CONSCIENTIOUSNESS AS A MODERATOR OF THE RELATIONSHIP BETWEEN WORK FAMILY CONFLICT AND STRESS AMONGST SOUTH AFRICAN POLICE SERVICE MEMBERS IN ALICE POLICE STATION, EASTERN CAPE.

By

Sandiso William Bazana

A mini dissertation submitted in partial fulfilment of the degree of Master of Commerce (Industrial Psychology)

In

The Department of Industrial Psychology

Faculty of Management and Commerce

at the

University of Fort Hare

2012

Supervisor: Mrs N.Gcaza

Co-supervisor: Dr N.Dodd
DECLARATION

I, Sandiso Bazana, student number 200700221, do hereby declare that the work titled "Conscientiousness as a moderator of the relationship between Work Family Conflict (WFC) among South African Police members in Alice, Eastern Cape is my own work and that, to the best of my knowledge, it contains no material previously published or written by another person nor material which to a substantial extent has been accepted for the award of any degree or diploma of the University of Fort Hare or any other institution of higher learning except where due acknowledgement has been made in the text.

Dated at the University of Fort Hare on the 11th January 2013

Student...........................................

Sandiso Bazana

Supervisor..................................

Mrs N Gcaza

Co-Supervisor.................................

Dr N. Dodd
ABSTRACT

The purpose of the study was to explore the relationship between WFC and stress with Conscientiousness which is part of the Big Five personality Traits Model in moderation. The study was undertaken in the South African Police Service members in Alice town in the Eastern Cape. The study was based on a sample size of eighty four (n=84) out of 134 (N=134) police officers. A simple convenient random sample was used to sample participants. With the use of descriptive, correlation and inferential statistics the finding revealed instead that Conscientiousness has no significant relationship with WFC at (r= 0.02792, p= 0.8022) also Conscientiousness had no significant relationship with stress at (r= -0.04465, p= 0.6885). Overall, after separating the group according to those that scored low and those that scored high on conscientiousness scale, the study found the group low in conscientiousness not significantly correlated with WFC and stress (r= -0.02263, p= 0.9414). and the group with a high conscientiousness the study revealed a high significant relationship for police officers that scored high on Conscientiousness at (r= 0.40119, p< 0.00). The group low in conscientiousness has no correlation between WFC and stress thus different values of conscientiousness cause a change in the relationship between WFC and stress. Thus those who are low in conscientiousness do not have a relationship between WFC and stress. A call is made to the SAPS as an institution to consider prioritizing personality trait particularly applicants that score low on conscientiousness personality test during recruitment and selection of new police officers to avoid the outcomes associated with the nature of police work.

KEYWORDS: Conscientiousness, Work Family Conflict, Stress, Police
ACKNOWLEDGEMENTS

I would like to express my sincere thanks and gratitude to the following people;

- Professor TQ Mjoli for introducing me to the topic and discussion of WFC.
- Mrs Gcaza, my supervisor, for her motivation and her continued concern for this study.
- Dr Dodd, the co-supervisor. Your role was more than just being a co-supervisor. This study would have not been possible without your assistance, your guidance, your time, your passion for research, your patience with me, and your quick responses to my correspondences to you. I will forever remain grateful.
- The Human Resources department of the University of Fort Hare’s contribution to the completion of this study is appreciated.
- Sandisiwe Nabo, her interest in my study, her time to read my study and her motivation contributed significantly to the completion of this study.
- The SAPS members that participated in this study.
- To the Lord, you made it possible yet again.
DEDICATION

To my late grandmother Nomsa Bazana and late sister Bulelwa Noni Bazana.
Table of contents

DECLARATION.................................................................................................................. i
ABSTRACT ....................................................................................................................... ii
ACKNOWLEDGEMENTS ................................................................................................. iii
DEDICATION ................................................................................................................... iv
List of figures ................................................................................................................... viii
CHAPTER 1 ................................................................................................................... 1
  1.1 Background of the study ......................................................................................... 1
  1.2 Statement of the problem ....................................................................................... 7
  1.3 Purpose of the study ............................................................................................. 13
  1.5 Hypothesis ............................................................................................................. 14
CHAPTER 2 ................................................................................................................... 18
  2.1 Theoretical framework ......................................................................................... 18
    2.1.1 Role theory ..................................................................................................... 18
    2.1.2 Identity theory ............................................................................................... 19
  2.2 Literature review ................................................................................................ 21
    2.2.1 Introduction .................................................................................................... 21
    2.2.2 Difference between Work and Family .......................................................... 22
      2.2.2.1 Work: ..................................................................................................... 22
      2.2.2.2 Family: .................................................................................................. 23
      2.2.2.3 Role conflict ............................................................................................ 24
      2.2.3 What is role conflict? .................................................................................. 25
      2.2.3.1 Work Family Conflict (WFC) ................................................................. 26
      2.2.3.1.1 Work Family Conflict defined ............................................................ 26
    2.2.3 Stress ............................................................................................................. 33
      2.2.3.1. Stress defined ......................................................................................... 33
      2.2.3.2. Occupational stress of SAPS ............................................................... 35
      2.2.3.3. Potential stressors within the police service ......................................... 38
      2.2.3.4. Sources of police stress (organisational and nature of work/inherent).... 41
      2.2.3.5. Organisational category ...................................................................... 42
      2.2.3.6. Stressful nature of police work .............................................................. 45
      2.2.3.7. Conscientiousness .............................................................................. 47
      2.2.3.8. Summary ............................................................................................... 52
List of Tables

Table 3.1 Cronbach Alpha of a Conscientiousness scale.............................................. 56
Table 3.2 Cronbach Alpha of WFC scale........................................................................... 58
Table 3.3 Cronbach Alpha of stress scale........................................................................... 59
Table 4.1 Pearson Correlation Coefficient of Conscientiousness, WFC and Stress.................................................................................................................. 75
Table 4.2 Pearson Correlation Coefficient of respondents with high Conscientiousness.......................................................... 77
Table 4.3 Pearson Correlation Coefficient correlation of respondents with low conscientiousness........................................................................................................ 78
Table 4.4 Descriptive Statistics for Conscientiousness, WFC & Stress.................................................................................................................. 79
List of figures

Figure 4.1 Age distribution of respondents.................................................. 65
Figure 4.2 Gender distributions of respondents.............................................. 65
Figure 4.3 Tenure distributions of respondents.............................................. 66
Figure 4.4 Marital status distributions of respondents..................................... 67
Figure 4.5 Distribution of respondents by number of children they have.......... 68
Figure 4.6 Occupational level distributions of respondents............................ 69
Figure 4.7 Distribution of respondents by family responsibilities.................... 70
Figure 4.8 Distribution of respondents residing with family members............... 71
Figure 4.9 Distribution of respondents by number of family members a respondent is residing with besides spouse/children...................................................... 72
Figure 4.10 Distribution of respondents' working hours respondents............... 73
Figure 4.11 Distribution of respondents as sole supporters in their families......... 74
1.1 Background of the study

Both work and family are central to one’s life and are known to bring the most stress and pressure in one’s life. With the changes in the demographic representation in terms of gender in the workplace, women have also tended to view employment as important to them and they continue to pursue their career goals which are contrary to the traditional view that women viewed their families as important. Barnett (1997) argues that even though some of these changes are positive to women in terms of the benefits employment provides, organizing child care activities, household chores, and professional responsibilities create stress and conflict for many working parents. It is only fair then to consider both genders when researching about WFC since women are not solely responsible for family but men too. Emphasis is being put on women because traditionally men have assumed the role of being the ones working in households.

The review of the concept of work family conflict by other researchers stems from the changes in demographic patterns on societal attitudes about work and family. According to Frone, Russell and Cooper (1992) the last quarter of the twentieth century presented a significant rise in the percentage of dual-earner families and the number of women with young children entering the workforce in America.
It is only fair to mention that, the changes in the American society have also been taking place in South Africa considering the legislation that has been promulgated to redress the imbalances of the past where women, disabled and the black people often referred to as the “designated groups” were deprived opportunities to take part in the economic activities of the country, this has led to more women finding themselves occupied in paid work. What remains an issue though is that, these women are still the caregivers in their families (Hooyman & Gonyea, 1995).

There has been a general agreement around researchers in the area of work family conflict that work family balance is important for one’s psychological wellbeing and that high self esteem, satisfaction and overall sense of harmony in life can be referred to as contributors of a successful balance between work and family roles (Clark, 2000). It is important then to investigate how one achieves work family balance.

Work-Family Conflict has also been shown to have a significant influence on family distress, which is the experience of stress associated with one’s family role. Frone et al. (1992) operationalized family distress as parental stress and marital stress in their study. They found that as WFC increased, so did the level of family distress that individuals experience. As a person experiences conflict between his work and family roles, he or she is going to have more distress at home, in trying to deal with the conflict that would have arisen from any of the two roles (work or family).
According to Greenhaus and Beutell (1985) work family conflict takes place when one is faced with multiple roles to perform e.g. spouse and parent. Stress related outcomes of these conflicting roles is Work Family Conflict (WFC) which is an interrole conflict in which pressures from both family and work are incompatible with one another (Greenhaus & Beutell, 1985). WFC can arise as a result of pressures from one role e.g. work burdening the ability to attain tasks of another role family or vice versa. Family related tasks can include taking care of children, household responsibilities such as cooking, cleaning as well as additional responsibilities that may arise as a result of one’s role in the family.

According to Bond, Galinsky, and Swanberg, (1998), a huge percentage of employees in recent research findings have reported to have to having some day-to-day family responsibilities. The various roles that individuals hold in their lives and how these roles affect and influence each other including what damage if any they exact on an individual is pivotal. Certain personality traits have been associated with the likelihood of experiencing stressful circumstances (Bolger & Schilling, 1991; Bolger & Zuckerman, 1995). The study adopts the premise that conscientiousness moderates the relationship between work family conflict and stress.

Studies examining the conflict between work and family roles have focused mostly on other important work variables such as the hours of work and the number of children on family variable as determinants of whether they will experience stress and individual variables have been ignored (Carlson, 1999). The present study argues that conscientiousness is the variable that influences conflict between these
two roles namely work and family. Conscientiousness forms part of the Big Five Personality traits model.

Personality traits have been investigated extensively in occupational stress studies however, conscientiousness as a personality trait has received little attention and this can be attributed to the limited role that work performance is assumed to play in models of occupational stress (Vakola, Tsaousis & Nikolau 2003).

A range of stressors whether at work or in the family will affect performance. Pressures at work have been found to be predictors of WFC such as job demands (Dollard & Winefield, 2001; Grzywacz & Marks, 2000; Wallace, 1997). Demerouti, Geurts, Bakker and Euwema, (2004) found unfavourable working time schedules to be a predictor, while Parasuraman, Purohit, Godshalk and Beutell (1996) found work-role overload and Bakker and Geurts (2004) found emotional demands evoked by interaction with customers demands of the job as predictors of WFC.

A research that was conducted amongst 1,986 employed American revealed that working parents with children are more affected by family work conflict (FWC) than ordinary partners with no children (Gryzwaiz & Marks, 2000). Family work conflict occurs when family role interferes with work role. Studies have focus on WFC and just recently there has been a focus on FWC. Frone et al. (1992a) FWC was found to be related to both depression and job stress. FWC has been found to be related to marital and parental dissatisfaction. Generally, WFC and FWC have the same effect or researchers have at least not shown clearly differential effects of the
WFC and FWC. The present study will focus more on WFC but will not discard the relevance of family interfering with work to the effects of WFC.

Furthermore, research indicates that FWC is higher on employees with more demands at home and those with low social support base (Peeter, Montgomery, Bakker and Schaufeli (2005). Barnett (1996) writes that if one has a sensitive partner to his/her partner’s job related pressures who listens, this may help one deal with the pressures and thereby maintain a healthy work performance.

Burke and Greenglass (1999) found a correlation between psychological distress and WFC. Frone, Yardley and Markel (1997) write that WFC results in poor overall physical health and high hypertension. The correlation may also be evident in the police service in South Africa. Police officers are exposed to three environmental sources of stress and these include personal, operational and organizational stress (Hart, Wearing & Headey, 1995).

Those individual personality facets of an officer that increase the effect of stressful occurrences are referred to as personal stressors that officers experience and these may include officer’s ways coping, ways of reacting to situations (Hart et al., 1995).

A police officer is exposed on everyday bases to gruesome street violence and officers have a duty to curb that violence and that is an example of an operational stress based on the characteristics of police work (Violanti & Paton, 1993). According to Violanti and Paton (1999) police work may sometimes lead to
chasing, shooting, stabbing car crashing and murder. The Sunday Independent (12 November 2006) reported that according Bilks Omar, a senior researcher at the Institute for Security Studies in Pretoria, the murder rate of South African police is too high. Poor pay, exposure to gruesome crimes is also some of the contributors to police stress in South Africa. This still forms part of operational stressors police officers are faced with. The newspaper article reveals that South African police officer is not immune to Violant and Paton’s described features of police work.

Burke and Mikkelsen (2006) included dealing with victims and perpetrators of crime, working shifts and dealing with criminal justice as additional operational stressors police officers have to contend with that can be referred to as organizational stressors.

Research has indicated that WFC is exacerbated by work pressures, inflexible work schedules and time demands of work (Carlson & Perrewe, 1999) part of organisational stressors. This is because of employees who devote more resources (e.g., time, emotions) to work, leaving them with fewer resources to devote to their family (Frone, Yardley, & Markel, 1997). It is only safe to deduce that officers confronted with a high work load will spill that over to family responsibilities.

However, as individuals try to integrate their work and family roles, it is evident that personality could play a role in the conflict experienced between roles. Personality is studied in many areas of psychology, as it is seen as being a major influence on people’s thoughts and behaviours. Two people may experience the same objective work or family situation (e.g. same level of job involvement, same
number of children) yet differ in their experience of conflict between work and family roles (Greenhaus & Beutell 1985).

It is against this background that the study has elected to focus on the South African Police service which is the core of the safety of the South African citizens from dangers and harm by others.

