Journal of Applied Psychology*, 77(1), 65-78.

- Frone, M. R., Yardley, J. K., & Morkel, K. S. (1997). Developing and testing an integrative model of the work-family interface. *Journal of Vocational Behavior*, 50, 145-167.
- Good, L., Page T.J., & Young, C. (1996). Assessing hierarchical differences in job related attitudes and turnover among retail managers. *Journal of the Academy of Marketing Science*, 24(2), 148-156.
- Goode, W. (1960). A theory of role strain. *American Sociological Review*, 25(4), 483-496.
- Goff, S., Mount, M., & Jamison, R. (1990). Employer supported child care, Work/Family conflict, and absenteeism: A field study. *Personnel Psychology*, 43(4), 793-809.
- Grandey, A., & Cropanzano, R. (1999). The conservation of resources model applied to work-family conflict and strain. *Journal of Vocational Behavior*, 54(2), 350-370.
- Grandey, A., Cordeiro, B., & Michael, J. (2007). Work-family supportiveness organizational perceptions: Important for the well-being of male blue-collar hourly workers? *Journal of Vocational Behavior*, 71(3), 460-478.
- Greenhaus, J., & Beutell, N. (1985). Sources of conflict between work and family roles. *Academy of Management Review*, 10(1), 76-88.
- Greenhaus, J., Collins, K., Singh, R., & Parasuraman, S. (1997). Work and family influences on departure from accounting, *Journal of Vocational Behavior*, 50, (2), 249-270.
- Greenhaus, J., Parasuraman, S., & Collins, K. (2001). Career involvement and family involvement as moderators of relationships between work-family conflict and withdrawal from a profession. *Journal of Occupational Health Psychology*, 6(2), 91-100.

Greenhaus, J., Parasuraman, S., Granrose, C., & Rabinowitz, S. (1989). Sources of work family conflict among two-career couples. *Journal of Vocational Behavior*, 34(2), 133-153.

Greenhaus, J., & Powell, G. (2006). When work and family are allies: A theory of work family enrichment. *Academy of Management Review*, 31(1), 72-92.

Grönlund, A. (2007). More control, less conflict? Job demand-control, gender and work family conflict. *Gender, Work & Organization*, 14(5), 476-497.

Grosswald, B., (2003). Shift work and negative work-to-family spillover, *Journal of Sociology and Social Welfare*, 30(4), 31-56.

Guttek, B., Searle, S., & Klepa, L. (1991). Rational versus gender role explanations for work-family conflict. *Journal of Applied Psychology*, 76(4), 560-568.

Hair, J.F., Babin, B., Money, A.H., & Samouel, P. (2003). *Essentials of business research methods*. Hoboken, NJ: Wiley.

Haar, J. (2004). Work-Family Conflict and Turnover Intention: Exploring the moderation effects of perceived work-family support. *New Zealand Journal of Psychology*, 33(1), 35-39.

Higgins, C., Duxbury, L., & Irving, R. (1992). Work-family conflict in the dual-career family. *Organizational behavior and human decision processes*, 51(1), 51-75.

Hobfoll, S. (1989). Conservation of resources: A new attempt at conceptualizing stress. *American Psychologist*, 44(3), 513-524.

Hyman, J., & Summers, J. (2004). Lacking balance? Work-life employment practices in the modern economy. *Personnel Review*, 33 (4), 418-429.

Hughes, E., & Parkes, K. (2007). Work hours and well-being: The roles of work-time control and work-family interference. *Work & Stress*, 21(3), 264-278.

