

Sex-Role Identity and Work-Family Conflict in South African Working Mothers

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Declaration

A research project submitted in partial fulfilment of the requirements for the degree of MA by coursework and research report in the field of Organisational Psychology in the Faculty of Humanities, University of the Witwatersrand, Johannesburg, February 2013.

I declare that this research report is my own, unaided work. It has not been submitted before for any other degree or examination at this or any other university.

Talia Sarah Solomon, February 2013

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“The two extremes of each trait, which are at a distance from one another, do not reflect a proper path. It is not fitting that a man should behave in accordance with these extremes or teach them to himself.

If he finds that his nature leans towards one of the extremes or adapts itself easily to it, or, if he has learned one of the extremes and acts accordingly, he should bring himself back to what is proper and walk in the path of the good [men]. This is the straight path.”

Maimonides, Laws of De'os

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Abstract

The current study aimed to contribute to research in the areas of Sex-Role Identity (SRI) and Work-Family Conflict (WFC), as no research to date has examined how socially desirable and socially undesirable SRI's effect this inter-role conflict. The EPAQ-R was used to examine a differentiated model of SRI and Carlson et al.'s WFC scale measured the bi-directional nature of WFC. This study made use of a cross-sectional, exploratory research design with 268 working mothers participating in this research. Under the COR framework and social constructionist theory, this study demonstrated that sex-role personality traits serve as resources that influence individual experiences of WFC. Results from a series of one and two-way ANOVA's indicated that socially desirable SRI's were associated with lower WFC than their undesirable counterparts. The results from this study provide support for the differentiated model of SRI. The practical and theoretical implications of this research are presented in this study.

CHAPTER I

Introduction

For decades gender researchers have engaged in heated debates regarding psychological differences between the sexes. The roles and mannerisms males and females adopt based on societal prescriptions and cultural influences have been the interest of academics since Bakan coined the terms “agency” and “communion” in 1966. The term agency corresponds to that of masculinity and is often characterised by assertiveness, competitiveness and self-oriented behaviour. Conversely communion, which is equated with femininity, personifies supportive, caring and nurturing qualities. Interest in gender-roles was further strengthened with Bem’s (1974) introduction of androgyny into the research area of Sex-Role Identity (SRI). With this revelation, masculinity and femininity were no longer perceived to be bipolar dimensions on a uni-dimensional continuum but rather mutually inclusive and compatible characteristics that can coexist in individuals.

There has been extensive research investigating the association between (SRI) and psychological outcomes such as self-esteem, self-efficacy, psychological wellbeing, stress, attributional style, competence and interpersonal adjustment. The majority of this research is however theoretically and methodologically unsound. Such research has only explored the impact of socially desirable (positive) sex-roles on psychological outcomes while failing to explore the socially undesirable (negative) qualities that may even be dominant in individuals (Spence, Helmreich & Holohan, 1979).

Taking both desirable and undesirable dimensions into consideration, the comprehensive model of SRI differentiates individuals into seven categories: positive masculine, negative masculine, positive feminine, negative feminine, positive androgynous,

negative androgynous and undifferentiated identities. While positive masculine individuals are often confident, competitive and assertive, negative masculine individuals often personify hostility, bossiness, egotistic behaviour and may neglect the needs of others in the pursuit of their own desires. On the other hand, those who have positive feminine identities are likely to be kind, compassionate, gentle and supportive. However, if individuals are negatively feminine they are likely to possess extreme levels of these traits and may land up neglecting their own needs by focusing too much on others. Negative feminine individuals may even endorse passive aggressive traits such as withdrawing from conversation, becoming moody or whiny. Positive androgynous individuals incorporate aspects of positive masculinity and positive femininity in their personality, whilst negative androgynous individuals are encompassed by the deficits of negative masculine and negative feminine traits.

To date, an insignificant amount of research has explored the SRI and WFC relationship. In fact, Parasuraman and Greenhaus (2002) stated that gender-roles have been largely overlooked in research on work and family interference. The only research that could be found on this association was Powell and Greenhaus' (2010) research on sex, gender and work-to family interference, Livingston, Burley & Springer's (1996) study on gender, sex-role and the anticipated work-to family conflict and Huffman's (2004) study on an examination of the perceived direction of work-family conflict. Nonetheless, all three of these studies have severe drawbacks.

Powell and Greenhaus (2010) research does not provide a comprehensive study on SRI as it only looks at the influence of one SRI on WFC, namely femininity. Livingston et al.'s (1996) research only examines anticipated and not perceived WFC. In addition, this study assesses WFC as a global construct and consequently fails to investigate its two directions (Family Interference with Work [FIW] and Work Interference with Family [WIF]). Furthermore, all three studies are limited as they only explore the impact of socially desirable

sex-role traits on WFC while failing to measure socially undesirable traits which are often dominant components of personality.

These methodological pitfalls are reflected in their use of the Bem Sex Role Inventory (BSRI; 1974) and the Personality Attributes Questionnaire (PAQ; Spence & Helmreich, 1978; Spence, Helmreich, & Stapp, 1974) to examine SRI. Both scales have been widely criticised for their neglect in measuring the undesirable gender-role characteristics. Therefore, no research to date could be found that examines the impact of socially desirable and undesirable SRI's on WFC.

A further limitation of SRI research is that it has focused on examining a narrow battery of psychological outcomes such as self-esteem, wellbeing, stress and interpersonal relationships. In assessing these relationships masculine SRI's often emerge as positively associated with well-being outcomes whereas feminine dispositions are usually positively related to social adjustment and interpersonal relationships (Saragovi, Aubé, Koestner & Zuroff, 2002). In other words, masculinity and femininity have been found to show the strongest positive associations with the variables with which they are theoretically related (Marsh, 1987; Marsh & Byrne, 1991). Therefore, the task-oriented nature of masculinity and person-oriented nature of femininity may confound the results of studies on SRI and psychological outcomes. In contrast, the construct of WFC could perhaps be viewed as an unbiased measure when relating to SRI as it incorporates both the task-orientated dimension of the work domain and the person-oriented home domain.

Both the task-oriented dimension of work and the person-oriented domain of family are recognised for being the two primary domains in an individual's life. Balancing the demands in these areas is without doubt a challenge. With the changes in family, job and organisational structures, the conflict between work and family domains has increased (Bailyn & Harrington, 2004; Lewis & Cooper, 2005; Parasuraman & Greenhaus, 2002). There

has been an influx of women entering non-traditional occupations, a rise in dual-earning parents and single parents. According to Joplin, Shaffer, Francesco and Lau (2003) the concept of “stay at home mothers” is progressively becoming the exception rather than the rule. As a result of these new societal norms and economic circumstances females need to succeed in both work and family domains. Therefore in the current societal climate, it is perhaps more accepted for females to transcend sex-role stereotypes and adopt SRI’s most conducive to their roles and responsibilities. Many women are indeed transcending the stereotypes that “women belong in the kitchen” and “men are the breadwinners” in order to balance the demands of work and family. Thus, gendered pigeonholes no longer pervade society to the extent that these previously did.

Despite this progression, researchers have found that women are still primarily responsible for housework and childcare (e.g., Greenhaus et al., 2000; West & Zimmerman, 1998). Women often have to structure their work around their family responsibilities whilst men usually have the flexibility of shaping their family responsibilities around their careers. Work is not always flexible in this regard and consequently women may be faced with conflict between work and family responsibilities.

Not meeting the demands of both roles leads to conflict between the work and family arenas. Work Interference with Family (WIF) and Family Interference with Work (FIW; Frone, Russell, & Cooper, 1992) are both incorporated into the understanding of Work-Family Conflict (WFC) which is bi-directional in nature. The experience of such inter-role conflict impacts negatively on the health and wellbeing of individuals. These physiological and psychological states are damaging to organisations, families and individuals as they repeatedly manifest in absenteeism, high turnover, lower performance, decreased family satisfaction and reduced wellbeing among employees (Duxbury & Higgins, 2003). Given the detrimental consequences of WFC, it is important to understand its causes.

The majority of research assessing predictors of WFC has focused on the influence of situational factors stemming from the work and home arenas, such as the presence of family-friendly policies and extent of family support. Substantial research has been conducted on the relationship between external, situational variables, and WFC; whilst dispositional factors, which are internal to the individual, have received minimal attention. Only recently has a minimal amount of research been conducted to explore the influence of personality traits on the work and home interaction (e.g., Bruck & Allen, 2003). This research suggests that experiencing WFC is more than the result of external influences, as internal personality differences play a significant role in this relationship. These bodies of research acknowledge that personality characteristics may predispose individuals to perceive and respond differently to conflict between work and family. As mentioned previously, one such dispositional factor that has been overlooked in WFC research is that of SRI. Gerson (2004) acknowledges this pitfall by explaining that the study of work and family has not consistently incorporated a “gender lens” (p. 2). Thus, the roles and personality traits associated with the different sex-roles have not been comprehensively employed in assessing WFC. It is therefore necessary to look beyond differences in biological aspects between the sexes in relation to WFC by employing a gender-role perspective to this inter-role conflict debate. Such a lens is necessary to provide an alternate and perhaps a solution to the mixed results of sex and WFC by exploring the relationship between SRI and WFC.

The scarcity in research on SRI factors in the work-family interaction is a shortcoming in work-family literature that needs to be addressed. These limitations prevent a comprehensive understanding of the full array of WFC predictors. Does an individual’s SRI influence the degree to which they experience WFC? Can the extent to which an individual possesses positive and negative sex-role traits personality characteristics influence their experiences of inter-role conflict between work and family domains?

The present research intends to answer these questions by using a differentiated model of SRI to assess the relationship between these gender-roles and WFC. This chapter outlined the context and prime focus of this research. The following chapters will provide the theory, methodology, results and discussion behind this study.

In chapter two the theoretical and conceptual framework for both SRI and WFC will be explored. The SRI section will be guided by the competing models of SRI, the social constructionist theory and the gender schemata theory. Following this, the Conservation of Resources (COR) theory will be applied to explore how sex-role personality traits serve as resources that influence the perceptions and experiences of WFC. This chapter will also explain the rich history behind and previous research on SRI and WFC. The limitations of previous research on gender-roles and WFC will subsequently be explored.

Chapter 3 provides the methodology employed in this study. This chapter will begin with the research design and then move on to describe the participants, instruments and the procedure undertaken in this study.

Chapter 4 describes the results of the study by detailing the descriptive statistics for this study and the correlations between the SRI subscales and WFC. A series of two-way ANOVAs are then presented which assess the effects of demographic and situational variables on the SRI and WFC relationship. One-way ANOVA's and post-hoc tests then determine the significant differences between different SRI's in terms of their WFC.

The findings will then be elaborated upon and explored in the discussion section in Chapter 5. This Chapter will provide explanations for the research findings in light of previous research.

In the final chapter, Chapter 6, the theoretical and practical implications for the study will be specified. Lastly, the limitations of this study and recommendation for future studies will be presented.

CHAPTER II

Theoretical and Conceptual Background

Towards a Definition of Sex-Role Identity

In examining research on gender-roles it is apparent that the terms sex and gender are often used interchangeably in literature; however, these terms are not synonymous. Whilst, sex refers to biological differentiations between men and women, gender denotes “psychological features and social categories shaped by human culture” (Matlin, 2000, p. 4). Thus, gender is a broader term denoting social and cultural distinctions between men and women. West and Zimmerman (1998) take the notion of gender a step further by suggesting that gender is not something we are, but rather something we do. Their “doing gender model” (West & Zimmerman, 1987) assumes that the concept of gender is dynamic as it changes with on-going social interactions and societal norms (Deutch, 2007; Thorne 2002; Vidal-Ortiz, 2009). Therefore, although shaped by culture and society, the choice regarding which gender-roles to conform to ultimately lies within the individual and is shaped by the culture within which he or she resides.

It is these socio-cultural influences which, from a social-constructionist perspective, form the underpinnings of Gender-Role Identity. Unlike the terms sex and gender, the phrases Gender-Role Identity (GRI) and Sex-Role Identity (SRI) are equivalent and thus reference will be made to both of these terms as well as gender-roles and sex-roles throughout this study. In keeping with a social-constructionist perspective, individuals think and act differently based on the sex-role traits they adopt from their culture and not based on inherent psychological traits (Pleck, Sonenstein, & Ku, 1994). These sex-roles are expressed through the adoption of a SRI which is described as “behaviours, expectations, and role sets defined by society as masculine or feminine which are embodied in the behaviour of the

individual man or woman and culturally regarded as appropriate to males or females” (O’Neil, 1990, p. 203). According to Park (1996) individuals assume SRI’s in congruence with what their culture instils in them, their education and the amount of resources they have to make informed decisions regarding what gender-roles to embrace. Therefore, one’s GRI can be said to be reflective of the amount of masculine and/or feminine traits that are adopted by individuals, regardless of their biological sex. An individual who adopts a masculine GRI will participate in masculine-oriented behaviours such as expressing dominance, aggression and competitiveness and assertiveness. On the hand, an individual who embraces a feminine identity is likely to exemplify feminine behaviours such as expressiveness, care, support and concern for others. In order to gain a comprehensive understanding of SRI is it necessary to explore the rich history behind the conceptualisation of these roles and behaviours.

History of Sex-Role Identity

Originally, SRI was perceived to consist of two components- masculinity and femininity-that were conceptualised as bipolar traits on a uni-dimensional continuum (Bakan, 1966; Gough, 1960). Based on this parochial understanding, individuals were sex-typed into being either masculine or feminine. However, a significant theoretical shift was brought about with the inclusion of androgyny as a component of SRI (Bem, 1974; Constantinople, 1973). With this new conception, femininity and masculinity were viewed as two unipolar scales which were independent of each other. Therefore, the classification of individuals was no longer restricted to masculine or feminine gender-roles alone. From then on it was understood that the two traits could be intertwined as individuals could be high in masculinity and low in femininity, high in femininity and low in masculinity. Moreover, individuals could be high in both femininity and masculinity, making them androgynous, or low in both in where they would possess undifferentiated traits.