1.2 Statement of the problem

Researchers have indicated that WFC leads to lower levels of life satisfaction due to a reduction in attainment of value (Perrewe, Hochwarter, & Kiewitz, 1999). The personality trait that an individual exhibits can either cause him/her to be affected or not affected by stress (Grundy, 2000). However, Fruyt and Mervielde (1999) argue that certain working conditions e.g. stressful ones could bring the best out of an individual’s personality trait while other personality traits can find it hard to cope with the stressful conditions.

On the 21st of June 2012, Minister of Police in South Africa, Mr Nathi Mthethwa issued statistics that indicate that SAPS attempted suicide rate in 2010 within SAPS members was 84, 10 636 police officers were believed to be suffering from depression with 2,763 suffering from post-traumatic stress disorder. The minister indicated that, policing remains a difficult and challenging duty and it requires a committed and selfless personality. Clearly, from the minister’s statement personality is pivotal in the execution of police work. A need to investigate stress exists within the SAPS and how it can be avoided from affecting the work of officers.
because clearly there is a crisis in the country. The minister also alluded to the effects stress has on the members’ immediate families such as suicides to dysfunctionality of such family.

The star newspaper reported that about 100 to 130 police officers commit suicide every year in South Africa due to stress caused by the nature of police work and organizational stressors e.g. lack of support from management, corruption amongst leaders of SAPS with the recent ousted police commissioner Bheki Cele as an example. Hitchens further argues that even women police officers are affected by the stress with the story of a women constable that killed herself due to high stress levels (Star Newspaper, Hitchens, 2012).

SAPS as an organization creates stress over the stress already associated with the nature of police work (Gull et al 1998) that is an element of organisational stress. It is important to note that, police officers are obligated to provide a safe environment to those residing in South Africa but their duties are not always carried out in a safe environment. Violanti and Paton (1999) argue that the conditions that police officers work under are very stressful and the police work is regarded as very stressful (Pestonjee, 1992). Organizations like the SAPS have been greatly affected by escalation of criminal actions and violence. Societal changes both political and socio-economic resulting from a transition from apartheid to a democratic government have also affected SAPS (Marks, 1995, Nel & Burger, 1996).

Recently, news reports have indicated that the South African Police force (SAPS) officers are under severe stress caused by the nature of their work, poor
pay, uncertainty about their future including heavy exposure to gruesome crimes and their failure to manage family demands which has resulted to theses officers killing their family members (Sunday Tribune; 12 November 2006). South African former minister of police Charles Nqakula reported in 2002 that 508 police officers committed suicide due to stress (Sunday Tribune: 12 November 2006). One could argue that had a member had a partner that was listening and sensitive to their job related pressures those suicides may have been avoided as it has been argued above.

South African police members have over the years experienced medical boarding mainly due to psychological reasons (Nel & Burger, 1995) and statistics have revealed an increase in recorded alcohol, drug abuse and divorce by SAPS members (Marks, 1995). All this illustrates how dire the situation regarding stress the SAPS is.

As alluded to above, police officers are exposed to environmental sources of stress and these include personal, operational and organizational (Hart, Wearing & Headey, 1995). These stressors can affect the quality of the police officer’s personal life (family life). The nature of the work that police officers are engaged in requires a certain personality that will allow the officer to deal with the demands of their work while at the same time be a responsible father, spouse or mother at home. The reported events of officers failing to take the strain of their duties could stem from their personalities which will spill over to their family life.
Police work is often associated with high strain as evidenced by the severe psychological and physiological problems experienced by officers, such as burnout (including emotional exhaustion), marital problems, alcohol and drug abuse, heart disease, and suicide (Gaines & Jermier, 1983). All these health related outcomes affect the life of a police officer and broadly how they carry their demanding societal duties of both work and family.

Researchers have focused on the other Big Five personality traits and less focus has been placed on Conscientiousness. Amongst the police force conscientiousness has not been singled out as the moderating variable even though it has been proven by DeVries and Van Heck (2002) that conscientiousness is associated with higher personal accomplishment and Van Heck (2002) found that if one scored low on conscientiousness higher emotional exhaustion can be predicted and vice versa. There has not been much empirical research on police work stress in South Africa and that is cause for concern (Coetzee, 2004).

On that note, the present study deduces that if an individual has high conscientiousness they will not be affected by stress and thereby work family conflict or vice versa. However, individual differences are key determinants of an officer getting affected by stress and WFC. It is evident that police work is often cited as one of the most stressful occupations (Goodman, 1990; Burke, 1993). According to Costa and McCrae (1992) the basis of conscientiousness lies within individual differences among planning, organizing, and carrying out tasks. More specifically, the individual who scores high on conscientiousness is purposeful, determined
punctual, reliable, organized, strong-willed, and usually attains organizational success (Costa & McCrae, 1992).

Police officers are expected to exercise discretion under very critical circumstances. According to Louw and Viviers (2010), police officers have a social support base that can be spouses, partners, children or friends but that support can also be a stress source for police officers. Mathews, Deary and Whiteman (2009) allude to the fact that no one is immune to stress however, the impact stress has on people differs depending partly on one’s personality traits. No one has focused on the differences in personality traits and how one can deal with demands of work and family and remain stress free.

According to Louw and Viviers (2010), police officers are typical citizens in that they tend to have spouses, partners, children or friends that can be resources for social support, or a buffer against work stress. However, on that assertion, one can also mention that the same resources can bring stress to the police officer as Bakker, Demerouti, & Dollard (2008) state that the crossover (i.e. to spouses) and spillover (i.e. into other domains) effects of job demands and emotional exhaustion can be pervasive, negatively affecting police officers’ personal lives, and contributing further to work family conflict. One’s spouse can instead of relinquishing one from stress engulf one in stress.

According to Miller, Griffin and Hart, (1999) research has shown that conscientiousness moderates the impact of the role clarity and ambiguity on individual well-being. Role ambiguity has been found more to have detrimental effect
on well-being and to have less detrimental effects on conscientiousness. Aryee (1992) found a correlation between role stressor and WFC. McCafferty (1999) recommended that there be further research on personality within police force to help understand the individual differences within the police force. This recommendation comes after it was discovered that personality research was sketchy within the police force.

The conscientiousness personality trait was found by Bruck and Allen (2002) to be a moderator of the effects of WFC after their study hypothesised that those with conscientiousness are not affected by WFC. Such a study has never been undertaken in the police force with specific reference to one personality trait of conscientiousness as a moderator, which has been shown to resist stress and WFC. Jonker (2004) found a negative relationship between stress and personality traits, particularly, conscientiousness was found to negatively correlate with job demands which lead to stress. Jonker found that, SAPS members with willingness to work hard, with an orientation to achieve (conscientiousness characteristics) are negatively affected by stress (Jonker (2008)).

In a study undertaken in the Dallas Police Department, Chen (1993) job stress was found to have short-term and long-term effects on police officers. Chen (1993) also found stress to be the main reason behind deterioration in both physical and mental health, personality, family life, and job performance of police officers.
Based on the aforementioned;

The following questions were formulated;

- Do police officers who are high/low on conscientiousness record less/high or no stress at all?
- Do police who score high on conscientiousness record less work family conflict (WFC)?
- Does conscientiousness mitigate between WFC and stress, and thereby reduce the effects of stress as a result of WFC?
- Also based on Jonker (2004), the present study seeks to verify Jonker’s findings that illustrated a negative relationship between conscientiousness and stress.

1.3 Purpose of the study

First, individual differences with regards to how people balance work and family largely have been ignored (Sumer & Knight, 2001). It has been revealed by a few studies that there is a possibility that both work and family roles can have a positive or enriching effect on one another (Greenhaus & Parasuraman, 1999). The purpose of the present study is to advance previous research, examine conscientiousness as a moderator of work family conflict and stress.

The present study singles out conscientiousness because it has been proven by several empirical studies that it has a negative significant relationship to WFC and
stress. Engaging in work and family roles has been proven to lead to inter-role conflict (Greenhaus & Beutell, 1985).

The study aims to shed light on the question: what is the role of personality in relation to work-family conflict as the role of individual differences in this context has been thus far inadequately addressed (Byron, 2005). The aim therefore of the present study is two-folded:

(1) To investigate whether high or low conscientiousness explains the differences in work-family conflict experiences and in stress.

(2) To investigate whether conscientiousness moderates the relationship between work-family conflict and stress.

1.4 The objective of the study

The objective of the present study is to determine whether, conscientiousness moderates the relationship between WFC and stress. If a correlation is found that indicates that conscientiousness does moderate the relationship between WFC and stress, the study will propose that, selection of police with conscientiousness can best deal with stressful work events and can have a balanced WFC life. This study should be taken into consideration during selection of police officers.

1.5 Hypothesis

It seems likely that individuals who are conscientious will be more effective at managing their time, responsibilities, tasks, and conflicts that arise between the work
and home domains, and therefore, less likely to report WFC. The study is predicated on three statements which are;

Hypothesis 1:

$H_0$— There is no negative relationship between conscientiousness and WFC

$H_1$— There is a negative relationship between conscientiousness and WFC.

Hypothesis 2:

$H_0$— there is no significant negative relationship between conscientiousness and stress.

$H_1$— There is a significant negative relationship between conscientiousness and stress.

Hypothesis 3:

$H_0$— Conscientiousness does not moderate the relationship between WFC and stress.

$H_1$— Conscientiousness moderates the relationship between WFC and stress.

1.6 Significance of the study

Personality characteristics of police officers are main determinants of a police officer’s psychological wellbeing (Wearing & Hart, 1996a). Psychological well-being
is pivotal in the everyday functioning of a police officer who is often faced with stressful situations and expected to behave professionally. De Bruin (2001) suggests that prospective candidates’ personality must be assessed and those who score high on anxiety trait should not be considered for operational police activities because they will be prone to developing stress. The present study suggests that those that score high on conscientiousness should instead be given first preference.

The study suggests that personality determines performance and response to stress both at work and at home and that personality brings balance in work and family life, as a result, selection of recruits in SAPS must be based more on personality and less on cognitive ability which has been shown to have racial biases (Visser & Viviers, 2010). It is also on that reason that the study speculates that people high on conscientiousness trait are more durable to hardship and thus can better overcome stressful work events and as a result record lower levels of WFC and stress.

The present study suggests that personality traits of officers must be assessed prior to employment and conscientiousness as a personality trait must be prioritised. This proposition was also made by Knoertze and De Bruim (2001). Perhaps a combination of cognitive and personality assessment should be embarked upon when selecting best police officers to avoid any risk during the recruitment stage (Wearing & Hart, 1996a).
The next chapter will discuss theories that accompany the discussion on WFC, Stress and Conscientiousness. Studies that have discussed the three variables will also be reviewed.
CHAPTER 2

The aim of this chapter is to show a theoretical background of the study. The chapter will also review the concept of WFC, Stress and Conscientiousness in the literature in an attempt to locate the study to the whole body of literature.

2.1 Theoretical framework

Several theories have been proposed and used in the literature to explain why conflict between work and family roles may arise. Two theories namely: role and identity theories will be discussed below. The two theories propose that the relationship between work and family is predicated on how much commitment one has on each role, how much energy and investment one assigns to the two different roles and how these roles can interfere with one another.

2.1.1 Role theory

Past research and discussions on conflict between work and family have drawn causal relationships between the work and family domains from role theory (Edwards & Rothbard, 2000). Smoot (2005) defines a role as “a socially expected behaviour pattern usually determined by an individual's status in a particular society” as cited in Mish (1990:102). With regards to work and family, a role can be viewed as the assigned responsibilities and behaviours that a person has in either domain. According to the role theory view, it is assumed that both work and family entail
multiple roles, each of which places demands on a person (Edwards & Rothbard, 2000). Reward from meeting the demands of these roles enhance a person’s role performance and that will bring extrinsic and intrinsic rewards which are assumed to lead to positive mood whereas a lack of reward will lead to stress (negative mood).

When negative mood strikes, an individual must try to cope with the domains of each role. According to Edward and Rothbard (2000) one will be trying to cope with the negative mood (stress) in an attempt to enhance wellbeing in both roles which will in turn enhance wellbeing. Conflict between work and family roles that arises according to role theory may be time-, strain-, or behaviour-based which are also dimensions of WFC. The role may interact negatively because of time constraints, strain or behaviour discrepancies Edward and Rothbard (2000).

2.1.2 Identity theory

According to Burke, (1980) identity theory, individuals have numerous roles that are arranged in order of salience, priority and importance to that person. The role that an individual identifies with will spur certain action in support of the identity. For example, one who is a father and an employee may place more salience on his role as a father because he identifies more with that role than the role of an employee and he will as a result spend more time fathering than being an employee. Now, depending on factors at play between the two roles, the theory purports that strain, time and behaviour-based conflict may arise (Burke, 1980).
There are two perspectives that have looked at the identity issue in terms of role salience which are the scarcity perspective and multiplicity perspective. Scarcity is concerned with resources that an individual does not have to fulfil various roles and as a result cannot have identities with both roles at once meaning they can only participate on one role and make the other role suffer (Bailyn, 1978). However, the multiplicity perspective asserts that one is able to commit to both role and have identity with more than one role without the other suffering as long as commitment is there (Marks, 1977). That is where in personality (individual differences) plays a role, where if one with conscientiousness traits will have a balance on both role because one of the characters associated with conscientiousness is commitment as literature below will reveal.

The identity theory is concerned with the salience or the identity with the roles that matter. Role importance also known as role centrality (Martire, Stephens, & Townsend, 2000), role commitment (Brown, Bifulco, & Harris, 1987), and personal involvement (Frone, Russell, & Cooper, 1995) is said to provide individuals with meaning, self-worth, and purpose. A role is said to provide one with meaning, self-worth and purpose (Frone, Russell & Cooper, 1995) as such a role should contribute to psychological wellbeing of an individual positively. Hence the multiplicity perspective that proposes that one is able to commit to both roles.

A deduction can be made from both these theories role theory and identity theory that they focus on how people perceive both their roles in workplace and at home, and also the conflict that arises between these two roles. From the argument above, role theory explains how work and family include various roles, which place
demands on a person. These demands can overlap, thereby causing conflict to arise. Identity theory asserts that people have multiple identities in their lives, and the importance that they place on these identities or roles is what influences whether conflict occurs. The importance of and commitment to a particular role is shown in the literature to affect the interference between work and family roles (e.g., job involvement and family involvement.