- Ilies, R., Schwind, K. M., Wagner, D. T., Johnson, M. D., De Rue, D. S., & Ilgen, D. R. (2007). When can employees have a family life? The effects of daily workload and affect on work-family conflict and social behaviors at home. *Journal of Applied Psychology, 92*, 1368–1379.
- Jansen, N., Kant, I., Kristensen, T., & Nijhuis, F. (2003). Antecedents and consequences of work-family conflict: A prospective cohort study. *Journal of Occupational & Environmental Medicine, 45*(5), 479.
- Joplin, J., Shaffer, M., Francesco, A., & Lau, T. (2003). The macro-environment and work-family conflict: Development of a cross cultural comparative framework. *International Journal of Cross Cultural Management, 3*(3), 305-328.
- Kahn, R., Wolfe, D., Quinn, R., Snoek, J., & Rosenthal, R. (1964). *Organizational stress: Studies in role conflict and ambiguity*. Oxford England: John Wiley.
- Kalil, A., Ziol-Guest, K., & Epstein, J. (2010). Nonstandard work and marital instability: Evidence from the national longitudinal survey of youth. *Journal of Marriage and Family, 72*(5), 1289-1300.
- Karatepe, O., & Uludag, O. (2008). Affectivity, conflicts in the work-family interface, and hotel employee outcomes. *International Journal of Hospitality Management, 27*(1), 30-41.
- Kaur, S. (2008). Women at work: Work-family conflict and well-being. *Pertanika Journal of Social Science & Humanities, 16*(2), 257-268.
- Kelloway, E., Gottlieb, B., & Barham, L. (1999). The source, nature, and direction of work and family conflict: A longitudinal investigation. *Journal of Occupational Health Psychology, 4*(4), 337-346.
- Kinnunen, U., & Mauno, S. (1998). Antecedents and outcomes of work-family conflict among employed women and men in Finland. *Human Relations, 51*(2), 157-177.

- Korabic, K., Leroy, D. & Adman, R. (2003). A multi-level approach to cross cultural work-family research. *International Journal of Cross Cultural Management*, 3(3), 289-303.
- Lambert, E., Hogan, N., Camp, S., & Ventura, L. (2006). The impact of work-family conflict on correctional staff: A preliminary study. *Criminology & Criminal Justice: An International Journal*, 6(4), 371-387.
- Landau, J., & Hammer T.H. (1986). Clerical employees' perceptions of intraorganizational career opportunities. *Academy of Management Journal*, 29, 385-404.
- Lee T.W, Mowday R.T. (1987). Voluntarily leaving an organization: An empirical investigation of Steers and Mowday's model of turnover. *Academy of Management Journal*, 30(4), 721-743.
- Livingston, M., Burley, K., & Springer, T. (1996). The importance of being feminine: Gender, sex role, occupational and marital role commitment, and their relationship to anticipated work-family conflict. *Journal of Social Behavior & Personality*, 11(5), 179-192.
- Luthans, F. (2002). The need for and meaning of positive organizational behavior. *Journal of Organizational Behaviour*, 23(6), 695-706.
- Luthans, F., Youssef, C., & Avolio, B. (2007). *Psychological capital: Developing the human competitive edge*. New York, NY US: Oxford University Press.
- Luthans, F., van Wyk, R., & Walumbwa, F. O. (2004). Recognition and development of hope for South African organizational leaders. *Leadership and Organizational Development Journal*, 25(6), 512-529.
- Major, V. S., Klein, K. J., & Ehrhart, M. G. (2002). Work time, work interference with family, and psychological distress. *Journal of Applied Psychology*, 87, 427-437.

- Mannon, S., Minnotte, K., & Brower, C. (2007). Work-family identities and work-family conflicts: Exploring the relationship with evidence from Utah. *Marriage & Family Review, 42*(1), 65-80.
- Martins, L., Eddleston, K., & Veiga, J. (2002). Moderators of the relationship between work-family conflict and career satisfaction. *Academy of Management Journal, 45*(2), 399-409.
- Masten, A. S. (2001). Ordinary magic: resilience processes in development. *American Psychologist, 5*, 227-239.
- Maume, D., & Houston, P. (2001). Job segregation and gender differences in work family spillover among white-collar workers. *Journal of Family and Economic Issues, 22*(2), 171-189.
- McElwain, A., Korabik, K., & Rosin, H. (2005). An examination of gender differences in work-family conflict. *Canadian Journal of Behavioural Science, 37*(4), 283-298.
- Michaels, C.E, Spector D.E. (1982). Causes of employee turnover: A test of the Mobley, Griffeth, Hand, and Meglino model. *Journal of Applied Psychology, 67*(1), 53-59.
- Michel, J., Jacqueline, K., Mitchelson, S., Cullen, K. (2010). Clarifying relations among work and family social support, stressors and work-family conflict. *Journal of Vocational Behavior, 76*, (1), 91-104.
- Mobley, W. H. (1977). Intermediate linkages in the relationship between job satisfaction and employee turnover. *Journal of Applied Psychology, 62*(2), 237-240.
- Mouton, J., & Marais, H.C. (1994). *Basic concepts in the methodology of the social sciences*. Pretoria: Human sciences research council.
- Nadler, D. A., Jenkins, G. D., Cammann, C., & Lawler, E. E., (1975). The Michigan organizational assessment package: Progress report II. Ann Arbor: University of Michigan.