The term androgyny is derived from the Greek word “andro” (men) and “gyny” (women; Matlin, 2000) and thus refers to individuals who have an array of coexisting masculine and feminine personality traits. With the introduction of androgyny into SRI, masculine and feminine traits were no longer perceived as mutually exclusive but rather as compatible constructs which could manifest simultaneously in individuals. Based on this understanding, the Bem Sex Role Inventory (Bem; 1974) and the Personality Attributes Questionnaire (PAQ; Spence & Helmreich, 1978; Spence et al., 1974) were developed as self-report measures used to categorise individuals into masculine, feminine and androgynous personalities.

The new perspective of androgyny revolutionised the understanding of sex-roles and gender differences. With theories on androgyny, assumptions of biological differences between the sexes and sex polarisations were questioned and often invalidated (e.g., Bem, 1993; Cook, 1985). In addition, with an understanding that both males and females could possess androgynous traits, the psychological distinctions between the sexes were reduced (Woodhill & Samuels, 2003). Thus, the androgyny model seems to be consistent with the social constructionist theory which stipulates that differences between the sexes are primarily a product of social and cultural distinctions.

From the androgyny period onwards, the boundaries that differentiated males and females were blurred as people began to realise that historical roles assigned to men and women may no longer be applicable for contemporary society. The stereotype of females having to conform to the “gyno-centric” notion of femininity was challenged as it was accepted that just as females could adopt a feminine nature, so too could they possess masculine and androgynous characteristics. Similarly, males were no longer confined to masculine traits alone; it was acknowledged that just like females, males could also embrace androgynous and feminine personality traits.

Although the conceptualisation of SRI has progressed significantly, research on SRI remains incomplete. The majority of research on gender-roles only measures socially desirable (positive) SRI's and fails to acknowledge the presence of socially undesirable (negative) SRI's in individuals. This social desirability bias in SRI research is evident as the two most common measures of SRI are the Bem Sex Role Inventory (BSRI, Bem, 1974) and the PAQ (Spence & Helmreich, 1978; Spence, Helmreich, & Stapp, 1974). Both these scales only consider socially desirable aspects of gender-roles.

This is a momentous shortcoming in the literature as not all individuals act in socially desirable fashions; in fact, Spence et al. (1979) stipulate that negative SRI variants are important components in individuals and may even be dominant. These researchers endeavoured to address this shortcoming in SRI research by extending their original version of the PAQ (1974) which only measures desirable SRI's to include undesirable aspects of SRI (EPAQ; Spence et al, 1979). This initiative was indispensable in SRI literature as it paved the way for the measurement and understanding of the full array of SRI components. Aside from the EPAQ, there are few measures that include both socially desirable and undesirable elements. One such scale is the Australian Sex-Role Scale (ARSR; Antill, Cunningham, Russell, & Thompson, 1981); however, this scale was developed exclusively for the Australian population (Marsh & Myers, 1986). Helgeson (1993) developed an eight item scale to examine unmitigated communion as the EPAQ subscale had low reliabilities for negative femininity; however this scale is not a comprehensive gender-role scale as it only measures one out of the seven SRI's.

Thus, despite the attempt to bridge the gap in SRI research, positive and negative components of SRI are rarely addressed in literature. Only a limited number of researchers have acknowledged the importance of distinguishing socially desirable and undesirable gender-role traits by employing instruments that measure a differentiated model of SRI, such

as the EPAQ, in their studies (e.g., McCreary & Korabik, 1994; Ricciardelli & Williams, 1995; Woodhill & Samuels, 2003). Understanding the progression in the conceptualisation of gender-roles is important in order to comprehend the personality traits that are associated with varying SRI's. Gender-roles are in fact core components of personality that influence thoughts, feelings and behaviours.

Sex-Role Identity as Personality Traits

Gender-roles are often operationalised as the degree to which individuals possess personality traits that are associated with being male and female (Littlefield, 2003). Therefore, SRI can simply be described as the extent to which individuals embrace masculine (i.e. competitive, aggressive, assertive) and/or feminine (i.e. expressive, kind and empathetic) personality traits. Bakan (1966) initially referred to these two dimensions as agency (masculinity) and communion (femininity) and deemed these traits the prime components of personality. According to personality theories, personalities are dynamic constellations of mental structures and coordinated mental processes that are responsible for individuals' emotions, thoughts and behavioural adjustments to their environments (e.g., Allport, 1937; 1961; James & Mazerolle, 2002; Millon, 1990). The assumption of personality theory is that certain personality traits will predispose individuals to think, feel and behave in consistent ways over varied situations. According to Bakan (1966) agency and communion are gender-related personality characteristics that influence the thoughts, feelings and actions of individuals and as such they can be considered fundamental aspects of personality development.

Throughout the research literature, SRI's are often referred to as personality attributes. For example Helgeson (1994) describes masculine and feminine traits as a fundamental pair of personality constructs that impact on physical and psychological

wellbeing. In addition, SRI is described an essential component of personality by numerous researchers (e.g., Herman & Betz, 2006; Moskowitz, Suh & Desaulniers, 2004). Moreover, Auster and Ohm (2000) explain GRI to be an individual's self-perceived endorsement of personality traits considered by wider society to embody masculinity and femininity. In addition, theories of sex-role development maintain that gender identity is one of the primary components of an individual's personality (Kim, 2008). In fact, a recent study conducted by Yawn (2007) refers to socially desirable and undesirable dimensions of SRI as personality traits that influence problematic behaviour.

The assumption that sex-roles are in fact measures of personality attributes is clearly illustrated in the titles of the sex-roles scales, namely the Personality Attributes Questionnaire (PAQ, Spence & Helmreich, 1978; Spence, Helmreich, & Stapp, 1974) and the Extended Personality Attributes Questionnaire (EPAQ, Spence et al., 1979). Spence (1984) concurs with this notion as she specifies that the PAQ and EPAQ are in fact measures of personality traits. In addition, the Bem Sex Role Inventory (BSRI; Bem, 1974) scale is an assessment that yields a score based on the extent to which individuals identify with masculine, feminine and androgynous personality characteristics. Thus, sex-roles are not only referred to as personality dimensions but they are in fact measured as personality traits. In order to understand the thoughts, feelings and behaviours that individuals with certain SRI's embrace it is helpful to gain an in depth understanding of the seven gender-roles.

A Description of Sex Role Identity Traits

By means of the EPAQ individuals can be classified into the seven categories: positive masculine (M+), negative masculine (M-), positive feminine (F+), negative feminine (F-), positive androgynous (A+), negative androgynous (A-) and undifferentiated (Au; Woodhill & Samuels, 2003). Korabik (1999) refers to negative masculinity and negative

femininity as over-socialised gender-roles, for individuals who possess these personality traits have taken the traits of agency and communion to the extreme, whilst simultaneously failing to integrate traits from the opposing gender-roles into their SRI. Socialised SRI's (positive masculinity and positive femininity) on the other hand are not taken to the extreme and are balanced with personality characteristics from their contrasting SRI. The following section will elaborate on the positive and negative elements of SRI.

Positively masculine individuals display traits associated with instrumentality (Stake, 1997) and agency (Bakan, 1966). These individuals are concerned with achieving their own desires and consequently possess traits associated with assertiveness, competitiveness, control and self-protection. It is, however, possible for individuals to possess excessive agentic traits (unmitigated agency; Bakan, 1966) whereby individuals focus on themselves to the exclusion of the needs of others (Helgeson & Fritz, 1998, 1999, 2000; Spence et al., 1979). Individuals who embody such traits are likely to be hostile, autocratic, domineering, greedy, bossy and arrogant.

In contrast to these instrumental SRI's, femininity is representative of personality traits connected to expressiveness (Stake, 1997) and communion (Bakan, 1966). Those with a positive feminine dispositions are likely to be interpersonally oriented (Fritz, 2000; Lippa, 1995) focusing on others, relationship building and attachment formation. These individuals are remarked upon for being kind, sympathetic, gentle and supportive. Yet, if taken to the extreme, such individuals could typify negative feminine traits (unmitigated communion; Bakan, 1966); in such cases, individuals focus too much on others to the exclusion of their own needs (Spence et al, 1979). Negative feminine traits are personified by excessive worrying about other peoples' problems, being overly nurturing, submissive and helping others instead of taking care of one's own needs.

Part of the problem with individuals who possess excessive communal traits is that they have externalised self-perceptions, where feeling good about themselves is based on the opinions and approval of others (Fritz & Helgeson, 1998). A healthy self-image on the other hand is based on internal self-worth, such feelings are likely to be internalised by individuals embracing positive SRI's. There is an additional component to negative femininity which is a passive-aggressive tendency. Passive-aggressive individuals often have pervasive patterns of negative attitudes towards others but will only express them through subtle means such as withdrawing from conversation, becoming moody and vindictive. For example women who embody these traits might withhold sex from their partners when they feel upset or angry (Woodhill & Samuels, 2004).

Androgynous individuals, on the other hand, express a combination of both the above described masculine and feminine traits. According to Woodhill and Samuels (2003) positively androgynous individuals utilise the positive dimensions associated with masculine and feminine traits. For example, if required individuals can be understanding yet simultaneously assertive in the same situation. On the other hand, negatively androgynous individuals may have a host of negative masculine and negative feminine traits in their identities, thereby embodying the deficits of both gender identities. For example, an individual may demonstrate high levels of submissiveness (negative femininity) and selfishness (negative masculinity).

The final category of SRI is an undifferentiated gender-role whereby individuals may be unpredictable and inconsistent in nature as they incorporate low amounts of masculine and feminine dimensions in their identities (Smit, 2005; Woodhill & Samuels, 2003). Thus, while androgynous individuals score high on masculinity and femininity, undifferentiated individuals are low on both these gender-roles. Consequently, undifferentiated groups have a limited self-identification with any gender-role (Waterman & Whitbourne, 1982) and have

fewer options for expressing their gender identity (Bem, 1981; Holt & Ellis, 1998).

Therefore, theoretically, undifferentiated SRI's represent unconsolidated or weak gender identities and are often considered the least functional of all the gender-roles (Littlefield, 2003). Researchers have been interested in the causes of these personality-based, gender-role differences. As such, researchers have questioned whether these differences are attributed to biological, psychological or socio-cultural distinctions. The following section will provide a theoretical account for the source of these SRI differences.

Theories of Sex-Role Development

Researchers and psychologists studying the origin of gender differences have their roots in three primary theories. The first being psychological theories which accentuate intra-psychic processes as the root cause of sex-role development (Freud, 1905, 1930; Kohlberg, 1966). On the other hand, biological perspectives maintain that gender-role differences can be attributed to biological roles of by males and females with regards to reproduction (Buss, 1985). According to this perspective, physical attributes of males and females influence the roles that these sexes occupy. Thus the size and strength of males gave them the powerful task of accumulating resources while the childbearing role of females provided them with caregiver responsibilities. These two theories have been faced with much criticism, primarily stemming from their neglect of the social-cultural influences on gender development (e.g., Morawski, 1985; Pleck, 1987). Thus, the third, social-constructionist theory addresses these limitations by asserting that social and environmental determinants are the primary causes of gender-role categorisations (Berger, Rosenholtz, & Zelditch, 1980; Eagly, 1987; Epstein, 1988). Given that metaphorical gender has been defined by social and cultural structures in this study, it seems apt for the social constructionist theory of gender development to form the theoretical basis for this research. The social constructionist theory (Mead, 1935; Eagly &

Wood, 1999) together with Bem's gender schemata theory will be the two perspectives presented in this study.

Social Constructionist Theory

The social-constructionist perspective (Mead, 1935; Eagly & Wood, 1999) posits that unlike sex, gender is culturally and socially constructed (Brannon, 2005). In other words, sex-role traits are not innate, biological traits but rather adopted by an individual based on external influences. A seminal study conducted by Mead (1935) that explores the gender-role differences between males and female in three different cultures, initiated the social constructionist approach to gender development.

The first culture to be assessed was the Arapesh; in this culture Mead found both the sexes to embody expressiveness, passivity and cooperativeness which are typical feminine mannerisms. In contrast, both males and females embraced masculine qualities in the Mundagamor society. In the third culture Mead explored, the Tchambuli, the roles of males and females were seemingly reversed to traditional gender stereotypes as males displayed more expressive dispositions whilst females engaged in more instrumental behaviour. These three findings are contrary to expected classifications which assume men are more masculine and that females embrace more feminine behaviours. In addition, Katsurada and Sugihara (2002) found that although gender-role similarities have been found cross-culturally, many cultures differ in their approach regarding what behaviour is acceptable for males and females. Based on these findings it is apparent that males and females are not born with different SRI's to each other; rather, in line with the social constructionist theory, they develop SRI's as a response to societal and cultural expectations and norms.

Although the social-constructionist theory places significant emphasis on the social construction of gender development, it does acknowledge the influence of biological sex differences on this process. Thus, the influence of the physical size and strength of males

together with the childbearing role of females is recognised as influencing cultural, social and economic roles that have been assigned to the sexes (Eagly, 1987; Eagly & Wood, 1999). Therefore, in line with the social-construction theory (Mead, 1935) gender-roles develop from the integration of self-knowledge of one's biological sex as well as cultural, personal and social dynamics (Bussey, 1983). Thus, an individual will adopt masculine, feminine or androgynous characteristics by internalising and interpreting their sex as well as their gendered cultural prescriptions.

Given that changing nature of historical periods and cultural dynamics which shape gender norms, one can understand that gender-roles too, change over time (Thorne, 2002). The changing nature of gender-roles becomes apparent when exploring SRI in the current societal climate. In contemporary society there is less power distance between the sexes and more gender equality and thus gender-role disparities have been reduced. Therefore, in accordance with the social constructionist theory, individuals have had to adjust and respond to these changing gender norms. Social interactions are often prime causes for SRI adaptations (Hollander, 2002). Western society is gradually coming to terms with the notion that females can be as assertive, resourceful and competitive as men are. Therefore, it is likely for females in contemporary Westernised societies to adopt more masculine and androgynous personas. Such roles would have been contended by their maternal predecessors who would most likely consider more masculine behaviour to be a violation of prescriptive female norms. Despite how liberated and egalitarian women have become, the onus of taking care of home and family needs is still on them. The gender-roles that women often embrace in the home domain such as nurturance, kindness and support may then be internalised by women when adopting a SRI.