Both theories are key in understanding the variables that the study will focus on which are WFC, Stress and personality trait of Conscientiousness. The way that conflict between work and family occur and the perceptions that one has of the interactions between work and family roles and coping may be due to how one places priority on their identities and the argument is a conscientiousness personality who identifies with both roles will cope with both roles’ demands and will not be affected by stress and no conflict will arise because the time, strain and behaviour will be dependent on the personality of that individual. This section has described two of the most prominent theories used to explain why conflict may occur between work and family roles.

2.2 Literature review

2.2.1 Introduction

The focus of this section is work conditions or characteristics, family characteristics and the spill over effect between work and the family. The chapter will also review previous literature on work family conflict first, stress in relation to the
study in question and the moderating variable of Conscientiousness will be looked at last in this chapter.

2.2.2 Difference between Work and Family

According to Tsai (2008) WFC research begun in the 1980’s with a focus on the negative affluence of the two roles (Work and Family). Tsai (2008) argues that the research interest in WFC was due to a sharp increase in the number of women who were seen joining the workforce. Traditionally, working has mostly been associated with men so this change called for research considering the changes this phenomenon brought within families. Work family conflict is a concept with two key words in it and the present study will briefly explain these two words work and family.

2.2.2.1 Work:

Edwards and Rothbard (2000) defined work as an important activity that is aimed at providing goods and services in support of one’s life. Intrinsic and extrinsic rewards can be received from work, however; its main purpose according to Edward and Rothbard (2000) is provision of extrinsic rewards. Work role characteristics include the demands of the job, scheduled work time including the amount of time available to participate in work role.
2.2.2.2 Family:

Family is defined as a close domestic group that is composed of people related by “blood, sexual mating or legalities” (Scott & Marshall 2005). Edwards and Rothbard (2000) expand the definition of a family, opining that these individuals in a family are related by biological ties, marriage, social customs or adoption. This means, even if one is not biologically or legally related but if they are part of the “group” they form part of family as long as they are intrinsically rewarded for being member to the unit.

Anderson and Sabatatelli (1999) defined family as a group with a complex structure, made up of interdependent individuals, with the same history, emotionally attached to each other, work together to support each member of the group and responsible for the survival of the whole group. The assumption that work and family are separate spheres and in competition for resources such as time and attention continues to be dominant in our society (Barnett, 1998).

However as alluded above the focus has shifted from making a father the sole provider of a family, in some families, women (mothers) too have taken up the responsibility of being providers too. Ferreira (2007) writes that, a “nuclear family” serves two roles that of socialisation of children and stabilisation of adult personalities.

According to Bianchi (2000) the changes in the labor force that has seen more women joining the workforce as a result men are now also expected to spend time
with their children. Apart from employment contribution, child rearing has also now become a responsibility of man including other domestic roles that used to be a solely women roles writes Bianchi (2000). Having the major responsibility for childrearing may be the significant contributor to work-family conflict (Bohen & Viveros-Long, 1981).

Bianchi (2000) states that although participation in the labor force has risen rapidly for mothers, the time that mothers spend with children is relatively stable over time and in marriage, fathers are spending an increasing amount of time with their children. According to Quadagno (2004) men’s household chores have doubled over the years. Quadagno (2004) argues that though there have been changes in roles men exercise, women are still having a primary responsibility to take care of their homes and care for their children.

Presser (2000) writes that women’s unavailability to fulfil traditional home duties leads to marital disharmony. According to Bowen (1998) the family gets affected negatively when work issues spill over to family more especially for married men and women. When work issues spill over into family, the family gets negatively affected particular married man and women (Bowen 1998).

2.2.2.3 Role conflict

The concept of role conflict has been defined by different researchers and different meanings have as a result. The focus of the present study was on the following definition of role conflict;
2.2.3 What is role conflict?

Understanding what a role is will give more clarity on why individuals experience conflict between two roles namely family and work. Biddle (1986) defined role conflict as a “concurrent appearance of two or more incompatible expectations for the behaviour of a person. According to Carlson (2003), roles allow one a social status and define who and what they are. Newman (1997) states that the behaviours and expectations of certain roles are so powerful that individual’s experience role conflict when the individual is in two conflicting statuses at the same time and the demands of one role conflict with the demands of the other.

When two demanding roles are in conflict with each other, the individual could feel very conflicted and the obligations of one role could be neglected to meet the demands of the other; with specific reference to the research study, the individual could neglect some of the demands of the family (role obligations) on a daily basis during the weekdays by meeting the demands of work (job demands).

Conflict between work and family roles has been defined as a form of inter-role conflict in which work and family role demands are mutually incompatible, such that if one is to meet the demands in one domain, it is difficult to meet the demands in the other domain (Adams, King, & King, 1996).
2.2.3.1 Work Family Conflict (WFC)

An individual has time, energy and commitment that he/she is expected to exercise in both work and family roles that results in pressure to the person concerned since all these roles have individual demands that must be fulfilled. Kahn et al (1964) referred to this phenomenon as WFC.

2.2.3.1.1 Work Family Conflict defined

Work family conflict is a form of inter-role clash where pressures from work and family are incompatible with one another. Participation in one role will lead to incompatibility to participate in another role. Lobel (1991) argue however that, participation in several roles may not always lead to conflict, based on the social identity theory; Lobel argues that one can achieve work family balance and this can be achieved through application of consistent personal values across all the roles one identifies with. Rothbard (2001) writes that; the greater the number of roles one is committed to the greater the benefit as opposed to the assumed drainage.

Work Family Conflict which emerged in the 1980s owing to an increase of women participation in the workforce has been viewed as a global, bidirectional, non-dimensional construct where roles interfere with each other (work & family) write Cook and Rousseau (1984). It occurs between work and family roles. Work-family conflict is conceptualized as the consequence of “resources being lost in the process of juggling both work and family roles” (Grandey & Cropanzano, 1999:352).
The changes in representation of all genders in the workforce that has seen more women joining the force led to a change in the traditional view of holding man as breadwinners and women as “kitchen unpaid” caregivers. WFC is believed to have an influence on the quality of both work and family life of one involved in the roles (Adams, King, & King, 1996). When the conflict arises extrinsic and intrinsic rewards may not be attainable then conflict then becomes aversive (Edwards & Rothbard, 2000).

According to Bolger, DeLongis, Kessler and Wethington (1990), having multiple roles can positively affect both men and women as opposed to the aversive view but instead enhancing one’s psychological well-being (Thoits, 1983) and personal worth and security feelings (Sieber, 1974). Kessler and McRae (1981) discovered that mental health benefits associated with a paying job were less for women who had children than for those that without children on the study.

Furthermore, because resources are not limited to concrete reserves, the inclusion of personal characteristics and conditions allows for exploration of how cultural contexts influence work-family conflict. The phenomenon of WFC cannot be studied in isolation from Family-to-work conflict (FWC).

Wiley (1987) views FWC as a related but distinct phenomenon to WFC. WFC implies that work interferes with family and FWC implies that family interferes with work. Netemeyer, James, McMurrian (1996) defined the family-work conflict facet as role conflict resulting from general demands and strain created by the family interfering with an employee’s ability to perform responsibilities related to work.
Edwards and Rothbard (2000) opine that processes and effects of work and family are bidirectional where work affects family and family also affects work.

According to Greenhaus and Parasuraman (1999) WFC is more likely to occur than FWC. The arguments deduced from that statement is that, one is allowed an element of lee-way to meet family demands than demands of work. Byron (2005) discovered that work demands have a greater impact on work-to-family conflict. These two facets when combined form one overarching work-family conflict construct.

Generally as noted above, WFC has been used to refer to conflict between work and family roles which FWC forms part of. The present study will use WFC referring to specific impact of the role of work on the family role resulting to conflict. To expand the concept of WFC, Greenhaus and Beutell (1985) distinguished between three forms of conflict between work and family roles namely; time, strain-based and behaviour-based conflict.

According to Parasuraman and Simmers (2001) work demands and family demands strive for the person’s time and energy. This translates to the view that, the greater the number of hours spent at the work, the less the time and energy left to spend with the family. Work-family conflict also has been associated with the amount and frequency of overtime and the presence and irregularity of shift work (Pleck Staines & Lang, 1980). Time-based conflict occurs when devoting time to one domain whether work or family, takes away from time that one would normally have spent on the other domain. According to Byron (2005) long work hours, schedule
inflexibility, shift work requirements, and overtime/evening duties are determinants of WFC. Large families, which are likely to be more time demanding than small families, also have been associated with high levels of work-family conflict (Cartwright, 1978; Keith & Schafer, 1980).

Bianchi (2000) further states that there could also be the underestimation of how women’s changed roles in the labour force are changing men’s domestic roles and this includes men’s amount of time involved in child-rearing. Bianchi (2000) argues that when there are changes in the workforce structurally, parent’s time with children gets affected since it becomes hard to strike a balance between work and family and a conflict arises between the two roles.

The source of pressures outlined in the paragraph above can either arise from work (Jones & Butler, 1980) and become work stress or the family domain (Holahan & Gilbert, 1979) and become family stress. Work stress is caused by conflict within one’s occupational role, work role ambiguity, and work role overload (Kahn & Byosiere, 1992) and leads to role pressure and incompatibility (Greenhaus & Beutell, 1985). Family stress includes those life events stressors or occurrences of sufficient magnitude to bring about change in the family system (Hill, 1949).

Time-based conflict is evidenced when time pressures of one role prevents an employee from being able to allocate time to meet the demands of another role (Greenhaus & Beutell, 1985; Kelloway, Gottlieb & Barham, 1999). Presser (2000) comments that in terms of time, women are not at home long enough to take on traditional home obligations and this causes marital disharmony. Some researchers
have argued that female roles in the family structure that of providing warmth, security, and emotional support and a male’s role is achievement orientated and revolves around working and is it leads to stress (Haralamos and Holborn 2000).

According to Bohen and Viveros-Long (1981), both time and strain-based conflict in the case of WFC affect variables such as the size of family, the age of the children, the number of hours worked outside the home, the level of control one has over one’s work hours, including how flexible one’s work hours are and the social affect WFC. Strain-based conflict takes place when the tensions occurring from work bars one from performing duties in the family role. The strain one experiences from one role crosses-over and interferes with full participation in another role.

According to Greenhaus and Beutell (1985) strain-based conflict occurs when pressure or strain from one role (work) affects how one performs in the family role. It is assumed that strain leads to a decrease in resources, such as energy and motivation that are needed to perform a role. Therefore, if these resources are reduced due to one domain, then the other domain’s roles are not fulfilled. Strain-based conflict does not necessarily mean that the work and family roles are conflicting with each other, but rather the resources that a person has are depleted.

According to Greenhouse and Beutell (1985) the last antecedent which is referred to as behaviour-based conflict takes place when behavioural patterns required and exhibited in one role are incompatible with those required for another role. During behaviour-based conflict, one finds it hard to adjust his/her behaviour based on the required role demands to be fulfilled of another role. In keeping with the
bi-directionality of the construct, Greenhaus & Beutell (1985) suggested that there are both work and family related sources of both time-based and strain based conflict. However, researchers have found it difficult to operationalize behaviour-based conflict, and as a result little is known about this form of conflict (Kelloway et al., 1999).

According to Keene and Quadagno (2004) one can make a determination as to whether men and women are able to manage demands from work including family according to the proposed three factors; work role characteristics, family role and spill over. An individual has time, energy and commitment that he/she is expected to exercise on both work and family roles that results in pressure that to the person concerned since all these roles have individual demands that must be fulfilled.

Although these three forms of conflict between work and family have been proposed in the literature (Greenhaus & Beutell, 1985), strain- and time-based conflict are reported to be experienced more by individuals than behaviour-based. As will be discussed later, the variables most often found to be related to conflict between work and family roles are things that are more time-based (e.g., job and family involvement, number of hours worked) and strain-based (e.g., job and family stressors, role conflict and ambiguity, parental demands) than they are behaviour-based.

Furthermore, individuals who experienced work-family conflict have been found to incur increased health risks, inadequate performance in family roles (e.g., marital partner and parent), reduced family and life satisfaction, and poor marital
adjustment (e.g., Bedian, Burke, & Moffett, 1988; Boles, Johnston, & Hair, 1997; Burke, 1988; Higgins, Duxbury, & Irving, 1992; Hughes & Galinsky, 1994; Suchet & Barling, 1986) Kelly and Voydanoff (1985) state that the multiple roles of worker, parent and spouse place demands on the individual in terms of time, energy and commitment to enact the role competently.

Kelloway et al. (1999) in examining the nature and direction of work-family conflict via a longitudinal study, hypothesized that time-based work interference with family and family interference with work, and strain-based work inference with family and family interference with work would predict a participant’s experiences of stress and intention to turnover.

The fourth major source of stress in police work involves work/family relationships. Research on work/family interface have long recognized that the personal lives of police officers are affected by the unique nature of police work which, in turn, makes officers perceive their job as more psychologically and physically stressful (Hughes et al., 1992). Several studies have identified work-family conflict as an important predictor of psychological burnout among police officers. This is particularly true for female officers because the demands of their domestic role as wife and mother are greater than those of male police officers (Martin, 1980).
2.2.3 Stress

Stress will be discussed in relation to the present study's direction with special reference to work and family domains that are potential sources of stress.

2.2.3.1. Stress defined

Stress differs from individuals to individuals. What is stressful to one person might not be stressful for the next person. Stress has been defined from different theoretical foundations in terms of how it works and how it leads to health problems. According to D’Zurillo (1990) researchers are still grappling to find an acceptable definition of stress. According to Cox et al (1995) stress is conceptualised and defined based on three approaches which are engineering, physiological and psychological approach.