- Netemeyer, R.G., Brashear-Alejandro, T., Boles, J.S. (2004). A cross-national model of job related outcomes of work role and family role variables: A retail sales context. *Journal of the Academy of Marketing Science*, 32(1), 49-60.
- Netemeyer, R., Maxham III, J., & Pullig, C. (2005). Conflicts in the work-family interface: Links to job stress, customer service employee performance, and customer purchase intent. *Journal of Marketing*, 69(2), 130-143.
- Näswall, K., Hellgren, J., & Sverke, M. (2008). *The individual in the changing working life*. New York: Cambridge University Press.
- O'Reilly, C., & Caldwell, D. (1981). The commitment and job tenure of new employees: Some evidence of post decisional justification. *Administration Science Quarterly*, 26(4) 597-616.
- Ouchi, W. (1977). The relationship between organizational structure and organizational control. *Administrative Science Quarterly*, 22, 95–113.
- Parasuraman, S., Greenhaus, J., & Granrose, C. (1992). Role stressors, social support, and well-being among two-career couples. *Journal of Organizational Behavior*, 13(4), 339-356.
- Porter, S., & Ayman, R. (2010). Work-flexibility as a mediator of the relationship between work family conflict and intention to quit. *Journal of Management and Organization*, 16(3), 411-424.
- Potgieter, S.C.B., & Barnard, A. (2010). The construction of work-life balance: The experience of Black employees in a call-centre environment. *SA Journal of Industrial Psychology/SA Tydskrif vir Bedryfsielkunde*, 36(1), DOI:10.4102/sajip.v36i1.892.
- Ramphela, M. (2002). *Steering by the stars: Being young in South Africa*. Cape Town: Tafelberg Publishers.

- Reynolds, J. (2003). You can't always get the hours you want: Mismatches between actual and preferred hours in the US, *Social Forces*, 81(4), 1171-1199.
- Riekert, L., & Taute, F. (2009). The influence of family dynamics on the productivity of working mothers in a motor company in South Africa. *Social Work*, 45(4), 31-43.
- Rode, J., Rehg, M., Near, J., & Underhill, J. (2007). The effect of work/family conflict on intention to quit: The mediating roles of job and life satisfaction, *Applied Research in Quality of Life*, 2(2), 65-82.
- Rosin, H.M., & Korabik, K. (1995). Organizational experiences and propensity to leave: A multivariate investigation of men and women managers. *Journal of Vocational Behavior*, 46(1), 1-16.
- Schindehutte, M., Morris, M., & Brennan, C. (2003). Entrepreneurs and Motherhood: Impacts on Their Children in South Africa and the United States. *Journal of Small Business Management*, 41(1), 94-107.
- Shaffer, M., Harrison, D., Gilley, K., & Luk, D. (2001). Struggling for balance amid turbulence on international assignments: work-family conflict, support and commitment. *Journal of Management*, 27(1), 99-121.
- Shelton, L. (2006). Female entrepreneurs, work-family conflict, and venture performance: New insights into the work-family interface. *Journal of Small Business Management*, 44(2), 285-297.
- Shi, H., Chiang, Y., Hsu, C. (2010). High involvement work system, work-family conflict, and expatriate performance- examining Taiwanese expatriates in China. *The International Journal of Human Resource Management*, 21(11), 2013-2030.
- Smith, B., Dalen, J., Wiggins, K., Tooley, E., Christopher, P., & Bernard, J. (2008). The brief resilience scale: Assessing the ability to bounce back. *International Journal of Behavioral Medicine*, 15(3), 194-200.