Notwithstanding the influence of societal pressures, the social constructionist theory further acknowledges that ultimately the choice of which gender-role to embrace lies within

each individual. This postulation emphasises the power that individuals hold in determining their gender-role identity, which will ultimately affect their psychological functioning and wellbeing. Individuals may depart from the masculine or feminine cultural models and view themselves as different to stereotypes or they may conform to masculine, feminine or androgynous norms. The process of gender-role development is said to commence at birth when interactions with family, friends and educators as well as cultural norms influence an individual's personality and behaviour (Katz, 1986). The influence of culture on sex-role development is further stressed in Bem's gender schema theory (1974).

Gender Schema Theory

Bem's gender schema theory (1974) combines truths from Kohlberg's theory of cognitive development (1966) and Bandura's theory of social learning (1977). This perspective stresses the influence of cultural systems in differentiating between males and females. These differentiations form the backdrop for socialising boys and girls into different sex-roles. Where Bem's gender schema theory differs to the social constructivist theory, is in its cognitive approach in acknowledging the presence of gender-based schematic processing in the sex-typing process. Bem's theory (1974) also draws on essentials from Kohlberg's (1966) social learning theory by explaining that children constantly make social categories to understand the world they live in (Rogers, 2002) and are thus the most susceptible to gender stereotyping.

A schema is a cognitive structure, a network of association that organises and guides an individual's perception (Bem, 1981). Taking this a step further, Bem (1974) defines gender schematic processing as "a readiness on the part of the individual to encode and to organise information - including information about the self – in terms of the cultural definitions of maleness and femaleness that constitute the society's gender schema" (p. 369). Gender schema theory proposes that this idea of metaphorical gender is derived when a child

internalises the society's gender schema to form their own network of associations (Bem 1981).

The process of gender development is said to begin in childhood from around the age of five when children become aware of gender-roles that are considered appropriate based on their culture and by middle-childhood, many children have conformed to the gender-roles most common in their society (Eysenck, 2004). Therefore, it is of no surprise that children can perceive, encode, and organise the information in their environment in terms of gender (Leinback & Fagot, 1993). In other words, cultural definitions of what constitutes being masculine and feminine are encoded into the individual's gender schema (Leinback & Fagot, 1993). Thus males and females will recall information that is consistent with their gender schema and disregard that which is not (Rice, 2000). Although gender formation is activated at a young age, this process continues across the entire lifespan of individuals (Eysenck, 2004). Therefore, although gender-roles are reasonably crystallised in adolescence to early adulthood, throughout life individuals process information from their societies and cultures about gender-roles and encode this into their gender schema.

Based on societal and cultural norms, children form masculine, feminine and androgynous schemata which enable them to determine which behaviour is appropriate for themselves and others. For example, a child who has male doctors but female teachers may encode this information into his gender schema in order to categorise traits and professions that society delineates as appropriate for males and females. Thus, individuals internalise the cultural definitions of what it means to be male and female and incorporate this into their self-concept and gender-role identity. It is therefore evident that in both the social constructivist theory and gender schema theory, cultural myths become self-fulfilling prophecies that guide human behaviour.

Based on this theoretical background, three models have been developed which attempt to explain the relationship between SRI and wellbeing, these include the congruency, androgyny and masculinity models. These three models of SRI, which will be discussed in the subsequent paragraphs, are used as a foreground for this current study on SRI and WFC as there is a dearth of research on the relationship between SRI and WFC. Therefore, since WFC is a stressor that impacts on the psychological health and wellbeing of individuals, the relationship between SRI and psychological outcomes will be used to infer the relationship between SRI and WFC.

Competing Theories of SRI

Congruency Model.

The congruency model, which endorses traditional perspectives, dominated early research on SRI and psychological outcomes. This model was established during the period in which masculinity and femininity were theorised as bipolar points on a single continuum. This model assumes that sex-typed individuals (individuals whose gender-roles are congruent with their biological sex) are associated with the highest levels of psychological wellbeing. In other words, according to the congruency model, wellbeing is thought to be acquired by men who display masculine traits such as control, competitiveness, forcefulness, dominance and self-confidence and females who personify feminine traits such as nurturance, support, forgiveness, kindness and compassion (Bassoff & Glass, 1982). This model endorses the notion that possessing traits opposite to one's sex this would bode poorly for wellbeing.

However, sex-role conformity was challenged when research on SRI expanded and masculinity and femininity were found to be bi-dimensional in nature (Whitley, 1983). Thus, the theory of androgyny emerged with the understanding that individuals could possess a combination of masculine and feminine traits. Given this new understanding, it was proposed

that individuals who incorporate both masculine and feminine characteristics in their identities have an advantage over their sex-typed equivalents (Bem, 1974). The move away from the congruency model was strengthened when researchers suggested that sex-typed behaviour only contributes to psychological benefits for males, whilst females who embrace femininity would not be as likely to experience such promising outcomes (e.g., Whitley, 1984). Recent research on feminine sex-typed behaviour supports the digression from the congruency model by demonstrating that femininity has little or less influence on psychological wellbeing and adjustment than masculinity (Wajsblat, 2011). Therefore, there has been a wave of research refuting the congruency model (e.g., Bassoff & Glass, 1982; Bem, Martyna, & Watson, 1976, Whitley, 1983) and subsequently, the androgyny and the masculinity models were developed.

Androgyny Model.

In contrast to the sex-typing process whereby males must conform to masculine standards and females to feminine behaviour, the androgyny model proposes that individuals can possess masculine and feminine personality traits that are complementary to each other. Bem (1974) stipulates that androgynous individuals are able to integrate various aspects of their personality in order to function optimally. The flexibility which androgynous sex-roles offer is one of the prime reasons why androgynous individuals are often considered to uphold high levels of psychological functioning. This adaptability is especially beneficial given the changing societal norms, such as the empowerment of women and increased home responsibilities of men (Ballard-Reisch & Elton, 1992). In King's (2006) research androgynous individuals were involved in de-gendered role responsibilities which were found to be associated with lower amounts of WFC. Since its conception, the relationship between androgyny and positive outcomes has been well researched (Cheng, 2005). Positive outcomes correlating with androgyny are apparent in ample amounts of research (e.g., Anthill, 1983;

Kirchmeyer, 1996, Rose & Montemayor, 1994; Sawrie, Watson & Biderman, 1991; Stake 1997; Wubbenhorst, 1994). Mead and Ignico (1992) in fact speculate that the androgyny model is superior to others in predicting positive outcomes. Many researchers consider this model to be predictive of the most advantageous outcomes of all gender-roles in terms of coping style (Cheng, 2005), mental health (Lefkowitz & Zeldow, 2006) and subjective wellbeing (Norlander, Erixon, & Archer, 2000). Furthermore, research indicates that androgynous individuals are able to perceive and experience less stress than individuals who only possess masculine or feminine traits (Shaw, 1982; Heilburn & Han, 1986). Within the work context, androgynous individuals have been found to adapt and respond to workplace stressors most effectively (Chow, 1987; Eichinger et al., 1991; Krausz et al., 1992; Wajsblat, 2011). The masculinity model is however in close competition with the androgyny model for providing the ideal model of gender-roles.

Masculinity Model.

Supporters of the masculinity model argue that it is the masculine component of androgyny and not the combination of femininity and masculinity that contributes to the positive consequences of androgynous sex-roles. Accordingly, advocates of the masculinity model suggest that psychological wellbeing is to a large extent dependent on variations in masculine personality traits (Whitley, 1984). In contrast to proponents of the androgyny model, supporters of the masculinity model posit that a masculine SRI is the most adaptive of all SRI's (Antill & Cunningham, 1979, 1980; Cook, 1985; Kopper & Epperson, 1996; Whitley, 1983). Whitley's (1984) meta-analysis of 32 studies demonstrates support for the masculinity model as findings in these studies further establish that masculinity is the SRI that promotes highest levels of psychological health among all the SRI's. These findings concur with previous research that links masculine sex-roles with higher levels of psychological wellbeing than androgynous identities (e.g., Adams & Sherer, 1985;

Castlebury & Durham, 1997; Taylor & Hall, 1982). Moreover, individuals with a masculine SRI have been equated with lowest levels of stress out of all SRI's for both males and females (Lubinski, Tellegen, & Butcher, 1981; Nezu & Nezu, 1986; Roos & Cohen, 1987). Although their hypothesis was not supported in their results, Livingston and Burley (1996) speculated that given that masculine sex-roles bode well in terms of wellbeing, these individuals would be more likely to experience lower levels of WFC.

It is therefore evident that both the androgyny and masculinity models have received vast amounts of empirical support. In fact, many studies have found negligible differences between these two models in predicting psychological outcomes (e.g., May & Spangenberg, 1997; O'Heron & Orlofsky, 1990; Wulff & Steitz, 1999). A communality of both theories is in their implication that masculine and androgynous groups are better adjusted than those with only feminine identity traits.

Feminine Sex-Role Identity and Wellbeing

Most research on feminine SRI suggests that this gender-role is associated with less favourable psychological outcomes than masculine or androgynous SRI's. As such femininity is often found to be unrelated to wellbeing outcomes or negatively related to positive psychological functioning. These predictions are depicted in research that shows feminine SRI's are associated with higher levels of stress in females (Bromberger & Matthews, 1996; Olds & Shaver, 1980) or unrelated to stress (Hatzenbuehler & Joe, 1981; Lubinski et al., 1981; Nezu & Nezu, 1987). Similarly, Helgeson's (1994) findings illustrate that communal traits are unrelated to wellbeing whereas other researchers have found a negative relationship between these variables between these characteristics and psychological wellbeing (e.g., Aubé, Fichman, Saltaris, & Koestner, 2001).

Although usually associated with a negative stance when it comes to wellbeing, femininity tends to fare well in terms of interpersonal adjustment. For example, femininity is often found to be accompanied by marital satisfaction, social adjustment and social support (e.g., Helgeson & Fritz, 2000). Therefore, by nature femininity is usually associated with expressive traits, masculine individuals will be advantaged when it comes to instrumental domains and androgynous identities will benefit from both the above components.

It is, however, difficult to draw hypotheses and conclusions from these competing models of SRI as they are theoretically and methodologically flawed. In almost all the above research the undesirable sex-role traits were not separated from the desirable traits and thus research findings may not be representative of the true SRI associations and outcomes. Thus, according to Ward (2000) despite an abundance of research on SRI, the limitations of the instruments used to measure these traits prevent adequate conclusions from being drawn. The accuracy of whether these models correctly portray the psychological wellbeing of individuals must therefore be questioned and their limitations must be brought forward.

Limitations of Sex-Role Identity Research

Research on androgyny and masculinity models is not without flaws as several researchers have found that these gender-roles do not predict wellbeing (e.g., Ray & Lovejoy, 1984). Findings regarding the optimal SRI have yielded equivocal results as studies both demonstrate and fail to demonstrate support for each of the three models (Dimitrovsky, Shiff, & Perl, 2000; Whitley, 1984). For example, Yu and Xie's study (2008) concurs with previous research (e.g., Lubinski, Tellegen & Butcher, 1981; Olds & Shaver, 1980) that draws attention to the inconsistent relationship between androgynous gender-roles and psychological functioning. Woo and Oei (2008) argue that although it seems "attractive and probably more

politically correct” for androgynous individuals to have the highest levels of wellbeing, findings do not repeatedly support this hypothesis.

The mixed results of SRI and wellbeing research indicate a lack in the theoretical understanding of different sex-roles. A fundamental limitation of the majority of research on SRI is that it only covers SRI in terms of a single category, namely desirable SRI when linked to wellbeing. Wajsblat (2011) argues that “the inability of prior research to differentiate between the positive and negative types of androgyny could have been responsible for masking the benefits of positive androgyny” (p.563). This proposition can be applied to research on all SRI’s that have failed to consider the presence of negative components in these gender-roles. Recently, researchers have expressed the need to differentiate the sex-roles into positive and negative facets in order to yield more definitive outcomes and consequently resolve the ambiguity in research findings (e.g., Choi, Fuqua, & Newman, 2007; McCreary, 1990; Woodhill& Samuels, 2004). By differentiating SRI into positive and negative outcomes the results of masculine and androgynous SRI models are likely to produce different outcomes. Yet, few researchers have heeded to these suggestions and thus research on SRI remains incomplete. This research therefore aims to obtain a comprehensive understand of SRI in order to understand the full array of SRI factors influencing WFC. The following section will examine research that has conceded to a differentiated model of SRI in its relationship to psychological wellbeing.

Undesirable Sex-Role Identity and Psychological Outcomes

An inadequate amount of research has explored a comprehensive model of SRI that measures its positive and negative dimensions in relation to wellbeing and psychological adjustment. The associations and outcomes of desirable SRI’s were illustrated in the competing theories of SRI as the majority of research on these theories has only measured

desirable gender-role aspects. Negative traits are however essential to investigate as they are often endorsed by and may even be dominant in individuals (Spence, 1984). In fact, Korabik and McCreary (2000) declare that certain individuals may in fact never fully develop positive gender-role traits and refer to this as being under-socialised with regard to positive identities.

Wajsblat (2011) found positive SRI's to be associated with better stress management strategies and higher levels of wellbeing than their negative counterparts, whose personalities are predictive of the poorest psychological outcomes. Moreover, Ricciardelli and Williams (1995) specified that desirable gender traits predict better functioning than undesirable traits when it comes to drinking related to problem behaviour, measures of restrained eating, and measures of personal competence. In addition, researchers have found that sex-role extremities impair the psychological functioning of individuals (Aube, 2008; Hammer & Good, 2010; Helgeson & Fritz, 1998).

Therefore, Woodhill and Samuels (2003) accentuate the need for researchers to address both positive and negative components of SRI. Individuals possessing socially undesirable traits are often found to have maladaptive psychological functioning. When a gender-role is dominant to the extent that it excludes the adoption of other personality characteristics, it is deemed as undesirable. For example, when the masculine trait of assertiveness is extreme and not neutralised with sensitivity and compassion, it may lead to arrogance and dominance. Likewise, although being supportive is a positive trait, if it is not balanced with self-preservation, it may lead to submissiveness the neglect of personal needs. The socially undesirable communal traits such as submissiveness are usually inversely related to positive psychological functioning.