According to the engineering approach, stress is viewed as a characteristic of the environment with regards to the demands the environment exerts on an individual. Physiological approach defines stress according to the biological changes one goes through when one is in a stressful mood. Lastly, the psychological approach defines stress based on Syle’s definition that, stress is “the non-specific result of any demands upon the body, be the effect mental or somatic (Syle, 1982, p.7) the definition considers stress as dynamic and determined by how one interacts with the their environment( Cox, Griffith & Rial-Gonzales, 2000). The psychological viewpoint is perhaps the most popular conceptualisation today and is considered superior by Cox and Griffiths (1995) as the engineering and physiological
approaches treat people as passive vehicles for stimulus and response, and cannot account for the effects of cognitive or situational factors on performance and well-being.

Stress should not be divorced from the perceived dangers by an individual of the environment (Speilberger, 1983). Lazarus (1966) emphasised the effect of environment on stress, Lazarus argued that both external conditions and self-evaluation processes, personal resources and the outcomes of all that both psychological and physical outcomes. According to Spielberger, Vagger, and Wasala (2003) stress is recognised as a complex process and can be categorised into three mechanisms namely; sources of stress, individual perception of a particular stressor and the emotional reaction exhibited by one.

The stress that originates from demands of the job whether psychological or physiological is referred to as mind-body arousal. If a situation one is faced with they view it as threatening then one may react with anger and anxiety activating autonomic nervous system. If the reaction continues to be severe the resulting physical and psychological strain may cause adverse behavioural consequences (Spielberger et al, 2003).

Generally, stress can be defined as any circumstance in which external or internal demands or both strain or surpass the adaptive resources of the individual (Monat & Lazarus, 1977). Rice (1998) refers to the demands as stressors. As Rice (1998) alluded to stress and distress are terms that can be used interchangeably.
The present study will look at stress associated with police occupation and stress experienced at home by officers due to the point that according to Pearlin (in Scheiman, Whitestone & Van Gundy 2006) conditions of one role may be stressing that they influence or spill over into other roles. Marks, et al argue that it is important then to understand how exposures to one role affect functioning in another role; they argue that, the information will help understand why and how such occur.

Occupational stress is defined as mind-body arousal resulting from the physical or psychological demands associated with the job. The appraisal of stressor that threatens leads to the emotional arousal of anxiety and anger and the associated activation of the autonomic nervous system. When both physiological and psychological strain continues it can have adverse behavioural consequences (Speielberger et al., 2003).

Lord, Gray and Pond (1991); Muntaner, Tien, Eaton and Garrison, (1991) related occupational stress with heart diseases, hypertension, upper respiratory tract infections, reduced immunity, migraines, alcoholism, depression, suicidal tendencies, anxiety, including other mental disorders.

2.2.3.2. Occupational stress of SAPS

According to the Spielberger State-Trait model, In the workplace, employees judge their work environment according to how frequently and severely certain job demands and pressures and the level of support provided by other employees (supervisors and co-workers), as well as organisational features (policies and
procedures) take place (Spielberger, Vagg, & Wasala, 2003). In accordance with the STP model, two categories of occupational stressors in policing have been identified (Alexander, Walker, Innnes & Irving, 1993; Biggam, Powers, McDonald, Carcary & Moodie, 1997; Brown & Campbell, 1990, 1994). Organisational aspects of police work, such as a lack of confidence in management, lack of internal communication and continuous organisational change represent the first category of significant stressors.

The second category includes the nature of police work, such as physical threat, force, and exposure to danger, facing the unknown and shift work come into play. The organisational aspect has been identified as the most prominent of these (Crank & Caldero, 1991; Crowe & Stradling, 1993; Evans et al, 1992; Hart et al, 1995; Kop & Euwema, 2001).

Gulle et al. (1998) conducted a study that explored inherent and organisational stress in the South African Police Service. It included 91 Police members ranging in ages from 21 to 53 years with the sample consisting of 85 males and 6 females. This study indicated that in comparison to American stressors, which were all inherent in the nature of the job, South African police stressors were among the more organisationally-oriented stressors. Violanti & Aron (1993) found the South African sample displaying a greater degree of stress than the USA sample. The way in which the SAPS operate creates stress in addition to the inherent pressure already existing as a result of the nature of police work. The study also found that excessive paperwork, insufficient person power, fellow officers not doing their job,
inadequate or poor quality equipment and inadequate salaries were cited among the stressors which occurred most frequently within the police.

Basson (2005) reported that police units involved with family violence, child abuse and sexual offences had 254 vacancies (20% of total number of jobs). The average number of criminal cases managed by each detective vary from 32 (Northern Cape) to 52 (Eastern Cape), with a national average of 43, whereas the ideal is that each detective should not investigate more than 18 cases. Therefore police member’s (detectives in particular) experience high job demands (Pienaar & Rothmann, 2006).

Martocchio and O’Leary (1989) conducted a meta-analysis of studies investigating the relationship between gender and occupational stress and concluded that there were no differences in experienced stress between males and females. International studies showed that police officers report varying amounts of work stressors on the basis of rank (Brown & Campbell, 1990; Brown et al, 1997; Kaufmann & Beehr, 1989), race and ethnicity (Violanti & Aron, 1993), and gender (Wexler & Logan, 1983). Cooper and Bramwell (1992) indicated that potential sources of stress varied between different sub-cultures and status groups within the same organisation. Terry & Calan (1997) showed that those higher in the organisational hierarchy experience higher levels of perceived stress.

According to the transactional process model individual differences play a pivotal role in personality traits in an attempt to rationalise the effect of a stressor in the workplace by an individual (Spielberger et al 2003). Occupational stress has
different effects for different individuals taking into account their personality traits. The job demands and pressures exerted by a job to one determine how that individual will evaluate his/her work environment not passing features of the organisation such as policies and procedures including support from other officers.

2.2.3.3. Potential stressors within the police service

The present study’s focus is on stress that is experienced at work and at home due to the characteristics of police work and conditions they work under considering the demands of police work. Police work is demanding and the demands such as overtime work, overload etc affect the fulfilment of the family functions and the roles on daily basis during the work week and at times during weekends depending on the work schedule.

Researchers have registered two categories as occupational stressors within the police work (Brown & Campbell, 1990). Lack of internal communication and continuous organisational change represent the organisational stressors in the police work with officer’s lack of confidence in management included. Stromnes (1999) writes that, the recent political change is South Africa has impacted significantly on the SAPS and has created uncertainty and turmoil among police officers. The political changes include the dissolution of the apartheid in South Africa which led to more demands being placed by the community the service of policing is for (community).
The second category is more on the work that police officers are engaged in, the nature of their work is mostly associated with force, exposure to dangerous events/circumstances, physical threat, facing the unknown and shift-work. Kop & Euwena (2001) identified organisational aspect as the most prominent stressor in the police work. A research conducted by Gullet et al (1998) within SAPS confirmed that organisational stressors are other stressors associated with the nature of police work in SAPS were excessive work/job, low pay including poor working hours.

Louw and Makgala (2003) indicate that stress within the police officers is as a result of job demands, lack of resources and job dissatisfaction (both extrinsic and intrinsic). According to Wiese, Rothman and Storm (2003) as discovered by Louw and Makgala (2003), stress comes as a result of demands of a job which leads to exhaustive and cynicism which can be reduced through emotional support. Grundy (2000) argues that one’s susceptibility to stress can be drawn from the personality traits that one exhibits. Personality involves, “a person’s characteristic patterns of thoughts, behaviour, and feelings” (Carver & Scheier, 2005, p. 78).

Nearly everyone experiences psychological stress however their responses to stress differs including the amount of stress they are exposed to. Nesselroade (1988) called this phenomenon of variation of individual effects of stress as Intra-individual variability. The present study focuses on one personality trait which has been scientifically proven to be associated with overall work performance. Generally, personality traits are valid predictors of job performance (Barrick, Mount & Judge, 2001). Conscientiousness has been found to be a valid predictor of job performance better than cognitive ability (Avis, Kudisch, & Fortunato, 2002). Cognitive ability
assessment has been viewed to favour one race over the other during selection than focussing on performance (Hunter & Hunter, 1984).

The trait theory defines personality from a collection of features based on how one behaves, thinks, feels and reacts (Reber, 1995). Conscientiousness is associated with self discipline, achievement striving, dutifulness and competence and a high degree of commitment (McCrea & Costa, 1996). Individuals high on conscientiousness are often dependable, work-hard, achievement oriented and are preserving. Scheufeli, Enzman, Storm and Rothman (2003a) correlate conscientiousness with higher personal accomplishment. Conscientiousness personality trait is further associated with depersonalisation (Storm & Rothman 2003a). Personality is associated with stress effects.

Stress due to due job demands has been found to negatively affect conscientiousness and stress due to lack resources in the organisation (Jonker, 2004). Job demands such as role ambiguity, role conflict, stressful events, heavy work load and work pressures all relate to exhaustion amongst SAPS members and exhaustion correlates strongly to stress due to lack of resources (Kleyn, Rothmann, Louw, & Makgala, 2003).

Storm and Rothman (2003a) found a correlation between exhaustion and stress, a conclusion is therefore that, due to certain job demands lead to exhaustion which in turn significantly correlates with stress amongst members. Schaufeli and Enzmann (1998) and Storm and Rothman (2003a) found a significant relation between professionalism and conscientiousness, this relates to a conclusion drawn
by Jonker (2004) that, hard-working SAPS members with an innate achievement orientation will record a higher level of “professional accomplishment” due to job demands.

Jonker (2004) also found neither impact nor effect of stress due to job demands and SAPS members who scored high on conscientiousness however, the findings could not be found to verify Jonker’s findings. Due to the hard working and duty together with the need to achieve (achievement orientation) of conscientiousness individuals, SAPS members who are high on conscientiousness will persevere in their job environment regardless of insufficient resources.

Jonker concluded that SAPS members who are introverts and those without orientation of achievement and hard work are prone to experience stress in the organisation (Jonker, 2004). Personality may lead to different exposure to numerous events that one deems stressful and individual differences will determine reaction to stress (Bolger & Zuckerman, 1995). McCrae and John (1992) found conscientiousness individuals as engagers in problem solving when confronted with a situation and unleash their planning characteristic to overcome the challenge unlike neuroticism that is associated with worry.

2.2.3.4. Sources of police stress (organisational and nature of work/inherent)

The STP model categorises occupational stress in policing into two namely (or sources of police stress); organisational and the nature of police work. Organisational category includes organisational aspects of police work and these
include lack of confidence in management/reduced confidence by officers over management, lack of internal communication and continuous organisational change. This is important in that role stressors have been related to WFC (Aryee, 1992). Van der Walt (2002) confirms that SAPS has undergone transition from being a force into a service and community based and driven including changes in rank structures and need to adhere to affirmative action policy. The nature of police work includes physical threat, force and exposure to danger, facing the unknown and shift work.

The two categories mentioned will be discussed below. Kroes (1976) was among the first researchers to implicate contemporary policing as a potentially stressful career. Similarly, Reiser (1974) stated that police work is not only a high stress occupation, but it also affects, shapes and at times scares the individuals involved and their families. Manolias and Hyatt-Williams (1986) supported this sentiment by stating that police work has been identified as the most psychologically dangerous job in the world.

2.2.3.5. Organisational category

According to Crank and Caldero (1991), organisational stressors are viewed as the most prominent. The police organization is faced with hierarchical and administrative ineffectiveness. Organisational stressors affect performance and motivation of an officer, the cost of caring for health increases, sick leave, absenteeism including turnover (Aldana, Sutton, Jacobson & Quick, 1996). The study that was conducted by Gulle et al. (1998) that compared stress felt by American police with that felt by SAPS revealed that organisational stressors were
the highest stressors felt by SAPS members. Some of the organisational stressors include poor quality. It has been recorded in research that police illness rates have increased, post-traumatic stress, medical boarding, burnout, alcohol abuse and suicide including decreased levels of job satisfaction and job performance compared to general population norms (Anshel, 2000; Rothman & Agathagelou, 2000, Rothman & Strijdom, 2002).

According to Gross (1980), most countries with South Africa included a quasi-military structure of the police service as the order of the day, with rigid authority, impersonality and authoritarian command system that subjects the officers to strict discipline. Golembiewski and Kim (1991) argue that, the quasi-military nature of the police organisations cultivates the spirit of alienation among police officers. The hierarchical structure of SAPS bestows its own stress on police officers. Studies internationally have revealed that police members stress differs in terms of ranks (Brown & Campbell, 1990), race and ethnicity (Violanti & Aron, 1993) which are as a result of the organisational change in South Africa from apartheid to a democratic society, including gender (Wexler & Logan, 1983). According to Cooper and Bramwell (1992), different subcultures and status groups determine sources of stress in on organisation.

Three most prominent individual stressors with regard to the organisation are lack of supervisory and poor management skills, ridiculously inappropriate courts sentences with emotional detachment from the family (Koortzen, 1996). As Koortzen specified that individual stressors in SAPS, Violanti and Aron (1993) reaffirms that argument that, stress is not experienced by police members uniformly it varies from
person to person. Personality traits are believed to play a pivotal role in the effects of the occupational stress (Cooper, Kirkealady & Brown, 1994, Davey 1994). In a meta analysis conducted by Martocchio and O'leary (1989) it was discovered that occupational stress affects both males and females.

On that note, Gerson (2002) allude to the fact that, in an attempt to bring balance between economic provision and time to spend with family, parents face a dilemma. Explicitly, a conflict that will lead to productivity and low family functioning will be experienced (Glass & Estes, 1997). Reiser (1974) stated that when occupational stress is high, the family of the individual involved will be affected. Police officers who recorded psychological burnout which is as a result of too much stress are more likely to be angry, be away from family, and be less involved in family matters. Automatically, the family will suffer as a result since relations with spouses/children will be compromised.

Burnout symbolises a long-standing stress effect, Maslach (1998) defined burnout as an emotional exhaustion syndrome characterised with depersonalization or feelings of low personal accomplishment. Of these two categories, Stratton, Parker, Snibbe (1984) found that police officers reported administrative issues (external stressors) to be more stressful than life -threatening situations (work itself). These findings were confirmed by Reiser (1974) who identified the nature of the police organisation as the key contributor to stress among police officers.