- Spector, P., Cooper, C., Poelmans, S., Allen, T., O' Driscoll, M., Sanchez, J., et al. (2004). A cross-national comparative study of work-family stressors, working hours and well-being: China and Latin America versus the Anglo. *Personnel Psychology*, 57(1), 119-142.
- Spector, P., Allen, T., Poelmans, S., Lapierre, L., Cooper, C., O' Driscoll, M., et al. (2007). Cross national differences in relationships of work demands, job satisfaction, and turnover intentions with work-family conflict. *Personnel Psychology*, 60(4), 805-835.
- Sprague, C. (2008). The silent generation meets generation Y: How to manage a four generation workforce with panache. HCI White Paper.
- Steiber, N. (2009). Reported levels of time-based and strain-based conflict between work and family roles in Europe: A multilevel approach. *Social Indicators Research*, 93(3), 469-488.
- Terre Blanche, M., Durrheim, K., & Painter, D. (2008). *Research Practice: Applied methods for the social sciences*. Cape Town, South Africa: Juta.
- Tett, R. P., & Meyer, J. P. (1993). Job satisfaction, organizational commitment, turnover intention and turnover: Path analyses based on meta-analytic findings. *Personnel Psychology*, 46, 259-294.
- Väänänen, A., Kumpulainen, R., Kevin, M., Ala-Mursula, L., Kouvonen, A., Kivimäki, ... Vahtera, J. (2008). Work-family characteristics as determinants of sickness absence: A large-scale cohort study of three occupational grades. *Journal of Occupational Health Psychology*, 13(2), 181-196.
- Voydanoff, P. (1988). Work role characteristics, family structure demands, and work/family conflict. *Journal of Marriage & Family*, 50(3), 749-761.
- Voydanoff, P. (2004). The effects of work demands and resources on work-to-family conflict and facilitation. *Journal of Marriage and Family*. 66(2), 398-412.

- Wang, P., Lawler, J., & Shi, K. (2010). Work-family conflict, self-efficacy, job satisfaction, and gender: Evidences from Asia. *Journal of Leadership and Organizational Studies*, 17(3), 298-308.
- Wang, P., Lawler, J., Walumbwa, F., & Shi, K. (2004). Work-family conflict and job withdrawal intentions: The moderating effect of cultural differences. *International Journal of Stress Management*, 11(4), 392-412.
- Wayne, S., Shore, L., & Liden, R. (1997). Perceived organizational support and leader member exchange: A social exchange perspective. *Academy of Management Journal*, 40(1), 82-111.
- Wentzel, L., Buys, C., & Mostert, K. (2009). Work and personal life: Which strategies do secondary school educators use to deal with the interaction? *SA Journal of Human Resource Management*, 7(1), DOI:10.4102/sajhrm.v7i1.166.
- Wilson, M., Polzer-Debruyen, A., Chen, S., & Fernandes, S. (2007). Shift work interventions for reduced work-family conflict, *Employee Relations*, 29(2), 162-177.

Appendix A

Items used in Questionnaire

Time-based conflict

1. My work keeps me from my family activities more than I would like.
2. The time I must devote to my job keeps me from participating equally in household responsibilities and activities.
3. I have to miss family activities due to the amount of time I must spend on work responsibilities.

Strain-based conflict

4. When I get home from work I am often too frazzled to participate in family activities/responsibilities.
5. I am often so emotionally drained when I get home from work that it prevents me from contributing to my family.
6. Due to all the pressures at work, sometimes when I come home I am too stressed to do the things I enjoy.

Turnover intention

7. I am actively looking for a job outside this company.
8. As soon as I can find a better job, I'll leave this company.
9. I am seriously thinking about quitting my job.
10. I often think about quitting my job at this company.
11. I think I will be working at this company five years from now.

Resilience

12. I have a hard time making it through stressful events.
13. It does not take me a long to recover from a stressful event.
14. It is usually hard for me to snap back when something bad happens.
15. I usually come through difficult times with little trouble.
16. I tend to take a long time to get over set-backs in my life.
17. I tend to bounce back quickly after hard times.