In general, negative femininity predicts imbalanced relationships and interpersonal problems of submission and over-involvement, whereas unmitigated agency predicts a confrontational interactional style and excessive interpersonal control (Helgeson & Fritz,

1998, 1999, 2000). In accordance with this research, Helgeson and Fritz (1999) found negative masculinity to be linked to with hostile dominant interpersonal problems and negative femininity to be reflective of submissive problems. Both negative masculine and negative feminine traits have been found to be moderately related to hostility and anger (Fritz & Helgeson, 1998; Fritz, Nagurney, & Helgeson, 2003).

Socially undesirable masculinity is often related to behavioural problems including increased drug use, anger expression and physical illness (Helgeson, 1994). These gender-role groups are known to often focus on the self to the detriment of both themselves and others (Helgeson, 1994). On the other hand, socially undesirable femininity is commonly related to internalising problems and psychological distress such as depression and anxiety. Moreover, undesirable feminine traits have been demonstrated to lead to negative physical and psychological health behaviours (Fritz, 2000). Supporting this research, Piro et al. (2001) found negative femininity to be inversely related to emotional well-being. The increased stress that undesirable femininity arouses is a further reflection of the unfavourable psychological responses that accompany this gender-role (Nagurney, 2007). Negative femininity may actually hinder the experience of meaningful and positive interactions and possibly lead to distress (Aube, 2008). Perceiving situations as more stressful is likely to lower individual wellbeing. Furthermore, unmitigated communion, but not communion, is associated with lower levels of physical and psychological wellbeing for both men and women (Helgeson, 1994; Saragovi et al., 1997).

Negative feminine groups are often neurotic which gives them the tendency to be more vulnerable to stress (McCrae & John, 1992). It is therefore expected for these gender-role groups to have heightened emotional and physical responses to stress (Connor-Smith & Flachsbart, 2007) and to be prone anxiety and worry (Eysenck & Eysenck, 1985). A further problem with neurotic individuals such as negative feminine identities is that they have been

found to report greater exposure and reactivity of interpersonal conflicts (Bolger & Zuckerman, 1995). Bouchard, Guillemette, and Landry-Leger (2004) concur with this research as they demonstrated these groups to have fewer resources to deal with their stress. These findings are consistent with the COR theory that explains sex-role traits to be resources that can predispose individuals to experience different levels of WFC. In line with Fride and Ryan's (2005) model of personality and WFC, negative feminine individuals are likely to appraise stressors as threatening, rather than challenging unlike their positive counterparts who view stressful situations as opportunities that they can overcome favourably.

Neurotic individuals often experience negative emotions as concern and anxiety, while emotionally stable individuals (positive identities) are described as even-tempered and calm (Costa & McCrae, 1992). Given the damaging consequences of negative masculine and negative feminine SRI's, it seems logical that researchers hypothesise that negatively androgynous individuals, who adopt the combination of these negative traits, have the least optimal outcomes (e.g., Wajsblat, 2011). The lack of research conducted that separates SRI into positive and negative components is evident in Wajsblat's research (2011) as she elucidates that Woodhill and Samuels' research (2003) is the first to provide empirical evidence for the constructs of positive and negative androgyny.

Woodhill and Samuels (2003) for example found that undifferentiated gender-roles were not related to any of the positive outcomes that they explored. Furthermore, empirical research indicates that undifferentiated traits are often associated with maladaptive wellbeing (e.g., Littlefield, 2003; Pritchard, 2008). Möller-Leimkühler et al. (2002) take research on this SRI a step further by explaining that alcoholics who endorse undifferentiated traits often have personality disorders. It is therefore evident that undifferentiated SRI's are reflective of low psychological functioning and thus, for the purpose of this study, they have been

classified together with the negative SRI's which are also associated with maladaptive psychological outcomes.

The impaired health and wellbeing possibilities associated with individuals who embody negative gender-roles further emphasises the need to understand the differentiated model of SRI in its entirety. Only once this model is utilised can research yield accurate results; therefore this comprehensive model will be employed in this study relating SRI to WFC. The following section provides a description of this inter-role conflict.

Towards an Understanding of Work-Family Conflict

A vast array of phrases have been established which refer to the conflict between work and family domains such as negative work-family spillover, work-family interference, and work-family tension (Frone, 2003). The term WFC, which was conceptualised in 1985 by Greenhaus and Beutell, is the term referred to in this study. Initially, WFC was thought to be uni-dimensional in nature with conflict arising from the work domain alone (Greenhaus & Beutell, 1985). However, more recently, researchers have recognised the duality of WFC, which involves not only Work Interference with Family (WIF) but also Family Interference with Work (FIW; e.g., Duxbury, Higgins, & Mills, 1992; Frone, 2003; Gutek, Searle, & Klepa, 1991). WIF refers to the stress that emanates from the work arena which interferes with home responsibilities. On the other hand, FIW is descriptive of the conflict that arises in the family domain and spills over to the work domain. The bi-directional nature of WFC is reflected in Greenhaus and Beutell's (1985) definition of WFC which they refer to as "a form of inter-role conflict in which the role pressures from the work and family domains are mutually incompatible in some respect" (p. 77). In order to fully understand the inter-role conflict, the bi-directional nature of WFC must be considered (Frone et al., 1992; Greenhaus & Beutell, 1985). Therefore, these two directions of conflict

together with WFC as a global factor will be the dependent variables in this study. Since family is the most salient component of home responsibilities, this study will concentrate on the interaction of work and family and not on additional home responsibilities.

WFC is a complex phenomenon consisting not only of two directions of conflict but also three forms of WFC. These include time-based conflict, strain-based conflict and behaviour-based conflict (Carlson et al., 2000). Time-based conflict is said to occur when job and family responsibilities compete for the individual's time (Niemeyer, Boles & McMurrian, 1996; O'Driscoll, Ilgen & Hildreth, 1992). Thus, the amount of time devoted to one role reduces the amount of time available to spend in other domains. For example, working overtime may prevent employees from fetching their children from school. Time-related conditions which are consistently related to WFC include long work hours, schedule inflexibility, shift work requirements, and over time requirements (Byron, 2005; Judge, Boudreau, & Bretz, 1994; Parasuraman, Purohit, Godshalk, & Beutell, 1996).

The second form of WFC, strain-based conflict, is brought about when strain experienced in one role interferes with performance in another role (Byron, 2005; Carlson, 1999). For example family-related stress such as marital or parental conflict may hamper one's ability to concentrate at work (Byron, 2005). On the other hand, negative workplace experiences may induce strain on individuals leading to expressions of irritability towards family members (O'Driscoll et al., 1992).

Lastly, behaviour-based conflict occurs when specific behaviours required in one role are incompatible with behavioural expectations in another role (Greenhaus & Beutell, 1985). In the context of this study, participation in work (or family) may make it difficult to perform effectively in the alternate domain. For example, instrumental traits required for managerial positions may conflict with the expectations of a parent to be warm, nurturing and supportive at home. Combining these two directions and three forms results in six dimensions of work–

family conflict: (1) time-based WIF, (2) time-based FIW, (3) strain-based WIF, (4) strain-based FIW, (5) behaviour-based WIF, and (6) behaviour-based FIW. These types of conflict create tension for individuals who strive to meet demands in both work and family roles.

The experience of inter-role conflict can be viewed as a form of stress that may impair the health and wellbeing of individuals. Although the interaction between work and family can result in facilitation between the two domains, the majority of research on the work and home interaction has focused on the conflict that arises between these domains (Barnett, 1998; Greenhaus & Parasuraman, 1999; Haas, 1999). Conflict between these two domains is more prevalent than work-family enrichment and therefore this study focuses on the negative interaction that work and family roles may produce.

Not all researchers acknowledge the bi-directional nature and different forms of WFC and thus a variety of scales have been developed for its measurement. One of the primary scales used is Netemeyer, Boles and McMurrian (1996) 10-item measure that includes items for both directions of work-family conflict (WIF and FIW). Conversely, the scale developed by Stephens & Sommer (1996) includes all three forms of WFC but only utilises the uni-directional nature of WIF. Accordingly, these researchers suggest that “further study is necessary to adequately measure family to work conflict” (p. 485). In order to transcend the limitations of the aforementioned scales, Carlson et al. (2000) developed a WFC scale that measures all six dimensions of conflict thus giving consideration to both the nature and direction of conflict (Kossek & Ozeki, 1998). Thus, the scale can be used to measure either the six dimensions, the three forms or the two directions of conflict. The current study employs this scale to measure the bi-directional nature of conflict, as well as looking at WFC as a global entity. The original author of this scale, Carlson, as well his associates (Grzywacz, & Zivnуска, 2009) specify that this scale is effective in measuring the two directions from which WFC arises. In line with researchers who have used this scale to measure the two

directions and not the three forms of conflict (e.g., Allen & Armstrong, 2006; Boyar, Maertz, Mosley, & Carr, 2008; Korabik & Lero, 2008; Shockley & Allen, 2007), this study also assessed the bi-directional nature of WFC, without assessing its three types of conflict. Consequently within the present research the two directions were measured as the scales measured WIF and FWC as two global entities.

The inter-role conflict emanating from the work and home domains serves as a stressor that may negatively impact the wellbeing of individuals. The following section will elaborate on the tension that is created through the experience of WFC.

Work-Family Conflict as a Stressor

Stress can be defined as “a threat to the quality of life, and to the physical and psychological well-being of an individual” (Cox, 1978, p. 25). Therefore, according to Cox, stress is a perceptual experience arising from a comparison between the demands on an individual and their ability to cope with the demands. Individuals who do not have enough resources to meet their requirements will be confronted with stress. Therefore, if the demands placed on individuals from the work and family are greater than their ability to deal with the demands effectively, they will be faced with a stress response.

Whether the conflict involves WIF or FIW, both serve as contributors to the perception and experience of stress. The researchers who developed the most comprehensive WFC scale, Carlson, et al. (2000), conclude that WFC is a source of stress that confronts the majority of individuals. Although research indicates that antecedents in the work and family domains may or may not be highly stressful when considered individually, their combination is likely to result in stress (Bedeian, Burke, & Moffett, 1988). WFC can therefore be regarded as a specific type of stressor triggered by the combined effects of antecedents from these two domains.

According to Kiecolt-Glaser, McGuire, Robles and Glaser (2002), the different dispositions individuals possess will cause them to experience stress differently. In fact, recent research has drawn attention to the notion that SRI influences perceptions and experiences of psychological stress (Littlefield, 2003). For example Misra and McKean (2000) suggest that individuals who adopt a masculine SRI will have lower stress levels as they have been socialised to be self-reliant and withhold their emotions to appear strong. There are several theories that provide an explanation as to why certain individuals experience different amounts of inter-role stress. These theories are elaborated upon in the following section

Theories of Work-Family Conflict

The Role Conflict Theory.

Hobfoll (1989) highlights a significant limitation in WFC research as it not often grounded in strong theoretical frameworks. When a theory is in fact applied it is usually the role conflict theory developed by Kahn, Wolfe, Quinn, Snoek, and Rosenthal (1964) which was developed 48 years ago. Numerous shortcomings of applying this theory in WFC research have been raised (MacDermid, 2005, Rosenbaum & Cohen, 1999). Perhaps the greatest critique of the role conflict theory is in its overall theoretical explanation of the cause of work and home conflict. This theory proposes that being involved in multiple roles is detrimental to an individual, creating inter-role conflict. The premise of this theory is that conflicting expectations, time demands and a lack of energy resulting from work and home responsibilities make it difficult for individuals to perform both work and home roles effectively (Greenhaus & Beutell, 1986; Kahn et al., 1964). Thus, according to this theory, the more roles individuals hold, the less capacity they will have to successfully perform role

demands and subsequently they will be faced with greater amounts of conflict and increased strain (MacDermid, 2005).

These theoretical underpinnings have been refuted by researches whose studies have found that multiple roles need not necessarily be detrimental but can in fact be complimentary to the individual (Kirchmeyer, 1992). A further limitation of the role conflict theory is that it pays less attention to family roles, which is, by definition, are essential to understanding work-family conflict (Grandey & Cropanzano, 1999). Furthermore, role theory does not acknowledge that certain variables may buffer stress outcomes (Jackson & Schuler, 1985).

Although various other theories, such as the spillover theory and segmentation models, have been developed to provide a framework for the study of work and family (Zedeck & Mosier, 1990) they do not provide a comprehensive theory to guide WFC research (Kelley & Streeter, 1992). In order to address previous WFC theoretical limitations, Hobfoll (1989) established the Conservation of Resources (COR) theory, which provides an integration of several stress theories. Therefore, this theory forms an essential component of the theoretical framework for this study.

The Conservation of Resources Theory.

Perhaps the greatest contrast between Hobfoll's COR theory and the role conflict theory is that the latter does not assume that increased roles are necessarily equated with increased conflict. In fact, the COR theory suggests that additional roles can be considered as resources that may in fact reduce inter-role conflict (Greenhaus & Powell, 2006). In line with the COR model, conflict occurs in the process of balancing work and family demands when there is the threat of a loss of resources, an actual loss in resources, or lack of an expected gain in resources (Grandey & Cropanzano, 1999).

Hobfoll (1989) defines resources as “those objects, personal characteristics, conditions, or energies that are valued by the individual or that serve as a means for attainment of these objects, personal characteristics, conditions, or energies” (p. 516). When faced with work and family demands, objects such as money or housing are valued through their physical nature and inherent ability to help individuals gain more resources (Hobfoll, 1989, 1998). Personal characteristics and dispositions can be constructive or destructive resources when dealing with WFC as they have the ability to enhance or hinder the stress response. Further resources that are valued are conditions, such as marital status and tenure; these circumstances promote access to or possession of other resources. The last form of resource described by Hobfoll (1989) are energies (i.e., time and knowledge) which are valued for aiding the acquisition of other resources such as time for work and family and opportunities for advancement. When resources are favourable they protect against resource loss and facilitate resource acquisition (Hobfoll, 1998). Consequently, those with a robust resource pool are more likely to repeatedly gain more resources (Hobfoll, 1998). However, those who lack strong resource pools may habitually find their resources depleting as a loss in resources precipitates further resource loss. It is the threat of depleting resources or actual resource decline which may lead to the experience of stress (Poelmans, 2001). Therefore, when individuals are faced with stressful situations, they strive to minimise their overall loss of resources by employing resources they already possess (Bryant, 2009).