Exhaustion and WFC has been associated with job demands such as work overload, complaining clients, lack of job resources. Autonomy, performance
feedback has been also associated with exhaustion and WFC effects (Bakker & Geurts, 2004, Koekemoer & Mastert, 2006), and studies indicate that exhaustion is amongst the psychological consequences of negative interference between work and home (Burke, 1988; Kinnun & Mauno, 1998). According to Bakker et al (2003), job demands may lead to fatigue and health problems. According to Jansen et al (2004) an individual has limited resources to manage work activities (e.g. insufficient support from his/her supervisor, or unclear instructions or targets), that will lead to spill over with negative connotations from work to home. This brings the study to the second category which is the nature of police work.

2.2.3.6. Stressful nature of police work

According to Meadows (1981) police work is both broad and complex. Syle (1978) referred to police work as a highly stressful occupation with hazardous effects. The hazardous nature of police work has a lot to do with the need to respond to both criminal and non-criminal situation. According to Anshel (2000), three postulates in stress associated with police officers associated with police officers can be distinguished namely; the extreme external circumstances that an officer perceives threatening lead to changes in psychological, physiological and behavioural response of police officers, secondly, failure of an officer to effectively cope with sudden stress that they face will lead to long term chronic stress which will have effects on the health generally of an officer e.g. inhibit the body of an officer’s immune system which will lead to diseases and medical illnesses and lastly, police stress due to the nature of police work will lead to reduced police motivation which
will in turn affect performance and effectively one will lead to one leaving the profession (Violant & Aron, 1993).

According to McCafferty, Godofredo, Domingo, and McCafferty, (1990) riots, criminal activities, corruption, injury or death are about some of the activities that police officers get involved in. These officers are expected to cope in deeply depressive social situations such as hostage situations, raid situations, scenes of abuse, murder etc (Williams, 1987). The death of a partner during the line of duty or having to take a life was rated top in terms of stressors by police officers (Violanti & Aron, 1993).

Turco opined that the most dramatic part of police work is the carrying out of their duties involving the need to kill (1986). Turco (1986) added that the exposure to such events impacts significantly on the officer's personality and general wellbeing including the lives of those close to them. Meadows (1981) affirm the view that, the horrific act that officers get exposed to impacts negatively on their psychological health.

Bonifacio (1991) comments that the nature of police work provides evidence that really the stress levels experienced by police officers are high and exact an emotional toll on the officers. Most researchers agree with Oliver (1993) who stated that violence in a suggestive or concrete form seems to have been ever present in the history of public order policing. In fact, it may be said that at some time or another every police officer is exposed to violence, becomes a victim of violence or uses violence against offenders (Nel, 1994).
Stressful work characteristics are consistently found to be related to WFC (Bakker & Geurts, 2004; Janssen, Anderies, and Walker (2004); Montgomery, Collins, Buffington, Abbe, 2003). According to Janssen et al. (2004), negative WFC is associated with job demands, including psychological and emotional demands. Employees who experience a high level of WFC are those who also report high work role conflict and work role ambiguity (Carlson & Perrewé, 1999; Grandey & Cropanzano, 1999), pressure at work (Frone, Russell & Cooper, 1992; Grzywacz & Marks, 2000) and work overload (Geurts, Rutte & Peeters, 1999). Several studies have also indicated that job resources can have a facilitating effect on WFC (Carlson & Perrewé, 1999; Grzywacz & Marks, 2000; Kinnunen & Mauno, 1998; Kirchmeyer & Cohen, 1999; Moen & Yu, 2000).

2.2.3.7. Conscientiousness

The study of personality has been in existence since the 1900s and has been termed either “Personality psychology or Personology” by researchers. The study of personality is concerned with people’s characteristics, tendencies to behave, think and feel in certain ways and attempts to measure those differences (Arnold, Cooper & Robertson, 1995). Personality reflects characteristics of individual’s behaviour and is what makes one different from others in terms of how they think, feel, behave or adapt to various situations. Personality involves “a person’s characteristic patterns of behaviour, thoughts, and feelings” (Carver & Scheier, 2000, p.5). According to Twersky-Glasner (2005), attributes such as courage, authoritarian, cynicism and aggression are about some of the common characteristics.
A trait is viewed as a “general mode of behaviour or a form of readiness to respond with a marked degree of consistency to a set of situations that are functionally equivalent for the respondent” (Freeman, 1964:556). According to Mathew, Deary and Whiteman (2009), traits are stable over time. Mathew et al (2009:3) further write that, “....traits directly influence behaviour”. Neill views traits as qualities and characteristics of a person (2003).

Personality traits are relatively stable features that one is responsible for and allows for the consistency in behaviour (Louw, Van, Eden and Louw (1998). Personality traits have been shown to be related to job performance (Barrick & Mount, 1991) stress and depression (Slaney, Ashby, & Trippi, 1995). According to McCrea and John (1992) there is one comprehensive description of an individual’s trait and that comprehensive description is the Big Five factor model. The Big Five factor model is a “hierarchical organisation of personality traits in terms of five basic dimensions: Extraversion, Agreeableness, Conscientiousness, Neuroticism, and Openness to Experience” (McCrae & John, 1992, p. 175). The five-factor model is a “hierarchical organization of personality traits in terms of five basic dimensions: Extraversion, Agreeableness, Conscientiousness, Neuroticism, and Openness to Experience” (McCrae & John, 1992, p. 175).

These five orthogonal factors of personality have emerged in self-reports and ratings, natural language studies, and theoretically-based questionnaires (McCrae & John, 1992). According to McCrea and Costa (1990) hundreds of personality traits proposed by theorists were organised into five factors to allow for an enduring convergent and discriminant validity across decades in adults.
Fleeson (2001) argues that, the organisation of the personality traits helps in describing behaviour and categorising it. There is still a great need to study extensively the big-five personality traits in relation to WFC. Few studies conducted have found Conscientiousness to be related to lower levels of WFC while Neuroticism was related to higher levels of WFC and Extraversion was not related to WFC in a study conducted by Wayne, Musissa and Fleeson (2004).

Now, personality has been suggested by many researchers as determinant of how individuals appraise stressors (Bolger & Zuckerman, 1995, Lazarus & Folkman, 1984). Personality may result to different exposure to stressors and different reactivity to the stress can be sort (Bolger & Zuckerman, 1995). Personality traits are predictive of job performance and may be even more predictive than cognitive ability for certain jobs.

It gives the researcher pleasure then to choose to investigate the impact that conscientiousness has on how one gets exposed and reacts to stress and WFC and to predict task performance (Ones, Viswesvaran, & Schimdt, 1993). Conscientiousness has been shown to be related to social environmental factors such as marriage and work (Robert & Bogg, 2004).

However, not much research has been conducted regarding conscientiousness in relation to improved health matters such as stress (Vollrath 2001) and high socioeconomic status (Judge, Higgins, Thoresen, & Barrick, 1999), marital stability (Cramer, 1993) including healthy lifestyle behaviour (Robert & Bogg, 2004).
Conscientious individuals tend to plan their activities (McCrae & John, 1992), so it is not surprising that they tend to engage in problem solving behaviours such as planning (Vollrath, 2001). According to John and Srivastava (1999) Conscientiousness refers to individual differences with regards to tendency to follow norms as a driving force without thinking, to be task and goal-oriented, to be planful, to delay gratification and follow norms and rules. Hough (1992) and Mount and Barrick (1995) opine that conscientiousness can be divided into achievement and dependability domains with the former representing the capacity to work hard and meet challenges linked to responsibility and dutifulness traits of conscientiousness while achievement relates to hard work and meeting challenges.

According to Miller, Griffin, and Hart, (1999) role clarity and ambiguities have been proven to be moderated by conscientiousness in terms of their impact on well-being. As alluded above, role stressors have been shown be related to WFC (Aryee, 1992) meaning both role stress is low on conscientiousness individuals (Wayne et al 2004). Wayne et al’s findings were based on the features of behaviour associated with conscientiousness such as ability to cope due to their trait of planning and self discipline and ability to solve problems (Connor-Smith & Flachsbart, 2007). Furthermore, conscientiousness has been associated with the ability to keep focussed even if engaged in unpleasant task (Connor-Smith & Flachsbart, 2007).

Conscientiousness was found to be a most reliable predictor of job performance than the cognitive ability measures (Avis, Kudisch, & Fortunato, 2002). Furthermore, because of their preventative efforts, conscientiousness has been associated with reduced stress exposure (Connor-Smith & Flachsbart, 2007). Given
that high-conscientious individuals are exposed to fewer stressors and tend to be organized and planful, they are likely to appraise stressors as manageable and controllable.

Working under stressful work conditions could bring out the best in some personality types, whilst others struggle to cope (Fruyt & Mervielde, 1999). Personality testing for selection for employment is pivotal for career success and less counterproductive work behaviours, turnover, absenteeism, a more citizenship behaviour, job satisfaction, task performance and leadership effectiveness (Barrick & Mount, 2005). Cognitive ability testing which is another determinant of job performance is surrounded with connotations of racial biases (Hunter & Hunter, 1984) whereas personality measures show adverse impact than the notorious cognitive ability test (Hough, Oswald, & Ployhart, 2001).

Conscientiousness has been proposed to lead to high involvement in both work and family roles, due to the fact that it involves being thorough, persevering, and efficient (Kossek, Noe, & DeMarr, 1999). Both WFC and FWC have been found to have less impact on conscientious individuals for instance, a study conducted in the University of Florida using a sample of 164 employees of the university found a negative relationship between conscientiousness and FWC (Bruck & Allen, 2003). Kinnunen, Vermulst, Gerris, & Makikanga (2003) also replicated Bruck et al findings when they sampled 296 employed fathers in the Netherlands. As alluded above, Wayne (2004) found a negative relationship between WFC and FWC using a national random sample of 2,130 participants.
Given that Wayne et al.’s (2004) study utilized a large, random sample, their results may reflect a more accurate estimate of these relationships. Additionally, Smoot (2005) reported a negative relationship between a general measure of WFC and conscientiousness. Thus, while studies linking WIF and conscientiousness have found inconsistent results, the literature generally supports a negative relationship between work-family conflict and conscientiousness. Smoot (2005) also found a negative relationship between Conscientiousness and WFC.

2.2.3.8. Summary

WFC and stress as the literature has revealed that it affects working parents and it is even affecting the police sector severely with the reported suicide cases where police men/women kill their families. Minister Nathi Mthethwa during the opening of medical facility (POLMED) in Lynwood, Pretoria on the 21st June 2012, said about 3000 to 4000 SAPS men are receiving debriefing consultation via the Health and Wellness Services within SAPS and in 2010 about 84 police officers attempted suicide due to depression and stress related issues.

Clearly, there is a need to consider personality testing in the SAPS to avoid some of the problems caused by mismatch of personality with the job and conscientiousness has been proven to moderate the effects between work and family and stress. The next chapter will focus on the research method the study has adopted and also show the reliability and validity of measuring instruments that were employed.
CHAPTER 3

RESEARCH METHODOLOGY

3.1 Introduction

Research methodology focuses on the methods or techniques that the study has followed since different studies use different methods depending on the aims of the study. The chapter will focus on the research design used, the research method, sampling and sampling procedure, research population, research instrument, the data collection method, data analysis and concluding remarks.

3.2 Research Design

Research design provides the overall structure of the procedures that the researcher follows, the data collected and the analyses of the data collected. According to Mouton and Prozesky (2005, p. 74) a research design is “a plan or a blue print of how a researcher intends to conduct a study”. The study was also descriptive in nature, as it attempted to accurately describe the characteristics of a particular individual, group, situation or event (De Vos, 2000; Leary, 1991). In the present study, the aim was to describe characteristics of a group of police officers.

Research design can be quantitative or qualitative. The data collected dictates the research method used hence the research problem must often consider the nature of the data in resolving the problem (Leedy & Ormrod, 2001). The present
study used the quantitative research design which Shaughnessy and Zechmeister (1997, p. 22) describe as “studies whose findings are mainly the product of statistical summary and analysis”.

The quantitative approach is typically used to answer questions about the relationship among measured variables with the aim of explaining, predicting, and controlling phenomenon. For the purpose of this research the correlation research method was employed. Correlation research considers more than one variable and attempts to look at the relationships between two or more variables.

3.3 Population of the study

Ghauri and Gronhaug (2005) state that a research population refers to the total universe of units from which the sample is to be selected. The present study focused on the police officers within the Alice police station of any rank with special emphasis on the officers that are mostly associated with field work not necessarily those at operational level.

3.4 Sample

The current study used a sample of eighty-four police officers (n=84) out of a total population of 135 (N=135) police officers in the Alice police station in the Eastern Cape.
3.5 Sampling Procedure

The study used a non-probability sampling procedure of convenience sampling. The procedure allows a researcher the discretion to include any member of the population readily available during the research (Welman, Kruger & Mitchell, 2005). All the officers that were at convenient reach of the researcher were included in the study. According to Harris (1998) one elects to employ a convenience sampling method when the sample is accessible and reasonably representative of the population the researcher is concerned with.

3.6 Data collection method

The study used questionnaires to gather data from police officers in Alice. The researcher approached the police station and arranged a meeting with the station head. The rationale behind the study was explained to the head that the study will contribute to the already existing police studies and that the study would make recommendations and propositions to the police sector to consider prioritising personality testing prior selection of police job applicants. Upon receiving the consent, the researcher distributed questionnaires to participants explaining beforehand why the research is conducted and the remaining questionnaires to officers who were not available were left to the head for further distribution. Participants were allowed five days to return the questionnaires and were allowed to complete the questionnaires at their own convenient time.
Questionnaires were opted for by the researcher since it remains the least expensive and easy method to administer of all the survey methods, and over and above that, questionnaires guarantee participants retention of anonymity which will offer better chances of honesty in the completion of the questionnaire.

3.6.1 Description of the instrument

The questionnaires had closed-ended questions where the respondents were expected to tick the appropriate answer on a varying point likert Scale. Questionnaires were composed of four sections which were biographical, conscientiousness scale, WFC scale and Stress scale.

A brief biographical questionnaire was constructed by the researcher to obtain information regarding the personal demographics of the participants (See Appendix 1, section A). The information was needed for the meaningful interpretation and description of the research findings. The questionnaire gathered information on the participants’ age, gender, marital status, number of children, work status, occupational level, family responsibilities, and number of family members a respondent is residing with, working hours per day and whether one is a sole supporter at home not.

The second section of the questionnaire was a Conscientiousness measure which was extracted from Goldberg’s International Personality Item Pool—conscientiousness (IPIP-C) (See Appendix 1, section B). According to McCrea and Costa (1992) the IPIP instrument which measures the whole Big Five Personality
traits was developed by Goldberg and it was found to have high correlation with two other personality test instruments that measure the Big five personality traits namely the Neo-PI-R and Hogan five personality Inventory (Hogan, 1992). The response of participants was rated in varying likert scales. Following is the current study's reliability and validity of the IPIP-C scale.

3.7 Data Analysis

Data analysis helps to describe facts and develop explanation. Data analysis on the other hand does not provide the answers to the research questions. Answers are found by way of interpretation of the data and the results (De Vos, Fouch & Delport, 2005).

In describing the characteristics of the sample group and also to test the similarities between groups that participated in the study, a descriptive research method was used. The present study used a correlation method, which takes into account more than one variable and tries to establish a relationship between two or more variables. Correlation method eliminates the researcher’s mischief of manipulating the position taken by participants on a certain variable but merely observes and measures.

Inferential statistics were used in the study, a method which according to Sekaran (2003) is helpful in generalization from a sample of population. The Pearson Product Moment Correlation was used in the study to illustrate the strength,
magnitude and direction of the relationship between two variables at a time (Sekaran, 2003).

3.8 Ethical Considerations

The study’s participants are human beings and as a result there are principles that must be upheld by the researcher. Huysamen (1994) writes that using human beings eliminates the researchers’ reign over the research procedure. The participants are entitled to be treated with respect, dignity and courtesy. As a result, the researcher expanded focus on the most basic ethical principles to be considered. These considerations include informed consent, voluntary participation, privacy and confidentiality.

3.8.1 Informed Consent and Voluntary Participation

According to Christensen (1997), informed consent implies consent to participate in a scientific study, given by a potential participant who has received an explanation of the procedure to be followed and a description of any possible adverse results from participating. The researcher has a responsibility to ensure that a participant is given enough information so they can make their mind in an informed manner to either participate or not to participate in the study (Christensen, 1997; Strydom, 1998). Huysamen (1994) indicated that the participants should be informed of the purpose of the research, and the risk of any possible discomfort.
The American Psychological Association (APA, 2000) emphasises the importance of the use of language that is reasonably understandable to the participants. Participants must be allowed to withdraw from partaking in the research anytime and should be made aware of the volunteering to partake in the study. This means that there is no pressure or coercion on the part of the researcher. The present study informed participants of the nature and purpose of the study through a letter that was hand delivered emphasizing the confidential and voluntary nature of the current research coupled with a consent form. The police station’s highly ranked officer elected to explain it further to the other officers and questions that were asked were responded to by the researcher.

3.8.2 Privacy and Confidentiality

Researchers are to guard against covert research and according to Huysamen (1994) invading the privacy of participants is the most unethical act one must avoid. According to Strydom (1998), invasion of privacy goes beyond covert observation and includes intimate questions that can potentially cause feelings of anxiety, guilt or shame. In the current study, no questions were asked regarding intimate details of the participants. The personal questions that were asked in the questionnaires had no potential harm on the participants.

Strydom (1998) defines confidentiality as the handling of information in a confidential manner. As a result, the researcher made sure that no information of participants is made available to anyone else other than the researcher and the researcher’s supervisor. Anonymity is defined as the principle that the participants will remain anonymous throughout the study, even to the researcher (APA, 2000).
Although the current study guaranteed confidentiality to all participants, anonymity could not be guaranteed for those participants who chose to provide their personal details so as to receive feedback. The consent form covered the issues relating to anonymity.

3.9 Concluding remarks

In designing the research, the research design selected was the quantitative method. The research instrument was a questionnaire consisting of four parts comprising, the biographical information, Goldberg’s IPIP-conscientiousness measure, WFC scale and Work and family stress scale. All ethical considerations were observed. The collected data will be analysed and the graphic presentation of analysed data will follow and a discussion will give a better understand to the data. The next chapter will focus on the analysing the data collected through the instruments outlined above and will be presented graphically and a discussion will follow to explain the data further.
4.1. Introduction

The findings of the study will be delineated in a clear, concise and comprehensive manner in this chapter. Bar charts were used in the explanatory analyses for the significance of the research results. The findings of the research are expressed reciprocally to the content of the questionnaires.

Table 4.1
Cronbach's alpha for conscientiousness scale

<table>
<thead>
<tr>
<th>Deleted Variable</th>
<th>Raw Variables</th>
<th>Standardized Variables</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Correlation with Total</td>
<td>Alpha</td>
</tr>
<tr>
<td>CQ1</td>
<td>0.28</td>
<td>0.72</td>
</tr>
<tr>
<td>CQ2</td>
<td>0.32</td>
<td>0.71</td>
</tr>
<tr>
<td>CQ3</td>
<td>0.22</td>
<td>0.72</td>
</tr>
<tr>
<td>CQ4</td>
<td>0.28</td>
<td>0.72</td>
</tr>
<tr>
<td>CQ5</td>
<td>0.31</td>
<td>0.71</td>
</tr>
<tr>
<td>CQ6</td>
<td>0.26</td>
<td>0.72</td>
</tr>
<tr>
<td>CQ7</td>
<td>0.39</td>
<td>0.70</td>
</tr>
<tr>
<td>CQ8</td>
<td>0.38</td>
<td>0.71</td>
</tr>
</tbody>
</table>
Table 4.1 shows the Cronbach’s alpha for the instrument measuring conscientiousness. The coefficient alpha is above 0.60. This suggests the instrument was a reliable measure of conscientiousness. Following will be the reliability and validity of the WFC scale (See Appendix 1 section B).

N.B. The level of Cronbach’s Alpha with values 0.6 and 0.7 are deemed at the lower end of acceptability and for the purposes of this study measures alpha above 0.6 will be considered acceptable.
The WFC measure used in this study according to Carlson, Kacmar, and Williams, (2000) measures the three forms of conflict alluded to in the literature review namely time, strain and behavioural-based conflict. The scale also takes two directions that of work to family and family to work. It must be emphasized though that the present study is concerned with WFC however; it cannot divorce WFC from FWC. Items that relate to WFC include items 1,2,3,7,12,14,17 and 18 but even the other nine items were analyzed yielding an 18 item scale (see Appendix 1 section C).

The items were presented as statements rated on a 5 point likert scale with statements such as “I’m so emotionally drained when I get home from work that it prevents me from contributing to my family” on a scale registering the frequency of occurrence of the statement from never to always. The time-based form of WFC out of the three forms includes items such as “my work keeps me from my family activities more than I would like”. The strain-based includes items like “when I get home from work I’m often too frazzled to participate in family activities”. Behavioural-based WFC include items such as “the problem solving behaviour I use in my job is not effective in resolving problems at home.

This study will now illustrate the reliability of the measuring scales used in the present study.
Table 4.2.

Following is the present study’s Cronbach Coefficient Alpha of the WFC scale:

<table>
<thead>
<tr>
<th>Deleted Variable</th>
<th>Raw Variables</th>
<th>Standardized Variables</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Correlation with Total</td>
<td>Alpha</td>
</tr>
<tr>
<td>WFQ1</td>
<td>0.533298</td>
<td>0.892461</td>
</tr>
<tr>
<td>WFQ2</td>
<td>0.656564</td>
<td>0.888470</td>
</tr>
<tr>
<td>WFQ3</td>
<td>0.493138</td>
<td>0.893591</td>
</tr>
<tr>
<td>WFQ4</td>
<td>0.552995</td>
<td>0.891732</td>
</tr>
<tr>
<td>WFQ5</td>
<td>0.515346</td>
<td>0.892898</td>
</tr>
<tr>
<td>WFQ6</td>
<td>0.568986</td>
<td>0.891233</td>
</tr>
<tr>
<td>WFQ7</td>
<td>0.455333</td>
<td>0.894441</td>
</tr>
<tr>
<td>WFQ8</td>
<td>0.609417</td>
<td>0.890329</td>
</tr>
<tr>
<td>WFQ9</td>
<td>0.453064</td>
<td>0.894562</td>
</tr>
<tr>
<td>WFQ10</td>
<td>0.541150</td>
<td>0.892034</td>
</tr>
<tr>
<td>WFQ11</td>
<td>0.486744</td>
<td>0.893588</td>
</tr>
<tr>
<td>WFQ12</td>
<td>0.587568</td>
<td>0.890433</td>
</tr>
<tr>
<td>WFQ13</td>
<td>0.609751</td>
<td>0.889636</td>
</tr>
<tr>
<td>WFQ14</td>
<td>0.581884</td>
<td>0.890609</td>
</tr>
<tr>
<td>WFQ15</td>
<td>0.373740</td>
<td>0.900354</td>
</tr>
<tr>
<td>WFQ16</td>
<td>0.719332</td>
<td>0.887520</td>
</tr>
<tr>
<td>WFQ17</td>
<td>0.491415</td>
<td>0.893447</td>
</tr>
<tr>
<td>WFQ18</td>
<td>0.670891</td>
<td>0.887461</td>
</tr>
</tbody>
</table>

Note: Table 4.2. \( p < 0.005 \)

Table 4.2 shows the Cronbach’s Alpha for the work-family conflict instrument. The alpha coefficient is 0.89 which is above 0.60 thus making it acceptable as a good
reliability. Following will be the reliability and validity of the stress scale (See Appendix 1 section D).

Table 4.3
Cronbach’s alpha for stress

<table>
<thead>
<tr>
<th>Deleted Variable</th>
<th>Raw Variables</th>
<th>Standardized Variables</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Correlation with Total</td>
<td>Alpha</td>
</tr>
<tr>
<td>WSQ1</td>
<td>0.134404</td>
<td>0.641611</td>
</tr>
<tr>
<td>WSQ2</td>
<td>0.287299</td>
<td>0.606629</td>
</tr>
<tr>
<td>WSQ3</td>
<td>0.243008</td>
<td>0.617180</td>
</tr>
<tr>
<td>WSQ4</td>
<td>0.251110</td>
<td>0.613760</td>
</tr>
<tr>
<td>WSQ5</td>
<td>0.128903</td>
<td>0.654333</td>
</tr>
<tr>
<td>FSQ1</td>
<td>0.567986</td>
<td>0.551986</td>
</tr>
<tr>
<td>FSQ2</td>
<td>0.485177</td>
<td>0.564801</td>
</tr>
<tr>
<td>FSQ3</td>
<td>0.473886</td>
<td>0.565348</td>
</tr>
<tr>
<td>FSQ4</td>
<td>0.400889</td>
<td>0.575315</td>
</tr>
</tbody>
</table>

Note: Table 4.3. p<0.005

Table 4.3 shows the Cronbach’s alpha for the instrument which was measuring stress. The coefficient alpha is 0.6 which show that the instrument is reliable to test for work and family stress.
4.2. Demographic results

4.2.1 Distribution of Respondents by age

Figure 4.1 below shows the distribution of respondents in relation to their age. The majority of the respondents (33.33%, n = 28) are in the age group 21-30 years, while 28.57% (n=24) are in the age group 31-40 years. Twenty-one respondents (25%) fall in the age category 41-50 years, and 13.10% (n = 11) of the respondents are in the age group of 51-60 year olds.

![Age Distribution of Respondents](image)

Fig. 4.1.

Figure 4.1.

Age Distribution of respondents
The majority of the respondents (57%, n=48) were female police officers while 43% (n=36) were male.
Figure 4.3: Tenure Distribution

Figure 4.3 above shows that the majority of the respondents in the study have worked for 1-5 years (29.76%; n=25). A 22.62% (n=19) of the sample have worked for a period of 11-15 years. A 21.43% (n=18) of the sample have been working for 16 years and above. There are sixteen respondents (19.05%) in this study who has worked for 6-10 years. Respondents who have worked for less than one year are (7.14%; n=6) of the total sample size.

Figure 4.4 below shows that the majority of the respondents, (n = 49) or 58.33% are married. 34.52% (n=29) of the respondents are single. The second last group shows that 4.76% (n=4) of the respondents are divorced and 2.38% (n = 2) of the respondents are separated.
Figure 4.4:

Marital Status distribution

Figure 4.5 below shows the distribution of respondents based on the number of children they have. The majority of the respondents, 28.57% (n = 24) had four or more children. 23.81% (n = 20) of the respondents had one child. 22.62% (n=19) of the respondents had two children. 17.86% (n=15) of the respondents had three children. Only 7.14% (n = 6) did not have children.
Figure 4.5: Number of children distribution

Number of children distribution
Figure 4.6

Occupational level Distribution

From figure 4.6 above most of the respondents, 61.90% (n = 52) fall in the other category and most participants wrote constable under the other. This means most the respondents were constable at the entry level of the police unit as they indicated on the questionnaire. The other category was followed by 15.48% (n = 13) of the respondents who are captains. An 11.90%, (n = 10) of the sample fall in the lieutenant category. 4.76% (n=4) of the respondents were Major generals and another 4.76% (n=4) were majors. There are 1.19% (n=1) respondents who are lieutenant colonel.
Figure 4.7 above shows the distribution of respondents by their family responsibilities. The majority of the sample respondents 98% (n=82) had family responsibilities in their lives, whilst 2% or two respondents did not have family responsibilities.
Figure 4.8
Residing with a Family Member Distribution

Figure 4.8 above shows that 81% (n=68) of the respondents currently reside with a family member on a regular basis other than their child, spouse or partner. A 19% (n=16) of the sample indicated that they do not reside with a family member other than their child or spouse.
Figure 4.9

Number of Family members other than spouse or children Distribution

Figure 4.10 above shows the numbers of family members the respondents live with who are not their children or spouse. The majority of the respondents 27.38% (n=23) lived with two members. A 20.24% (n=17) of the sample did not live with any family member. 19.05% (n=16) lived with four family members, 13.10% (n=1) lived with three family members, 7.14% (n=6) lived with one family member and 5.95% (n=5) lived with six family members. Those who lived with five and ten members were 2.38% (n=2) respectively of the total number of respondents. 1 respondents (1.19%) from the sample lived with seven family members. The last group shows that 1.19% (n=1) of the respondents lived with nine members.
Figure 4.10

Working Hours per day Distribution

Figure 4.10 shows the number of police respondents are assigned on a daily basis. The majority of the respondents 81% (n=68) worked for 8 hours while, 19% (n=16) of the respondents reported that they worked for 12 hours.