In keeping with the aim of this study, to explore the relationship between the sex-role dispositions and WFC, the role of personal characteristics as personal resources, and not the conditions, energies and objects acquired by individuals, will be examined. Personal characteristics are traits that result from one’s orientation to the world (Wayne et al., 2004). Such characteristics are regarded as resources as they have the potential to aid or weaken stress resistance (Hobfoll, 1989). There are numerous personality characteristics which differ

among individuals such as self-esteem, self-confidence, locus of control and attributional style. However, for the purpose of this study the way that individual sex-role dispositions influence stress responses will be explored. These sex-role differences affect how individuals perceive and experience work-family stress. For example, certain characteristics, such as socially desirable sex-role traits, will place individuals at an advantage by providing them with better skills to minimise their loss of resources and gain extra resources. For example, those with desirable masculine traits may not be as concerned by time-related stress as they know they have the ability to cope with such tension or potential loss of resources.

In accordance with Hobfoll (1989) one way individuals with positive sex-roles may conserve resources is by reinterpreting threats as challenges (p. 519). Individual who have the ability to focus on potential gains rather than losses, will be able to protect themselves from the loss of valuable resources and consequently minimise the negative ramifications of resource loss. Additionally, certain sex-roles may provide individuals with a positive outlook whereby they perceive stressors as controllable; such dispositions are likely to reduce individuals' perceptions and experiences of WFC (Rotondo, Carlson, & Kincaid, 2003).

Conversely, negative thoughts, which are likely to be present in those with negative sex-role identities, may reduce an individual's energy, taking valuable resources away from work and family role obligations. Such dispositions are likely to detract from an individual's resources as they are taxing to the individual and counterproductive in dealing with conflict. Therefore, one can assume that individuals with positive predispositions are likely to have better skills in dealing with WFC than their negative counterparts. Therefore, the COR suggests that certain dispositions may serve as resources which may augment or reduce the experience of WFC. Based on this grounding, it is apparent that Hobfoll's (1989) COR model is most apt to form the theoretical framework for this study which looks at the relationship between socially desirable and undesirable sex-role personality traits and WFC. In addition to

the strong theoretical foundations, this study also guarantees that this research utilises concrete methodology so that WFC can be measured accurately. The following section is devoted to a discussion of the contributing factors to the interference between work and family. While situational, demographic factors have received vast empirical research, only recently have researchers begun to realise the impact of internal dispositions on the work and family relationship.

Predictors of Work-Family Conflict

The past 25 years have been proliferated with research examining the interaction of work and family with the bulk of this research focusing on the conflict that exists between these roles (Barnett, 1998; Greenhaus & Parasuraman, 1999). Yet, despite the extensive research that has been conducted on WFC, there are substantial gaps in the existing literature. Most research on the antecedents of WFC has emphasised the contribution of situational factors to inter-role conflict (e.g., Allen, 2001; Anderson, Coffey, & Byerly, 2002; Thompson et al., 1999). Situational factors that have been found to predict WFC among individuals have been well documented (Eby, Casper, Lockwood, Bordeaux, & Brinley, 2005; Ford, Heinen & Langkamer, 2007). Most of these predictors emanate from the work domain rather than home arena. Consequently, research has demonstrated that WIF surpasses FIW conflict among individuals (e.g., Frone, 2003). One can therefore infer that work roles are more damaging to family life than vice versa.

Research investigating domain-specific antecedents for work include the impact of work demands, availability of work-family benefits, supportive supervisors, and a supportive organisational culture (e.g., Allen, 2001; Anderson et al., 2002; Thompson et al., 1999), role ambiguity, role responsibility and job requirements on the work-family interaction (e.g., Carnier et al., 2004; Eby et al., 2007). The number of hours worked per week is the most

notarised work-related situational antecedent on WFC research (Fox & Dwyer, 1999; Major, Klein, & Ehrhart, 2002). From the reverse direction, the presence of dependent children in the household is regarded as the single most investigated situational antecedent from the home domain (Carlson, 1999; Kinnunen & Mauno, 1998; Saltzstein et al., 2001). Moreover, the age of the youngest child has been found to be related to the experience of work and family interference (Lu, Gilmour, Kao, & Huang, 2006). Various other situational factors arising from the home domain that are extensively explored in WFC studies include the extent of family support, age of children and spousal employment (e.g., Ballout, 2008; Bellavia & Frone, 2003; Byron, 2005; Geurts & Demerouti, 2003).

Thus, substantial research has examined external predictors of WFC; however, dispositional factors, which are internal to the individual, have by large been ignored. Minimal studies have examined personality differences as they pertain to individuals' experiences of WFC (Sumer & Knight, 2001; Wayne, Musisca, & Fleeson, 2004). The scarcity in research on dispositional factors in the work-family interaction is a shortcoming in work family literature that needs to be addressed (Eby et al., 2005). Not only do these factors give insight into individual experiences of WFC but they have in fact been found to account for more variance in WFC than situational factors (Allen, Herst, Bruck & Sutton, 2012; Beauregard, 2006).

Given this gap in WFC literature, researchers have called for further investigation of dispositional factors that predict work-family interference (e.g., Byron, 2005; Eby et al., 2005). Recent studies have heeded to these suggestions by investigating the influence of individual dispositions on WFC (e.g., Bonebright, Clay & Ankenmann, 2000; Boyar & Mosley, 2007; Bruck & Allen, 2003; Carlson, 1999; Erdwins, Buffardi, Casper, & O'Brien, 2001; Sanz-Vergel, Demerouti, Moreno-Jiménez, & Mayo, 2010). Despite this progress in research, such studies are still in their infancy.

Fride and Ryan's (2005) theoretical work has formed the framework for most research exploring the contribution of personality to the work and family interaction. These researchers propose three ways in which dispositional factors may influence experiences of WFC. Firstly, personality may predispose individuals to choose more challenging or supportive environments that can help them deal with inter-role conflict. Secondly, personality traits will influence the way individuals perceive work and family demands. Lastly, dispositions may influence the coping strategy implemented when conflict arises.

The most frequently examined typology of personality relating to work and family interference is Goldberg's Five Factor Model, often referred to as the "Big Five" (Goldberg, 1990). Within this research, there has been a consistent positive link between neuroticism and WFC and a negative association between conscientiousness and WFC (Wayne et al., 2004). The neurotic element that is present in negative feminine individuals provide further indication that individuals with these traits may experience high levels of WFC. On the other hand, the link between positive sex-role groups and conscientiousness offers evidence for the inverse relationship between inter-role conflict and these socially desirable gender-roles. Another typology of personality that has been commonly employed is that of positive and negative affect. Whilst negative effect has consistently been demonstrated to lead to higher levels of WFC, positive effect has the inverse result (Bonebright et al., 2000; Bruck & Allen, 2003; Carlson, 1999; Stoeva, Chiu, & Greenhaus, 2002). In keeping with a dispositional stance, recent research suggests that negative affect and neuroticism influence WFC more than situational variables (Michel, Clark & Jaramillo, 2010). Other academics found that a Type A personality and a tendency towards negative affectivity plays a role above and beyond situational variables in determining the perceptions and experiences of WFC (e.g., Carlson, 1999). For decades there has been a positive association found between masculinity and Type A behaviour (e.g., Auten, Hull, & Hall, 1985; Dohi, Yamada & Asada, 2001). Yet,

Korabik and McCreary (2000) found that it is only the unmitigated aspect of masculinity that is related to Type A personality traits and consequently they suggest that positive masculinity is not linked to this type of conduct. Helgeson's (1990) research supports this suggestion as she found that only unmitigated agency and not agency was related to Type A behaviour patterns. Previous research that links Type A behaviour to masculinity is therefore likely to be confounded by negative masculine gender-roles. These interpretations provide further support for differentiating between the desirable and undesirable aspects of SRI's.

Additional dispositions that affect the way individuals experience WFC include hardiness (Grandey & Cropanzano, 1999), self-esteem (Grzywacz & Marks, 2000), life management strategies (Baltes & Heydens-Gahir, 2003), different coping styles and skills (Becker & Moen, 1999) attachment style, personal growth, and life role values (Aryee, Srinivas, & Tan, 2005; Carlson & Kacmar, 2000; Grzywacz & Butler, 2005; Sumer & Knight, 2001; Wayne et al., 2004). Moreover, according to Rothbard (2001) self-evaluations influence whether individuals perceive engagement in multiple roles as depleting or enriching.

Therefore, although relatively little research has examined the relationship between personality and WFC, the research that has been conducted offers encouraging results (Wayne et al., 2004). Given the importance of dispositional factors affecting patterns of WFC, one would expect the relationship between SRI and WFC to have been investigated as SRI is an essential component of personality. Yet, there is a dearth of research examining the link between SRI and WFC among individuals. Therefore, despite its progress, personality-based predictors of WFC are still in their initial stages.

In addition to situational and dispositional antecedents of WFC, demographic antecedents of WFC have also been explored. Although the most common demographic factor to be incorporated in the work and family research is sex, findings remain inconsistent.

There have been mixed results in research that explores the difference between the sexes when it comes to work and home interaction. On the one hand various researchers have shown that women have higher levels of WFC than men (e.g., Cinamon & Rich, 2002; Gutek, Searle, & Klepa 1991; Pleck, 1977). In line with this argument, Greenhaus and Beutell's (1985) suggest females may experience higher WFC than males owing to their family-role salience in assigning priorities to family responsibilities. In congruence with this perspective, despite their involvement and progression in the work domain, women are still held primarily responsible for family responsibilities. The importance of the family domain for women may be attributed to gender-socialisation where women are raised to believe that their most important role is being a wife and a mother and that pursuing career interests is secondary. Research has often confirmed women's family-role salience by demonstrating that even women who have demanding careers will still invest more time in family activities than their male colleagues (Cinamon & Rich, 2002; Izraeh, 1994). The heightened experience of WFC for women may be owing to the fact that women tend to be more involved than men in both work and family responsibilities such as taking care of families and working full-time. Upholding this balancing act may lead women to experience greater levels of WFC than men. On the other hand, there are researchers who suggest that males and females do not differ in their levels of WFC (e.g., Frone, 2003; Ensher, Grant-Vallone & Donaldson, 2001; Grzywacz & Marks, 2000) or that males have higher levels of conflict (e.g., Livingston & Burley, 1996). These mixed results give further evidence that WFC may go beyond sex differences and may rather be a product of gendered thoughts and behaviour.

Gendered personality differences may impact how individuals internalise and experience WFC. Thus, as illustrated above, some studies have found no sex differences in work and family interference whereas other studies have depicted females to experience either higher or lower levels of conflict than that experienced by males (Eby et al., 2005). This

equivocal evidence may be indicative of a theoretical pitfall in WFC research. In the words of Korabik et al. (2008), “sex has often been used as a control or as a proxy for variables based on notions of gender that have been conceptually linked to sex”. These researchers seem to be alluding to the notion that it is socially constructed gender and not biological sex that plays a significant role in the inter-role conflict; however sex and not gender has been the focus of WFC research. Powell and Greenhaus (2010) have recently recommended that in light of the confusing research findings on sex and WFC, researchers should perhaps concentrate on the impact of gender-roles in this relationship. According to these researchers, no studies have tested theoretical models linking sex and gender-related variables to WFC and thus the current study will focus on this neglected area of research. Having delved into the antecedents of WFC, it is necessary to explore the consequences associated with these stresses as it is these detrimental outcomes that individuals and organisations seek to avoid.

Consequences of Work-Family Conflict

Regardless of the direction from which the conflict arises, WFC is a source of stress that manifests in potentially damaging consequences not only on the individual but also on families and organisations. These detrimental effects are often reflected in a reduction in an individual’s life satisfaction, family satisfaction and job satisfaction (Allen, Herst, Bruck, & Sutton, 2000; Burke & El-Kot, 2010; Ryan & Sagas, 2009; Anafarta & Irmak, 2009).

On an individual level, the experience of work-family stress is likely to lead to decreased psychological wellbeing (e.g., Geurts, Kompier, Roxburgh, & Houtman, 2003). These negative states are often manifested in increased levels of exhaustion, anxiety and increased potential for depression (Ballout, 2008; Warner & Hausdorf, 2009; Wilson, Polzer-Debrwyne, Chen, & Fernandes, 2007). In addition to a reduction in psychological health, WFC has also been shown to contribute to physical health impairments such as increased

alcoholism (Rotondo, Carlson, & Kincaid, 2003). Given the damaging psychological and physical consequences associated with WFC, it is plausible to assume that such stress may lead to lower life satisfaction among individuals (Greenhaus, Collins, & Shaw, 2003).

In addition to impacting on individual wellbeing, common concerns associated with WFC include lower family satisfaction (Cardenas, Major, & Bernas, 2004) and augmented family-related strain (Swanson & Power, 1999). Although both WIF and FIW are frequently experienced forms of conflict, research has shown that WIF is reported more frequently than FIW (Frone, 2003). Perhaps these findings can be attributed to the obligatory nature and uncompromising structure of work which often forces individuals to give preference to work over their family domains. This often results in individuals devoting less time and effort to family roles, which increases the interference from work on family lives (Carlson et al., 2000; Premeaux, Adkins, & Mossholder, 2007). In addition, when individuals can no longer manage the demands of work and family responsibilities, marriages are often compromised, which ultimately results in lower levels of marital satisfaction and general wellbeing (Voydanoff, 2005). Thus, it is not only the individual who experiences the conflict who is confronted with adverse outcomes, as partners and families are also negatively affected by such inter-role stress (Bakker, Demerouti, & Dollard, 2008; Dikkers, Geurts, Kinnunen, Kompier, & Taris, 2007).