Figure 4.11 below shows that half of the respondents 50% (n=42) of the respondents are the sole supporters in their families, while the other half 50% (n=42) of the respondents are not the only supporters of their family.
Figure 4.11:
Sole supporters Distribution
4.2. Correlations

This section of the study will illustrate the tested hypothesis for all the three hypothesis statements.

Table 4.4
Hypothesis testing

*Pearson Correlation Coefficients of Conscientiousness, WFC, Stress, Work Stress and Family stress (N=135, n=84)*

<table>
<thead>
<tr>
<th>No.</th>
<th>Variables</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Conscientiousness</td>
<td>-</td>
<td>0.02792</td>
<td>-0.04465</td>
<td>-0.10534</td>
<td>0.03955</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.8022</td>
<td>0.6885</td>
<td>0.3432</td>
<td>0.7226</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>WFC</td>
<td>0.02792</td>
<td>-</td>
<td>0.33609</td>
<td>0.07062</td>
<td>0.41716</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.8022</td>
<td>0.0018</td>
<td>0.5233</td>
<td>0.0001</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Stress</td>
<td>-0.04465</td>
<td>0.33609</td>
<td>-</td>
<td>0.72767</td>
<td>0.70946</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.6885</td>
<td>0.0018</td>
<td>.0001</td>
<td>.0001</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>WS</td>
<td>-0.10534</td>
<td>0.07062</td>
<td>0.72767</td>
<td>-</td>
<td>0.03284</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.3432</td>
<td>0.5233</td>
<td>.0001</td>
<td></td>
<td>0.7668</td>
</tr>
<tr>
<td>5</td>
<td>FS</td>
<td>0.03955</td>
<td>0.41716</td>
<td>0.70946</td>
<td>0.03284</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.7226</td>
<td>.0001</td>
<td>0.0001</td>
<td>0.7668</td>
<td></td>
</tr>
</tbody>
</table>

Note: p< 0.001

Hypothesis 1

\( H_0 \): There is no negative relationship between conscientiousness and WFC

\( H_1 \): There is a negative relationship between conscientiousness and WFC.
Table 4.4 illustrates a positive though not significant relationship between Conscientiousness and WFC at \((r = 0.02792; p = 0.8022)\) meaning there is a relationship between conscientiousness and WFC but it not clear to what extent. Therefore the null hypothesis will be accepted.

Hypothesis 2

\(H_0:\) There is no significant negative relationship between conscientiousness and stress  
\(H_1:\) There is a significant negative relationship between conscientiousness and stress.

Stress has a negative impact on conscientiousness though not significant \((r = -0.04465; p = 0.6885)\) \((p< .005)\) meaning stress does to some degree have an impact on conscientiousness though not clear. The null hypothesis is accepted.

Conscientiousness has however been shown in Table 4.4 to have a positive relationship with family stress though not significant \((r = 0.3955; p = 0.7226)\). Work stress also has an impact on conscientiousness \((r = -010534)\) though not significant \((0.3432)\).

Hypothesis 3

\(H_0:\) Conscientiousness does not moderate the relationship between WFC and stress  
\(H_1:\) Conscientiousness moderates the relationship between WFC and stress.
On this hypothesis comparison will be made between a respondents with high conscientiousness and respondents with low levels of conscientiousness as shown by the two tables below.

Table: 4.5

Pearson Correlation Coefficients of respondents with high conscientiousness (n= 72)

<table>
<thead>
<tr>
<th>No.</th>
<th>Variables</th>
<th>CONSCIENT</th>
<th>WFC</th>
<th>STRESS</th>
<th>WS</th>
<th>FS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>CONSCIENT</td>
<td>1.00</td>
<td>0.06</td>
<td>-0.09</td>
<td>-0.21</td>
<td>0.09</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.57</td>
<td>0.42</td>
<td></td>
<td>0.06</td>
<td>0.40</td>
</tr>
<tr>
<td>2</td>
<td>WFC</td>
<td>0.06</td>
<td>1.00</td>
<td>0.40</td>
<td>0.07</td>
<td>0.52</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.57</td>
<td>0.00</td>
<td></td>
<td>0.51</td>
<td>0.52</td>
</tr>
<tr>
<td>3</td>
<td>STRESS</td>
<td>-0.09</td>
<td>0.40</td>
<td>1.00</td>
<td>0.75</td>
<td>0.67</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.42</td>
<td>0.00</td>
<td></td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>4</td>
<td>WS</td>
<td>-0.21</td>
<td>0.07</td>
<td>0.75</td>
<td>1.00</td>
<td>0.03</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.06</td>
<td>0.51</td>
<td>0.00</td>
<td></td>
<td>0.77</td>
</tr>
<tr>
<td>5</td>
<td>FS</td>
<td>0.09</td>
<td>0.52</td>
<td>0.67</td>
<td>0.03</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.40</td>
<td>0.00</td>
<td></td>
<td>0.77</td>
<td></td>
</tr>
</tbody>
</table>

Note: Table: 4.5. p<0.000

From the table above there is a high significant relationship between work family conflict and stress with high conscientiousness in moderation (r=0.40119; p= 0.00) (p<.05).
Table 4.6

Pearson Correlation Coefficients of respondents with low conscientiousness

<table>
<thead>
<tr>
<th>No.</th>
<th>Variables</th>
<th>CONSCIENTIOUSNESS</th>
<th>WFC</th>
<th>STRESS</th>
<th>WS</th>
<th>FS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>CONSCIENT</td>
<td>1.00</td>
<td>-0.55</td>
<td>0.30</td>
<td>0.31</td>
<td>0.19</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.06</td>
<td>0.06</td>
<td>0.33</td>
<td>0.31</td>
<td>0.53</td>
</tr>
<tr>
<td></td>
<td></td>
<td>12</td>
<td>12</td>
<td>12</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>2</td>
<td>WFC</td>
<td>-0.55</td>
<td>1.00</td>
<td>-0.02</td>
<td>-0.00</td>
<td>-0.02</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.06</td>
<td>0.94</td>
<td>0.99</td>
<td>0.93</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>12</td>
<td>13</td>
<td>13</td>
<td>13</td>
<td>13</td>
</tr>
<tr>
<td>3</td>
<td>STRESS</td>
<td>0.30</td>
<td>-0.02</td>
<td>1.00</td>
<td>0.56</td>
<td>0.83</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.33</td>
<td>0.94</td>
<td></td>
<td>0.04</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>12</td>
<td>13</td>
<td>13</td>
<td>13</td>
<td>13</td>
</tr>
<tr>
<td>4</td>
<td>WS</td>
<td>0.31</td>
<td>-0.00</td>
<td>0.56</td>
<td>1.00</td>
<td>0.03</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.31</td>
<td>0.99</td>
<td>0.0422</td>
<td></td>
<td>0.92</td>
</tr>
<tr>
<td></td>
<td></td>
<td>12</td>
<td>13</td>
<td>13</td>
<td>13</td>
<td>13</td>
</tr>
<tr>
<td>5</td>
<td>FS</td>
<td>0.19</td>
<td>-0.02</td>
<td>0.83</td>
<td>0.03</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.53</td>
<td>0.93</td>
<td>0.00</td>
<td>0.92</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>12</td>
<td>13</td>
<td>13</td>
<td>13</td>
<td>13</td>
</tr>
</tbody>
</table>

Table 4.6. p<0.05

The tables above show that conscientiousness does moderate the relationship between work family conflict and stress. There is no significant relationship between work family conflict and stress in the absence of conscientiousness ($r = -0.02263; p= 0.9414$) instead there is a negative relationship.

From the two tables above Table 4.2 and 4.3, conscientiousness is shown to be a moderator of the relationship between WFC and stress since at high conscientiousness the impact of stress and WFC does not show whereas at low levels of conscientiousness there seems to be a negative impact.
Table 4.7
*Descriptive Statistics for Conscientiousness, WFC, Work and Family stress*

<table>
<thead>
<tr>
<th>Variables</th>
<th>N</th>
<th>Mean</th>
<th>Std Dev</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONSCIENT</td>
<td>84</td>
<td>3.5095</td>
<td>.45644</td>
</tr>
<tr>
<td>WFC</td>
<td>84</td>
<td>1.6124</td>
<td>.51628</td>
</tr>
<tr>
<td>WS</td>
<td>84</td>
<td>3.2952</td>
<td>.62438</td>
</tr>
<tr>
<td>FS</td>
<td>84</td>
<td>1.4196</td>
<td>.75964</td>
</tr>
</tbody>
</table>

Table 4.5 above illustrates the performance of the sample on descriptive statistics. The objective of descriptive statistics according to Howell (1995) is to describe the performance of the sample (police officers) on the measuring instruments. According to Howell (1995) descriptive statistics has components such as mean, standard deviation, modes and medians. The mean provides numerical values regarding the centre of distribution (Harris, 1998). The standard deviation determines the distance of scores from the mean and shows variability (Harris, 1998).

Table 4.5 illustrates that the mean of conscientiousness was \(M=3.5095, SD=.45644\), WFC had a mean of \(M=1.6124; SD=.51628\). Table 4.5 also illustrates the mean of work stress with a mean of \(M=3.2952; SD=.62438\). Family stress of the sample stood at \(M=1.4196; SD=.75964\).
4.3. Concluding remarks

The chapter showed with the use of pie chart and tables and explained further the results produced in the previous chapter from Pearson, Inferential and correlation methods of statistics data analysis. The following chapter will put more sense on the brief explanation given above and provide future researcher with pointers to consider when researching or replicating or exploring the current study.
5.1. Discussion of results

The purpose of the present study was to explore the effect of conscientiousness personality trait as a moderator of the relationship between the relationship between WFC and stress. The study wanted to establish if there is a relationship between conscientiousness and WFC, between conscientiousness and stress and overall to establish whether conscientiousness moderates the relationship between WFC and stress.

The findings in chapter four under the demographic section indicate that more of the participants were women which validate the view that more women are now joining previously men dominated occupations. Majority of the respondents were married parents with children. This means these officers are appropriate to test WFC amongst them and even though some are not married but they reported having children to take care of. The concern of the impact of stress and female police officers should be given more attention now that female police officers have become a steadily growing demographic in many police agencies. The increase in the presence of female police officers, coupled with research findings that suggest that stress can have a negative impact on job performance provides justification for additional research on gender and police stress.
Furthermore, the majority of the respondents recorded “other” under the occupational level which most officers’ recorded constable. This is an appropriate sample because these are officers that are in contact with the communities they serve and they receive pressures from middle and senior management which causes high levels of job stress that will spill over to family roles.

Also, the majority of the respondents work for eight hours and more with half of the respondents recording that they are not sole supporters in their families meaning either a spouse or family members in the households is leaving officers with a responsibility to care for children or to take care of household chores.

Hypothesis 1

$H_0$: There is no negative relationship between conscientiousness and WFC.

$H_1$: There is a negative relationship between conscientiousness and WFC.

A positive though not significant relationship between Conscientiousness and WFC at ($r = 0.02792; p = 0.8022$) meaning it is not clear whether WFC has or does not have an impact on conscientiousness. Therefore the null hypothesis accepted.

The above results did not confirm Smoot’s (2005) findings. Participants that scored high on conscientiousness were better than low conscientiousness people in balancing their time and energy (Smoot, 2005). Furthermore, John and Srivastava (1999) found conscientiousness to be related to individual differences in their
propensity to follow socially prescribed norms for impulse control, to be task and goal orientated, planful, to delay gratification and to follow norms and rules. As illustrated, the present study instead found low conscientiousness officers to be less affected by WFC

A deduction from John et al (1999) is that, conscientious police officers will plan their time to devote to their families and not confuse it with time allocated for work an activity because they follow norms and rules prescribed by the society and the society prioritizes both work and family roles.

Hypothesis 2

H₀: There is no significant negative relationship between conscientiousness and stress
H₁: There is a significant negative relationship between conscientiousness and stress

The results shows there is no significant negative relationship between conscientiousness and stress (r= -0.04465, p= 0.6885). The p value is not less than 0.005 hence it is not significant (p<.005).

The findings agree with Freidman (2000) findings including Robert and Bogg (2004) who found conscientiousness to be an important health-related trait. Poor health outcomes are now considered the primary contributors to poor work outcomes (McGrinnis & Foege, 1993). Stress is a health related outcome and it lead to
behaviour such as tobacco use, excessive alcohol use, violence and suicide, risky sexual behaviour and illicit drug use (McGinnis & Foege, 1993).

The present study findings can be translated to the view that conscientiousness is a personality trait that is able to block health detrimental effects as a result of exposure to stressful condition. Conscientiousness was found by Hooker, Frazier, Monahan (1994) to be a personality trait that allows one to cope with a problem through dealing with the problem directly (Watson & Hubbard, 1996).

Hypothesis 3

\[ H_0: \text{Conscientiousness does not moderate the relationship between WFC and stress} \]
\[ H_1: \text{Conscientiousness moderates the relationship between WFC and stress}. \]

After comparisons were made between high and low conscientiousness it transpired that, high conscientiousness does not moderates the relationship between stress and WFC but low conscientiousness moderates the relationship. The findings also validate Mathews, Deary and Whiteman (2009) assertions that were alluded to above that no one is immune to stress however, the impact stress has on people differs depending partly on one’s personality traits. Also, Jonker (2004) found a negative relationship between stress and personality traits, particularly, conscientiousness was found to negatively correlate with job demands which lead to stress. The previous studies however did not explicitly indicate the extent of conscientiousness because from the present study, police officers that scored high on conscientiousness were actually highly affected by stress.
High conscientiousness was found to be positively correlated with WFC meaning, the higher the conscientiousness the higher will be WFC amongst police officers. Conscientiousness had a negative relationship though not significant with stress meaning, the higher the conscientiousness one gets lesser and lesser stress. High conscientiousness has negative significant relationship with work stress (WS) meaning, the higher the conscientiousness the lower the WS. High conscientiousness was also found to have a positive though not significant relationship with family stress (FS) meaning; high conscientiousness police officers will be affected by family stress.

WFC was also found to have a relationship with stress at high conscientiousness, meaning, at high conscientiousness a police officer will experience WFC caused by stress. WFC also has a significant positive relationship with family stress, meaning, at high conscientiousness an officer will be affected by family stress leading to WFC.

Furthermore, low conscientiousness police officers had a negative significant relationship between WFC and Conscientiousness. Police officers that scored low on conscientiousness were not significantly affected by stress, work stress and family stress. There was also a negative relationship between WFC and stress with low conscientiousness.

Contrary to previous researchers’ findings, the present study revealed that the extent of conscientiousness that a police officer has as a personality trait is important to consider. At high conscientiousness an officer would be affected by stress which will spillover to WFC, however, those that score low on conscientiousness will manage their stress and will not be highly affected by WFC. The present findings can be
attributed to the view that the police officers that are high on conscientiousness try to get everything together and in attempting to get everything together e.g. work and family they frustrate themselves and the put a strain on themselves. Whereas those low on conscientiousness do not fuss about getting everything together making them not susceptible to stress because they are easy about these two roles (work and family) and thereby managing a balanced on both work and family roles. This calls for further research on the entire Big Five personality traits model that will see to it that all personality traits are examined and a general conclusion then will be drawn in South Africa with regard to an appropriate personality trait within the police service.

In the beginning the study had four main questions based on the statement of the problem namely;

- Do police officers who are high/low on conscientiousness record less/high or no stress at all?
- Do police who score high on conscientiousness record less work family conflict (WFC)?
- Does conscientiousness mitigate between WFC and stress, and thereby reduce the effects of stress as a result of WFC?

Also based on Jonker (2004), the present study seeks to verify Jonker’s findings that illustrated a negative relationship between conscientiousness and stress.

It has been established that low conscientiousness records less or no stress at all and there is less WFC at the involvement of low conscientiousness and it has been proven that low conscientiousness does moderate the relationship between stress and WFC. Jonker’s findings were repeated in the present study however, the
present study did not explicitly show the degree at which conscientiousness officers are affected by stress (not significant).

5.2 Limitations of the study

The first limitation that the study was faced with which affected a number of other activities pertaining to the study was unavailability of funds for the research. The study was not funded which affected the limitation to geographical area of Alice.

The language also used in the questionnaires proved to be somewhat difficult to comprehend on the side of the participants. This was raised by some of the participants and the researcher while explaining the instruments to respondents, a sense of lack of grasping the English language was identified. The problem can be attributed to the fact that the participants were mostly black race with the language English as their second language.

The response rate of the sample was somewhat problematic. Out of 135 questionnaires which were distributed according to the number of officers in that police station only an 84 returned their questionnaire and that negatively reflected on the generalization of the current study. Some officers see themselves as too busy to respond to the survey and some just don’t see the importance of the survey to the police occupation in general.

Some of the participants reported having parents but they never married their partners which lead to them registering not married on the questionnaire which is a
prevailing occurrence in most South African communities. Also, some participants did not want to appear neglectful of their family responsibilities even though they are most stuck up in work related activities e.g. some officers recorded working 12 hours a day but they recorded being able to avail themselves on their family roles. That compromised the authenticity of their responses.

5.3 Recommendation for future research

The personality trait of conscientiousness needs to be studied further in the police sector because policing is an important element of South African society and without concrete knowledge of personality traits that are good for one to be a police officer the whole policing fraternity will be a hokum.

There is a need to design a questionnaire that is responsive to the different cultural groups in South Africa to derive authentic responses from participants who do not use English as their first language. The questionnaire must also guard against cheating by respondents. According to Gregory (2007) a number of psychologists are realising that many psychological tests are appropriate entirely for certain groups of people who do not use English as a mother tongue. Foxcroft and Aston (2006) also alluded to the fact that one’s’ level of proficiency in English language impacts on their performance on psychological tests particularly cognitive and personality test.

The future research on WFC and conscientiousness as a moderator requires a more in-depth understanding of at the phenomenon and one suggests a more qualitative study would be an answer to some of the problem encountered while
doing this research. For instance the children that participants stay with, the spouse and the other family members need to be interviewed, it shouldn’t end only with the exact participant without the other family members.

Finally, Jonker (2004) called for a replication of his study to confirm his finding and he suggested that if his findings are confirmed then “preventative measures can be taken in order to minimize the occurrence of burnout” writes Jonker (2004, p. 51). The current study is suggesting that SAPS must prioritize personality testing and give special focus and preference to applicants that score high on conscientiousness. This is because, the current study and many other studies that have focused on personality traits in relation to WFC and stress have found conscientiousness as a determinant of work performance and also mitigates health related problems brought by stress related outcomes. With the SAPS can minimize the number of excessive drinking, depressions and other health related outcomes that lead to gruesome acts suicide, killing of spouses etc.

There is also a need to sort another method to test mediation variable apart from the method that has been used in the present study, perhaps a different method might produce different results.

5.4 Concluding remarks

Studying WFC and its relationship to other variables is an important pursuit by far. Singling out conscientiousness personality trait is another important pursuit and the present study has confirmed that conscientiousness is immune to stress and
most of all WFC. Stress has been referred to as the biggest threat in the work of police officers in South Africa due to the detrimental effects stress bring to the officer. According to Kleinmuntz (1982, p. 7) personality refers to “the unique organization of characteristics that define an individual and determine that person’s pattern of interaction with the environment. Personality of a police man has been a raging debate with some expecting police officers’ behaviour to be exempted from ordinary citizens and some reckoning that they are human beings too and so they are subjected to the category of personalities established (Lefkowitz, 1975).

Twersky-Glasner (2005) outlined certain attributes of a police officers namely; courage, authoritarianism, cynicism and aggression including conventionality (Evans, Coman & Stanley 1992). Looking at the attributes of a police officer and fitting them with the broader big five personality traits, they are not far from the conscientiousness personality trait. Conscientiousness has been associated with tendencies such as habituality carefulness, reliability, being hard-working, well organized and purposeful. McCrea and Costa (1986) confirmed that conscientiousness focuses on venting of feelings and denial in coping with stressful events an attribute that is associated with authoritarian.

The current study was set out to establish if conscientiousness moderates the relationship between WFC and stress and a strong correlation was found indicating that, conscientiousness does moderate the relationship between stress and WFC. The correlation established in the present study was found by other researchers proving that time based conflict, strain-based and behaviour based conflict are
manageable in police officers that scored high on conscientiousness and they are immune to stress.

The study is cognisance of the challenges associated with the use of personality test in South Africa that researchers have discovered. For instance, Meiring et al (2005) used a sample of 13 681 applicants from different cultural groups for entry-level position in SAPS using a 15FQ+ Personality test found very low alpha coefficient for particularly black applicants. Such challenges can be resolved with the help of qualified language experts and psychologists to ensure that the test adhere to the culture of those whose personality is being tested. Psychological tests have cultural and cognitive links and therefore the language used to develop a test is pivotal to those it will be administered to.

Literature has shown that conflict that employees experience between their work and family roles negatively influence job, life, and marital satisfaction, and more. The present study contributes to the already existing literature of the effect of personality on health related outcomes and work performance and it singled out conscientiousness and proved it to be a reliable trait for immunity to stress and effects of WFC.
REFERENCES


California: Duxbury Press.


Costa, P.T., & McCrea, R.R. (1992). *Revised Neo Personality Inventory (NEO-PI-R) and Five-Factor (NEO-FFI) Inventory professional manual*. Odessa, FL:PAR.


Prentice Hall.


The Sunday Independent newspaper (12 November). Ref. No. 16569


APPENDIX 1: Measuring Instruments

University of Fort Hare
Faculty of Management and Commerce
DEPARTMENT OF INDUSTRIAL PSYCHOLOGY
RESEARCH QUESTIONNAIRE

My name is Bazana Sandiso. I am a student in the Department of Industrial Psychology, Faculty of Management and Commerce, at the University of Fort Hare. I’m conducting a research on conscientiousness as a moderator of the relationship between stress and work family conflict in your organisation. The research is done as part of the Master’s degree requirements in Industrial Psychology. The research is done strictly for academic purposes only. The information solicited will be kept confidential and anonymity is assured. You are cordially requested to complete the questions that follow.

Section A

(Demographic and Occupational information)

Please mark with an (X) where appropriate

1. Age

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

2. Period of employment in your present job

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

3. Marital status

| Single | Married | Divorced | Separated | Widowed |
4. Number of children

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4 and above</td>
</tr>
</tbody>
</table>

5. Work status

Full time  Part time

6. Occupational level

<table>
<thead>
<tr>
<th>Colonel</th>
<th>Lt Col</th>
<th>Major</th>
<th>Captain</th>
<th>Major General</th>
<th>Lieutenant</th>
<th>Other (state)</th>
</tr>
</thead>
</table>

7. Do you have any family responsibilities?

| yes | no |

8. Do you currently reside with a family member on a regular basis e.g. spouse, child, or extended family member?

| yes | no |

9. Please indicate the number of family members that live with you other than your spouse, partner or children.

10. Please indicate your number of hours of work a day.

11. Are you the sole financial supporter in the family?

| Yes | no |
Section B: The IPIP Conscientiousness scale (Goldberg, 1999)

Instructions
Below are a number of statements that may or may not apply to you. Mark with an X in the box to indicate the extent to which you agree or disagree with each statement.

<table>
<thead>
<tr>
<th>1. I'm always prepared.</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. I pay attention to details.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. I get chores done right away.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. I like order.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. I follow a schedule.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. I'm exacting in my work.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. I leave my belongings around.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. I make a mess of things.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. I often forget to put things back in their proper place.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. I avoid my duties.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. I do things according to a plan.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. I continue until everything is perfect.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. I make plans and stick to them.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15. I like to tidy up.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17. I waste my time.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18. I do things in a half-way manner.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19. I find it difficult to get down to work</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20. I leave a mess in my room.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Section C: WFC scale (Carlson, Kacmar, and Williams, 2000)

Instructions

Below are a number of statements that may or may not apply to you. Mark with an X in the box to indicate the extent to which you agree or disagree with each statement.

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>Sometimes</th>
<th>Often</th>
<th>Very Often</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. My work keeps me from my family activities more than I would like.

2. I am often so emotionally drained when I get home from work that it prevents me from contributing to my family.

3. Behavior that is effective and necessary for me at work would be counterproductive at home.

4. The time I spend on family responsibilities often interferes with my work responsibilities.

5. Because I am often stressed from family responsibilities, I have a hard time concentrating on my work.

6. The problem-solving behavior that works for me at home does not seem to be as useful at work.

7. Due to all the pressures at work, sometimes when I come home I am too stressed to do that thing I enjoy.

8. The time I spend with my family often causes me not to spend time in activities at work that could be helpful to my career.

9. Tension and anxiety from my family life often weaken my
ability to do my job.

10. The behaviors that work for me at home do not seem to be effective at work.

11. Due to stress at home, I am often too preoccupied with family matters at work.

12. The problem-solving behaviors I use in my job are not effective in resolving problems at home.

13. The time I must devote to my job keeps me from participating equally in household responsibilities and activities.

14. When I get home from work I am often too frazzled to participate in family activities/responsibilities.

15. Behavior that is effective and necessary for me at home would be counterproductive at work.

16. I have to miss work activities due to the amount of time I must spend on family responsibilities.

17. The behaviors I perform that make me effective at work do not help me to be a better parent, spouse, or family member.

18. I have to miss family activities due to the amount of time I must spend on work responsibilities.
Section D: WORK STRESS AND FAMILY STRESS

Instructions

Below are several feelings that you may have experienced at work. Using the 1 – 5 scale below, indicate the frequency with which you have experienced each feeling. The word “work” refers to all paid employment activities.

1 = strongly disagree, 2 = disagree, 3 = uncertain, 4 = agree, 5 = strongly agree

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I feel tense at work.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. I feel calm at work.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. I feel relaxed at work.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. I feel jittery at work.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. I feel at ease at work.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Instructions

Below are four statements that deal with your family responsibilities and your experiences at home. Please indicate by checking the appropriate box in each of the following sections which description suits you best. The words “family life” and “home” refer to all unpaid activities in the home that relate to family responsibilities.

1 = strongly disagree, 2 = Disagree, 3 = Uncertain, 4 = Agree, 5 = Strongly agree

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. In general, I am usually tense or nervous at home.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. There is a great deal of nervous strain connected with my daily activities at home.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. At the end of the day I am completely exhausted by my family responsibilities.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. My daily activities at home are extremely trying and stressful.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Thank you for your cooperation.
07 November 2012

TO WHOM IT MAY CONCERN

Sir/ Madam

REQUEST ON GRANTING ACCESS TO YOUR ORGANISATION FOR CONDUCTING RESEARCH

The University of Fort Hare, with their main aim of providing quality research, requests if you could grant our Honour’s/Master’s student: _________________________, student no: _________________________ in the Department of Industrial Psychology, permission and assistance to conduct research in your organisation as part of the fulfillment and completion of his/her Honour’s/Master’s degree.

The research will be conducted on the following topic:

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

An executive summary of the study will also be provided to the relevant people.

It will be appreciated if upon granting permission you could provide us with the contact person and contact details (telephone no and e-mail address), should the student need some information pertaining to this study.
Your assistance on the above matter will be highly appreciated. If you need any information on the student, feel free to contact the supervisor at the numbers provided below.

Yours sincerely

Mrs. N. I. Gcaza

Contact Person: Sign

Lecturer: Department of Industrial Psychology

Tel: 040 602 2119/2241

E-mail: ngcaza@ufh.ac.za