However, negative consequences are not only limited to individuals and their families, as work-family conflict also leads to unfavourable organisational implications which, if unresolved, are likely to contribute to lower productivity among employees and increased cost to the organisation. Compromised job-related psychological states are often consequences of prevailing WFC. These include reduced job satisfaction (e.g., Carly, Allen, & Spector, 2002; Greenhaus, Tammy, & Spector 2006; Perrewe', Hochwarter, & Kiewitz, 1999), lower organisational citizenship behaviour (e.g., Netemeyer, Maxham, & Pullig,

2005), reduced organisational commitment (e.g., Carlson, Grzywacz, & Kacmar, 2010) and augmented burnout (e.g., Peeters, Montgomery, Bakker, & Schaufeli, 2005). These psychological states manifest themselves negatively in organisations in the forms of increased turnover intention (e.g., Shaffer, Harrison, Gilley, & Luk, 2001), actual turnover rates, lower performance (Duxbury & Higgins, 2003) and increased absenteeism (e.g., Kirchmeyer & Cohen, 1999; Willis, O'Conner & Smith, 2008; Kim et al., 2005).

The impaired psychological and physical health linked to WFC, is likely to cost the organisation significant time and money as more psychological and physical health services need to be employed (Allen et al., 2000; Carr, Boyar, & Gregory, 2008; Duxbury & Higgins, 2001; Frone, 2000; Väänänen et al., 2008). In order to minimise the negative consequences of WFC, it is important for individuals and organisations to understand the importance of gender-role dispositions in the experience on WFC. By understanding the relationship between their gender-roles, their experience of inter-role conflict and how to manage effectively with such conflict, employees can strive to reduce levels of conflict and consequently increase their psychological health and wellbeing.

Research Aims

Based on the literature review and the recent research which suggests that 1) dispositional factors can influence perceptions of WFC and 2) that negative SRI's can have clearly negative implications for wellbeing; empirical research is therefore needed to gain insight into the relationship between both positive and negative SRI's and WFC. Consequently, the aim of this research is to conduct an exploratory study investigating the relationship between different SRI's and WFC. More specifically, this study intends to determine whether individuals with positive SRI's differ in their levels of WFC to those with

negative SRI's. Given the exploratory nature of this research, the following research questions as well as hypotheses have been formulated to guide the research methodology.

Research Question

1. What are the relationships between positive and negative SRI's and WFC?

Sub Questions

- 1a. What are the relationships between positive and negative SRI's and WFC?
- 1b. What are the relationships between positive and negative SRI's and WIF?
- 1c. What are the relationships between positive and negative SRI's and FIW?

Specific Hypotheses

- 1a. Females who have positive SRI's (A+, M+, F+) will have the lowest levels of WFC while females who have negative SRI's (F-, A-, M-, Au) will have the highest levels of WFC
- 1b. Females who have positive SRI's (A+, M+, F+) will have the lowest levels of WIF while females who have negative SRI's (F-, A-, M-, Au) will have the highest levels of WIF
- 1c. Females who have positive SRI's (A+, M+, F+) will have the lowest levels of FIW while females who have negative SRI's (F-, A-, M-, Au) will have the highest levels of FIW

CHAPTER III

Methodology

Research Design

This study was a quantitative, non-experimental and exploratory study. A non-experimental research design was employed as it was not possible for the researcher to manipulate the SRI's of individuals. Despite its limitations, non-experimental research is often used in the behavioural sciences to ensure consistency between pre-existing participant variables (Gravetter & Forzano, 2006). When used for the behavioural sciences non-experimental research is referred to as “an important and appropriate mode of research” that is “easy to classify and defensible” (Johnson, 2001, p. 3).

Given that the research design prevented the implementation of random assignment to create the SRI groups no cause and effect relationships between the independent variables and the dependent variables could be determined (Gravetter & Forzano, 2006). Therefore, a between-subjects, non-equivalent group design was used and groups were determined based on their individual SRI scores. In order to minimise threats to internal validity that could be associated with this lack of causation, potentially confounding variables were controlled. These included controlling demographic variables such as the age of participants, race and marital status. In addition family-related situational antecedents were controlled such as number of children and amount of domestic help. Lastly, work-related situational antecedents were controlled such as the use of family-friendly policies and hours worked each week. By controlling these variables, threats to the internal validity of the research were minimised.

The exploratory style of this research was necessary as no research to date has investigated the effect of a differentiated model of SRI on the work and family interference. Therefore, although grounded in strong theoretical frameworks, this research aims to

contribute new knowledge to research on SRI and WFC. The theoretical backgrounds for this study included the androgyny and masculinity models of SRI, the social constructionist theory, the gender-schemata theory as well as the COR theory.

Given that proving causality between SRI and WFC was not the intention of this study, it was appropriate for the surveys to be distributed by means of a cross-sectional research design. This design allowed the researcher to assess comparisons and relationships between different SRI groups and their experiences of WFC. This study made use of two methods of non-probability sampling: convenience sampling and snowball sampling. Convenience sampling allowed for the participation of various organisations in the study; whilst snowball sampling provided the researcher with the means of contacting individuals and asking them to forward the online survey to their network of working mothers. In addition to being economical, non-probability sampling is conducive as it involves participants who are the most accessible (Reddy, 2010). The population for this study consisted of full-time working mothers. This population is relatively difficult to get access to and therefore these two sampling techniques were conducted.

Participants

268 full-time female employees in South African organisations, who were single, married, cohabiting, divorced or widowed and had at least one child, participated in this research. Table 1 displays the demographics of the participants.

Table 1

Characteristics of participants (n=268)

Variable	Category	N	%
Race	Black	39	14.6
	Coloured	59	22
	White	153	57
	Indian	14	5.2
	Asian	2	0.7
	Other	1	0.4
Age of participant	22-30	44	16.4
	31-40	113	42.2
	41-50	73	27.2
	51-60	34	12.7
	61-68	3	1.1
Marital Status	Single	28	10.4
	Cohabiting	15	5.6
	Married	184	68.7
	Divorced	30	11.2
	Separated	6	2.2
	Widow	5	1.9
Level of Education	Less than Grade 10	2	0.7
	Grade 10	11	4.1
	Matric	51	19
	Diploma	81	30.2
	Undergraduate Degree	48	17.9
	Honours Degree	33	12.3
	Masters Degree	37	13.8
	Doctoral Degree	5	1.9
Job Level	Entry Level	18	6.7
	Intermediate	71	26.5
	Junior Management	33	12.3
	Middle Management	80	29.9
	Upper Management	38	14.2
	Executive	25	9.3

The sample consisted of 268 employed females who had at least one child. The majority of the participants were White (57%). There were 59 (22%) Coloureds and 39 (14.6%) Blacks who took part in this research. Few participants were Indian (5 %) and less than one percent of the sample was Asian. Participants' ages ranged from 22 to 68. The majority of participants were between the ages of 31 and 40 (42.2%). Following this, 27.2% of participants were aged between 41 and 50. Of the 268 participants, 184 were married (68.7%), 30 were divorced (11.2%), and 28 were single with children (10.4%). Five (1.9%) of the women were widows. Levels of education ranged from having less than a grade 10 (0.7%) to having a Doctoral Degree (1.9%). Most of the women had a diploma (30%). The majority (29.9%) of participants were in middle management positions, 9.3% in executive levels while only 6.7% of the women were in entry level positions.

Measuring Instruments

Demographic and Situational-Related Antecedents Questionnaire.

A demographic questionnaire together with closed-ended questions regarding work and family-related antecedents to WFC were used to gather information about the sample. These variables were explored within the two-way ANOVA's to examine if these factors confounded the relationship or contributed in any way to the relationship between SRI and WFC. It was necessary to control the effects of these variables to prevent threats to the internal validity of the study. The following demographic information was obtained: age, race, marital status, job level, job title, job industry, organisational tenure, level of education. Family-related antecedents included: number of children, age of youngest child, spouse's working hours, spouse's help with home responsibilities, spouse's help with children, children's help with domestic tasks, family support and domestic help. The work-related antecedents that were gathered include hours worked per week, the presence or lack thereof

and use of family-friendly policies such as job sharing, home and teleworking, childcare, and maternity leave.

Independent Variable: Sex-Role Identity.

Bernstein's (2012) modification of the EPAQ scale into a revised form (EPAQ-R) was used to measure the independent variables of positive and negative SRI's. The original EPAQ scale was developed by Spence, Helmreich, and Holahan (1979) with the purpose of extending the previous version of the Personal Attributes Questionnaire (PAQ; Spence & Helmreich, 1978; Spence, Helmreich, & Stapp, 1974). The PAQ only allows for the measurement of positive traits, thus the researchers developed the EPAQ to include the measurement of negative sex-role traits in addition to the measurement of positive traits.

The original EPAQ consists of 40 sets of bipolar adjectives, including the original 24 items of the PAQ. The original 24 items are divided into 3 scales with 8 items that measure positive masculine traits (e.g., "stands up well under pressure"; "never gives up easily"); 8 items measuring positive feminine traits (e.g., "aware of feelings of others"; "very kind") and eight bipolar masculine-feminine scales. The additional 16 items are divided into a further three subscales which include eight items that measure negative masculine traits (e.g., "very arrogant"; "looks out only for self"); four items measuring verbal passive aggressiveness (e.g., "very whiny"; "nags a lot"); and four items measuring excessive communality (e.g., "subordinates oneself to others"; "very gullible").

The EPAQ is scored on a Likert scale of 1 to 5 and participants are asked to indicate the degree to which each item describes themselves. Higher scores indicate greater agreement with the item, and item scales are summed to obtain a total score for each scale respectively. A factor analysis of the EPAQ using six independent samples supported its four-factor structure (M+, M-, F+, F-; Helmreich, Spence, & Wilhelm, 1981). Aside from the negative

femininity scale; the EPAQ has good internal consistency and reliability (Helmreich, Spence & Wilhelm, 1981; Katz, Russ & Overholser, 1993).

Bernstein (2012) piloted the EPAQ-R on a South African sample and found unsatisfactory reliabilities for the sub-scales. The socially desirable masculine scale was just over the acceptable level, having an alpha value of .73. The positive feminine scale was satisfactory scale with an internal consistency of .76. However, the socially undesirable masculine scale was unsatisfactory as it yielded a reliability of .59. The negative femininity scale mirrored this unsatisfactory reliability as the alpha coefficient was .46. These values are exceptionally low and thus Bernstein redeveloped the EPAQ-R instrument. Seventeen items were added and various existing items were modified, with the final scale comprising a total of 57 items. There are 12 positive feminine items, 13 positive masculine items, 17 negative feminine items and 15 negative masculine items. With these changes, the reliabilities were transformed to acceptable levels. The reliability of the positive masculine scale was transformed to .83; positive feminine to .85, negative masculine to .85 and most importantly the negative feminine reliability was increased to .81. Bernstein's EPAQ-R therefore meets its objective of increasing the reliability of the EPAQ subscales for usage within the South African context.

Dependent Variable: Work-Family Conflict.

Carlson, Kacmar, and Williams' (2000) 18-item scale was used to assess WFC as a global construct as well as its bi-directional components (i.e., work-to-family and family-to-work). Half of the items on the scale measure conflict arising from the work onto the family domain. A sample item from the WIF subset is "my work keeps me from my family activities more than I would like". The other nine items measure conflict that arises in the family domain and spills over to the work domain. An example item from FIW is "Due to stress at home, I am often preoccupied with family matters at work". This scale is scored on a

five-point Likert-type scale ranging from strongly disagree (1) to strongly agree (5). A higher score indicates a higher level of WFC. Carlson et al. (2009) reported the Cronbach alpha for WIF to be .91 and for FIW the alpha value was .92. These high reliabilities have been confirmed by numerous researchers; for example Allen and Armstrong (2006) found the internal consistency for WIF to be .88 and .87 for FIW.

Procedure

Once ethical approval was received from the Organisational Psychology Department's Ethics Committee at the University of Witwatersrand, the researcher contacted several Human Resource Managers and general managers of large companies in South Africa. The researcher explained the purpose of the study to these individuals and requested the participation of employees in their companies for this research. An email detailing the request for organisations to participate was emailed to managers who were open to participate in the survey (see Appendix A). Out of dozens of managers who were contacted, three managers gave consent for employee participation in this study. These managers were provided with an encrypted link from survey monkey through which they accessed the survey. A separate link was created for each organisation that participated so that the researcher could present these organisations with a tailor-made report of the results. The three managers compiled a list of the working mothers in their organisations and sent these individuals an email with an encrypted link to the survey and a brief outline of the research as provided by the researcher.

Response rates were relatively low and 114 responses were collected by means of this convenience sampling. In order to increase the sample size, snowball sampling was subsequently conducted. Emails as well as messages on the social media site of LinkedIn were sent to numerous individuals. The emails and messages that were sent described the

purpose of the research, the conditions of anonymity and confidentiality and the reporting of the results. Individuals were asked to complete the survey if they were working mothers and asked to pass on the survey to any other working mothers they knew or with whom they worked.

In addition to the electronic version of the questionnaire, paper and pen tests were also used. These questionnaires were given to friends of the researcher and these friends asked other working mothers they knew to complete the survey manually. Through these two (electronic and paper and pen) methods of snowball sampling an additional 154 surveys were collected. Therefore, a sum total of 268 women participated in this research. The electronic and paper and pen versions of the surveys for the convenient and snowball sampling methods contained a cover letter for participants detailing the purpose of the research, ethical considerations and the benefits of this research (see Appendix B). Demographic and situational related information were requested before the independent and dependent variables were assessed (See Appendix C). The results from survey monkey as well as the paper and pen versions of the test were then exported into an excel spread sheet. This excel spread-sheet was subsequently imported into the statistical programme (SPSS Inc., 2009) for the analysis.

Ethical Considerations

Ethical clearance was obtained from the Departments Ethics Committee. The email that was sent to managers explained the purpose of this research, the guaranteed anonymity of the participants and confidentiality of the data, the approximate time required to complete survey, the use and presentation of results as well as the benefits the organisation would derive by participating in this research (See Appendix A). In addition, the email explained

who the researcher was and that the need to conduct research was part of the requirements for the researcher to fulfil her Master's degree.

A safe, encrypted link to the survey, on Survey Monkey was sent to managers and individual participants. As soon as the links to the survey were opened, a cover letter from the researcher appeared. Therefore, individuals who were recruited by means of both convenience and snowball sampling were presented with the cover letter before completing the survey.

The covering letter (see Appendix B) explained the purpose of the research, the questionnaires that they needed to complete, their anonymity and the confidentiality of the data, their right to withdraw at any stage prior to submitting their questionnaires and their informed consent by submitting the questionnaires. All participants who took part in the research did so on a voluntarily basis and had the right to withdraw from the study prior to submitting their questionnaires. No names, ID's or staff numbers were asked for, the IP codes were deleted once the surveys had been submitted to ensure anonymity of participants. Confidentiality was adhered to as only the researcher and the researcher's supervisor had access to the data. . Under no circumstances was data shared or distributed. An electronic database was kept securely by researchers but remained strictly confidential. Feedback was provided to the participating organisations in the form of a summarised report in order to ensure that no individual responses could be recognised.

CHAPTER IV

Results

This chapter presents the results of the study based on a sample of 268 working mothers in a variety of job industries, ranging from human resources to sales banking, finance and accounts. The statistical analysis was carried out with the Statistical Package for the Social Sciences (SPSS) programme, version 20, (SPSS Inc., 2012). The first section in this chapter describes the internal consistency of the EPAQ-R and WFC instruments. This is followed by an explanation of the descriptive statistics which are used to describe the sample. Thereafter, the correlations between the variables are presented. The subsequent sections are organised in terms of the research question and hypotheses.

Internal Consistency

The independent variable, SRI, was divided into four subscales namely positive masculinity, negative masculinity, positive femininity and negative femininity. The internal consistencies of these four scales were then computed as illustrated in Table 2. Androgynous and undifferentiated scales were computed using Woodhill and Samuels' (2003) z-score procedure and therefore, these SRI's do not comprise separate subscales; consequently the internal consistencies and correlations of these gender-roles were not calculated. The reliability for the outcome variable, WFC, is also provided in Table 2. In addition to presenting the results for WFC as a whole, the reliability of its two directions of conflict are presented. The alpha coefficients of the scales needed to exceed the cut-off point of .70 to be acceptable (Nunnally & Bernstein, 1994).

Table 2

Internal Consistency for Dependent and Independent Variables

Variable	<i>A</i>
Positive Femininity	.791
Positive Masculinity	.789
Negative Femininity	.785
Negative Masculinity	.854
WFC Total	.852
WIF	.819
FIW	.771

The internal consistency of the variables was calculated with coefficient alpha. All four subscales of SRI showed good reliabilities as alpha values ranged from .785 (negative femininity) to .855 (negative masculinity). Good internal consistency was also found for the dependent variable, WFC, which yielded an overall reliability of .852. When divided into its directional components the scales showed good reliabilities, $\alpha = .819$ for WIF and $\alpha = .771$ for FIW.

Descriptive Statistics for the Sample

Descriptive statistics were computed to describe data on SRI and WFC. The percentages of women who were categorised into each SRI were computed. Participants were classified into one of seven SRI's: Positive Masculinity (M+), Positive Femininity (F+), Positive Androgyny (A+), Negative Masculinity (M-), Negative Femininity (F-), Negative Androgyny (A-) and Undifferentiated (Au). Figure 1 illustrates the distribution of participants in terms of these seven SRI's.

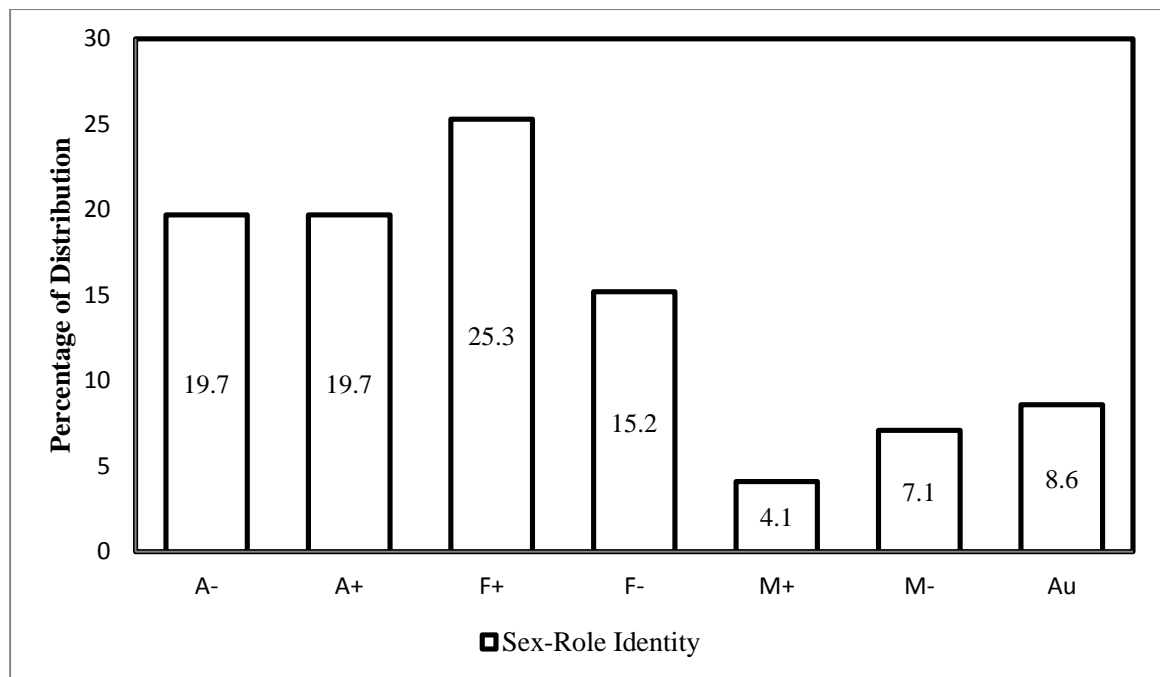


Figure 1: Distribution of participants in terms of SRI

Participants dispersed into all seven SRI categories. The majority (25.3%) of participants were classified as positively feminine. The subsequent categories with the most individuals were the androgynous groups in which there was the exact same amount of women in the socially desirable and undesirable groups, with each comprising 19.7% of the participants. Following this, 15% of the working mothers had predominant negative feminine personality traits. In contrast, significantly fewer participants were categorised as undifferentiated, negatively masculine and positively masculine with percentages of only 8.6, 7.1 and 4.1 respectively. When explored together, approximately half (49%) of the sample were categorised into positive SRI's whilst 51% of the sample were classified as into negative sex-role dimensions.

Following this analysis, additional descriptive statistics were calculated to examine the means and standard deviations of the EPAQ-R subscales and the WFC instrument. Table 3 displays these descriptive statistics.

Table 3

Descriptive Statistics for EPAQ-R subscales and WFC

	Min.	Max.	<i>M</i>	<i>SD</i>
WFC	1.0	4.0	2.57	.57
WIF	1.0	4.8	2.80	.72
FIW	1.0	4.2	2.34	.59
F+	2.1	4.8	4.00	.49
F-	1.2	3.8	2.66	.48
M+	1.7	4.7	3.54	.56
M-	1.0	4.0	2.38	.58

WFC was measured on a 5 point likert scale with 5 indicating a lot of conflict and 1 indicating a little conflict. In general participants reported relatively high levels of WFC ($M=2.75$, $SD=.57$). Participants experienced slightly higher WIF ($M=2.80$, $SD=0.72$) than FIW ($M=2.34$, $SD=0.59$). The mean for F+ was 4.00 ($SD = .49$); it was 2.66 for F- ($SD = .48$); 3.54 for M+ ($SD = .56$) and 2.38 for M- ($SD = .58$). Additional descriptive statistics were calculated in order to summarise the demographic profile of the data and the situational related variables regarding the sample. These descriptive included the frequencies, percentages, means and standard deviations of the variables. The results are displayed in Table 4 below.

Table 4

Descriptive Statistics for Work-Related Situational Antecedents

Variable	Category	N	%	M	SD
Amount of hours worked each week				41.18	26.96
	< 30	43	16.0		
	30-39	19	7.1		
	40-49	115	42.8		
	50-59	21	7.8		
	>60	13	4.8		
	Total	211	78.4		
	Missing	58	21.6		
Organisational tenure				7.86	6.89
	0-1	26	9.7		
	2-3	43	16.0		
	4-7	75	27.9		
	8-11	41	15.2		
	12-20	48	17.8		
	21-40	11	4.1		
	Total	244	9.7		
	Missing	25	9.3		
Family-friendly policies they have used					
Job Sharing	No	251	93.7		
	Yes	9	3.4		
	Na	8	3.0		
	Total	268	100		
Home and Telework	No	211	78.7		
	Yes	47	17.5		
	Na	8	3.0		
	Total	268	100		
Maternity Leave	No	24	9.0		
	Yes	193	72.0		
	na	1	.4		
	Total	268	100		
Childcare	No	237	88.4		
	Yes	23	8.6		
	na	8	3.0		
	Total	268	100		

The mean amount of hours participants worked each week was 41.18 hours ($SD=26.45$). The majority (42.8%) of mothers work between 40 and 49 hours weekly. Only 13% of the sample work over 60 hours each week.

The average organisational tenure was 7.86 years ($SD=6.90$). Seventy-five of the participants (27.9%) have been employed in their current organisation for 4-7 years, 48 (17.8%) have been in their organisation for 12- 20 and 43 (16%) of the women have been in their companies for 2-3 years. Only four percent of the women have been working in their current organisation for over 21 years.

In terms of family-friendly policies offered, only 9 (3.4%) women made use of job sharing, 17.5% of the women utilised home and teleworking policies, whilst 72% of the sample benefited from maternity leave. Only 8% of the sample benefited from childcare facilities. The descriptive statistics relating to the family-related situational antecedents are presented in Table 5. The following variables are described in this table: number of children, ages of youngest child living at home, spouses help with home responsibilities, children's help with domestic tasks, level of family support and domestic help.

Table 5

Descriptive Statistics for Family-Related Situational Antecedents

Variable	Category	N	%	M	SD
Number of children				1.97	.865
	1	80	29.7		
	2	132	49.1		
	3	46	17.1		
	4	6	2.2		
	5	2	.70		
	6	2	.70		
	Total	268	100		
Ages of youngest child living at home				3.48	1.60
	0-3	78	29.1		
	3-6	41	15.3		
	6-12	57	21.3		
	12-20	42	15.7		
	Total	218	81.3		
	Missing	50	18.7		
Hours Spouse Work Each Week				44.50	14.88
	< 30	22	8.2		
	30-39	4	1.5		
	40-49	112	41.8		
	50-59	32	11.9		
	>60	33	12.3		
	Total	203	75.7		
	Missing	65	24.3		
Spouses help with home responsibilities	No help	61	22.7	2.65	1.14
	A little help	48	17.8		
	Moderate help	75	27.9		
	A lot of help	79	29.4		
	na	5	1.9		
	Total	268	100		
Children's help with domestic tasks	No help	77	28.6	2.06	.91
	A little help	117	43.5		
	Moderate help	46	17.1		

	A lot of help	24	8.9		
	Na	4	1.5		
	Total	268	100		
Level of family Support					
	No help	44	16.4	2.82	1.09
	A little help	55	2.4		
	Moderate help	73	27.1		
	A lot of help	96	35.7		
	Total	268	100		
Domestic Help					
	No help	41	15.2	3.62	1.54
	Once a week	38	14.1		
	Twice a week	28	10.4		
	More than twice a week	37	13.8		
	Five days a week or more	124	46.1		
	Total	268	100		

Given the requirements for participation in this study each women had at least one child. The mean number of children was 1.97 ($SD=.87$). Many women (29.7%) only had one child and approximately half (49%) of the women had two children. Two individuals (0.7%) reported having 6 children.

Participants' youngest children were aged between a few months to 20 years. Children over 20 were not included in the analysis as children over 20 are not as demanding on mothers as those under 20 (Higgins, Duxbury & Lee, 1994). The average age of participants' youngest child was 3.48 ($SD = 1.60$). Seventy eight (29%) of the women's youngest children were aged between 0-3 while 21% of the women youngest children were between 6-12. Just under 16% of the women had children between the ages of 12-20.

Spouses working hours were slightly higher than participants' with a mean of 44.50 ($SD=14.88$). Similarly to the women, most spouses (41.8%) worked between 40 and 49 hours

each week. Just under 12% percent of women worked between 50-59 hours weekly whilst only 1.5% worked between 30 and 39 hours weekly.

The majority of the women's spouses (29.4%) provide their partners with a lot of help when it comes to home responsibilities. Moderate help is also offered by 27.9% of spouses. Nearly 18% of the spouses offer minimal help; however 22.7% of spouses do not provide any help with home responsibilities. On average spouses provide a moderate level of help ($M = 2.65$, $SD = 1.14$). The average level of children's help with domestic tasks is 2.06 ($SD = .91$). The majority of children (43.5%) provide a little help with domestic tasks and only 8.9% of them offer a lot of help.

There is a considerable amount of family support given to working mothers in the sample ($M = 2.82$; $SD = 1.10$). A lot of support is provided for 35.7% of the sample and only 2.5% of participants are given a little support from their family. In terms of domestic help, most women (124) have help five days a week or more. Forty-one (15.2%) women do not have any domestic help whilst 28 (10.4%) women have domestic help twice a week. On average more domestic help is provided than any other form of support for the mothers ($M = 3.62$, $SD = 1.54$).

Correlations for EPAQ-R Subscales, WFC, WIF and FIW

As part of the preliminary analysis, the correlations between the EPAQ-R subscales, WFC, WIF and FIW were calculated. These relationships were computed in order to describe relationships between variables (Gravetter et al., 2006). In order for Pearson's product-moment correlations to be used to establish the associations between the four EPAQ-R subscales (M+, M-, F+, F-) and WFC, various criteria needed to be met. These assumptions are based on Howell (2009) and are provided below.

1. A linear relationship must exist between variables independent and dependent variables

2. Both variables must be normally distributed
3. Both variables must have interval or ratio scales of measure
4. The independent and dependent variables must be independent of each other

The following section will explain how these assumptions were addressed and thereafter present the Pearson's product-moment correlations.

1. Scatterplots were created and inspected to test for linearity between all the variables being assessed (F+, F-, M+, M-, WFC, WIF and FIW). The scatterplot indicated that linear relationships exist between the independent (F+, F-, M+, M-) and dependent variables (WFC, WIF, FIW). There were no curvilinear relationships among any of these variables. Therefore, the assumption of linearity for all the variables was met. In order to test the second assumption of normality, the descriptive statistics for the EPAQ-R subscales and WFC variables were calculated. Table 6 displays this data by describing the means, standard deviations, skewness and kurtosis values of the variables.

Table 6

Normality for EPAQ-R subscales and WFC

	Skewness		Kurtosis	
	Statistic	SE	Statistic	SE
F+	-.43	.15	-.13	.30
F-	-.03	.15	-.17	.30
M+	-.40	.15	.19	.30
M-	.10	.15	-.39	.30
WFC	.02	.15	-.39	.30
WIF	.17	.15	-.39	.30
FIW	.32	.15	.22	.30

The skewness and kurtosis lies between -1 and 1 for all the variables which indicates that all variables are normally distributed. The skewness value for F+ is $-.43$ ($SE = .15$); for F- it is $-.40$ ($SE = .15$); M+ is $-.40$ ($SE = .15$) and M- is $.10$ ($SE = .15$). The skewness for WFC is $.02$ ($SE = .15$), for WIF it is $.17$ ($SE = .15$) and for FIW it is $.32$ ($SE = .15$). Kurtosis for F+ is $.13$ ($SE = .30$); for F- it is $-.17$ ($SE = .30$); M+ is $.19$ ($SE = .30$) and M- is $-.39$ ($SE = .30$). The kurtosis is $-.39$ ($SE = .30$) for both WFC and WIF lies within the acceptable range. The kurtosis for FIW is $.22$ ($SE = .30$).

This indicates that the independent and dependent variables are normally distributed and thus the second assumption is met. The third requirement for the Pearson's product-moment correlation is also adhered to as WFC and the EPAQ-R subscales were all measured on an interval scale. For the EPAQ-R data, scores were transformed into z-scores and participants were classified into seven gender identity role categories per positive androgynous (A+), negative androgynous (A-), positive masculine (M+), negative masculine (M-), positive feminine (F+), negative feminine (F-), and undifferentiated androgynous (Au). Participants who did not obtain positive or negative z-scores above 1.00 on both masculinity and femininity were categorised as M+, M-, F+ or F-based on which of their z-scores had the highest positive value. Participants with all four z-scores above or below zero were considered as having undifferentiated identities.

The final assumption is that the variables were independent of each other. By examining the research design it is evident that the value of one observation was not related to any other observation as no participant was sampled more than once (McCall, 1990). The assumption of independence has therefore been fulfilled. Therefore, all the assumptions were satisfied and subsequently Pearson's product moment correlations were computed for the four EPAQ-R subscales and the dependent variables of WFC, WIF and FIW. These correlations are presented in Table 7.

Table 7

Correlations between the four EPAQ-R subscales and WFC

Variable	1	2	3	4	5	6	7
1 F+	-	.13*	.09	-.41**	-.07	-.04	-.10
2 M+	.13*	-	-.37**	.36**	-.05	-.02	-.11
3 F-	.09	-.37**	-	.08	.29**	.19**	.33*
4 M-	-.41*	.36**	.08	-	.13*	.10	.13*
5 WFC	-.07	-.05	.29**	.13*	-	.89**	.83**
6 WIF	-.04	-.02	.19**	.10	.89**	-	.49**
7 FIW	-.10	-.11	.33**	.13*	.83**	.49**	-

* $p < .05$ (95% significance), ** $p < .01$ (99% significance)

A small positive correlation exists between F+ and M+ ($r = .13, p < .05$). There is a moderate association between M+ and M- ($r = .37, p < .01$). There are also significant moderate negative relationships between M- and F+ ($r = -.41, p < .01$) and between M+ and F- ($r = -.37, p < .01$). Moreover, small positive correlations are prevalent between F- and WFC ($r = .29, p < .01$), WIF ($r = .19, p < .01$) and there are moderate associations between F- and FIW ($r = .33, p < .01$). In addition, there is a small significant positive relationship between M- and WFC ($r = .13, p < .05$) and M- and FIW ($r = .13, p < .05$). Lastly, there are robust positive relationships between WIF and FIW ($r = .49, p < .01$); between WFC and WIF ($r = .89, p < .01$) and between WFC and FIW ($r = .83, p < .01$).

Two-Way ANOVA for SRI and additional variables as a function of WFC

A series of two-way ANOVA's were conducted to determine if the SRI groups differed in terms of their WFC while controlling for the effects of confounding variables.

This statistical technique is more advanced than a one-way ANOVA as it allows the

researcher to determine if the effects of SRI are dependent on other independent variables such as race, marital status, family support and hours worked per week or if there is a main effect of SRI on WFC regardless of the additional demographic and situational variables. Prior to conducting the two-way ANOVA, the preliminary assumptions (McCall, 1990) for this test were assessed.

Assumptions for ANOVA.

1. The dependent variable is normally distributed
2. The dependent variable is at least interval in nature
3. Statistical independence of the groups of scores that are to be analysed – the Assumption of Independence of Observations
4. Equality of variance within each group – the Assumption of Homogeneity of Variance
5. The factors (independent variables) should be measured on a categorical or discrete scale

Assumptions 1 and 2 were already confirmed in the correlation analysis where the dependent variables of WFC, WIF and FIW were all demonstrated to be normally distributed and comprise interval data. The third assumption requires homogeneity of variance for the dependent variable. The Levene's test for equality of variance was used to determine homogeneity of variance and the results are presented in Table 8.

Table 8

Equality of Error Variance for Demographic and Situational Variables and WFC

Variable	Levene Statistic	df1	df2
Age	1.57*	30	24
Race	1.51	26	24
Marital status	1.10	33	23
Level of education	1.34	46	22
Job Level	1.27	39	23
Number of children	1.33	28	24
Ages of youngest child living at home	1.225	27	19
Hours worked each week	1.58*	33	23
Amount of hours spouse works each week	1.46	34	16
Spouses help with home responsibilities	0.92	27	24
Family support	1.16	27	240
Domestic help	1.37	33	234
Children's help with domestic help	1.65*	25	238
Organisational tenure	1.44	38	205
Job sharing	0.96	12	139
Home and telework	0.95	13	140
Maternity leave	1.00	13	142
Childcare	1.20	12	133

* $p < .05$ (95% significance), ** $p < .01$ (99% significance)

The Levene's test of equality of variance indicates that there was homogeneity of variance for the demographic variables of race $F(26,241) = 1.51, p > .05$; marital status $F(33,243) = 1.10, p > .05$; level of education $F(46,243) = 1.34, p > .05$ and job level $F(39,239) = 1.27, p > .05$. Age of participants violated the homogeneity of variance assumption $F(30,237) = 1.57, p < .05$.

In terms of family-related variables there was homogeneity of variance for number of children $F(28,239) = 1.33, p > .05$; ages youngest child living at home $F(27,190) = 1.225, p > .05$; amount of hours spouse works each week $F(34,164) = 1.46, p > .05$; spouses help with home responsibilities $F(27,235) = 0.92, p > .05$; family support $F(27,240) = 1.16, p > .05$ and

domestic help $F(33,243) = 1.37, p > .05$. There was however no homogeneity of variance for children's help with domestic tasks $F(25, 238) = 1.65, p < .5$.

There was homogeneity of variance for all work-related antecedents aside from hours worked each week $F(33,233) = 1.58, p < .05$. The other variables that were over the .05 significance level include time employed in current organisation $F(38,205) = 1.44, p > .05$; Job Sharing $F(12, 139) = 0.96, p > .05$; home and telework $F(13,140) = 0.95, > .05$; maternity leave $F(13,142) = 1.00, p > .05$ and childcare $F(12,133) = 1.20, p > .05$.

Therefore all variables met the homogeneity of variance assumption except for three variables (ages of participants, hours worked per week and children's help with domestic tasks) which were consequently not included in the two-way ANOVA. The last assumption for the two-way ANOVA stipulates that all the variables assessed for the analysis are categorised. Therefore all the demographic variables as well as family- and work-related antecedents were categorised into at least two categories (see Table 2 which describes the descriptive statistics of the categories). Therefore, all the assumptions were met and the two-way ANOVA was conducted. Results are provided in Table 9.

Table 9

Two-way ANOVA for WFC as a function of Demographic and Situational Variables

Variable	SS	df	MS	F
SRI	1438.60	6	239.77	2.49*
Race	200.56	5	40.12	.42
Race*SRI	1586.22	15	105.75	1.10
Error	23180.52	241	96.19	
SRI	1121.07	6	186.85	1.89
Marital Status	417.78	5	83.56	.843
SRI* Marital Status	1735.90	22	78.90	.796
Error	23195.69	234	99.13	
SRI	1524.51	6	254.00	2.57*
Level of Education	866.84	7	123.83	1.25
SRI *Level of Education	2703.51	33	81.93	.83
Error	21888.28	221	99.04	
SRI	2103.18	6	350.530	5.07**
Job Level	1849.88	6	308.31	.70
Sri* Job Level	3587.44	30	119.58	1.38
Error	20198.35	225	89.77	
SRI	1017.53	6	169.59	.13
Number of children	63.61	5	12.72	1.73
SRI* Number of children	1620.43	17	95.32	.97
Error	23382.24	239	97.83	
SRI	1487.48	6	247.91	2.68
Hours worked each week	4691.69	44	106.623	1.15
SRI* Hours worked each week	5296.52	55	96.30	1.04
Error	14902.67	161	92.56	
SRI	788.21	6	131.37	1.36
Amount of hours spouse works each week	544.96	4	136.24	1.41
SRI* Amount of hours spouse works each week	1874.11	19	98.64	1.02
Error	16721.04	173	96.65	
SRI	1222.22	6	203.70	2.09*
Spouses help with home responsibilities	285.18	4	71.30	.73

SRI* spouses help with home responsibilities	1578.838	20	78.942	.808
Error	23156.715	237	97.708	
SRI	2042.501	6	340.417	3.49**
Family Support	590.475	3	196.825	2.02
SRI*family Support	1753.710	18	97.428	.10
Error	23410.292	240	97.543	
SRI	2133.849	6	355.64	3.76**
Domestic Help	861.61	4	215.40	2.28
SRI*Domestic Help	2585.94	23	112.43	1.19
Error	22122.72	234	94.54	
SRI	1367.55	6	227.93	2.56*
Ages of Youngest Child at home	407.89	3	135.96	1.56
SRI* Age of Youngest Child at home	1276.29	18	70.91	.80
Error	16920.12	190	89.05	
SRI	939.353	6	156.559	1.66
Organisational tenure	598.514	5	119.703	1.27
SRI* Organisational tenure	2439.924	27	90.368	.956
Error	19377.226	205	94.523	
SRI	903.505	6	150.584	1.89
Job Sharing	255.976	1	255.976	3.21
Job Sharing*SRI	277.014	5	55.403	.70
Error	11060.934	139	79.575	
SRI	1571.293	6	261.882	3.17**
Home and Telework	221.957	1	221.957	2.69
SRI* Home and Telework	289.077	6	48.180	.58
Error	11549.684	140	82.498	
SRI	1834.204	6	305.701	3.61**
Maternity Leave	160.015	1	160.015	1.89
SRI* Maternity Leave	307.861	6	51.310	.61
Error	12013.307	142	84.601	
SRI	1059.809	6	176.635	2.20*
Childcare	54.106	1	54.106	.67
SRI*Childcare	416.058	5	83.212	1.04
Error	10682.857	133	80.322	

* $p < .05$ (95% significance), ** $p < .01$ (99% significance)

Results from the ANOVA demonstrated that there were no significant interactions between SRI and the demographic and situational related variables as $p > .05$ for all the interactions. Furthermore, there were no main effects of any of the variables other than SRI on WFC, as $p > .05$ for all variables aside from SRI. In contrast, there was a main effect for SRI when controlling for race $F(6, 241) = 2.49, p < .05$; level of education $F(6, 221) = 2.57, p < .05$ as well as job level $F(6, 225) = 5.07, p < .01$.

In contrast, there were no significant effect for SRI when marital status was included $F(6, 234) = 1.89, p > .05$. In addition, when number of children was assessed with SRI, the latter no longer had a main effect on WFC, $F(5, 239) = 0.13, p > .05$. The same results were found for hours worked each week $F(6, 233) = 2.87, p > .05$; amount of hours spouse works per week $F(6, 161) = 2.68, p > .05$ and organisational tenure, $F(6, 205) = 1.66, p > .05$.

There were however main effects for SRI with regards to, spouses help with home responsibilities $F(6, 237) = 2.09, p < .05$; family support $F(6, 240) = 3.49, p < .01$; domestic help $F(6, 234) = 3.76, p < .01$ and ages of youngest child living at home $F(6, 190) = 2.56, p < .05$. When

In terms of family-friendly policies offered, SRI still had a significant effect when the following variables were included: home and teleworking $F(6, 140) = 3.17, p < .01$; maternity leave $F(6, 142) = 3.61, p < .01$ and childcare $F(6, 133) = 2.20, p < .05$. On the other hand when job sharing was added, SRI no longer had a main effect on WFC, $F(6, 139) = 1.89, p > .05$.

Based on the results it is evident that the relationship between SRI and WFC is not confounded by any other independent variables. When marital status, age of youngest child living at home, number of hours worked, number of hours spouse works, organisational tenure and job sharing are added, the effects of SRI on WFC were no longer significant; however these variables did have any significant main effect on WFC. Therefore, the

estimated marginal means for these variables were not presented. Instead a series of one-way ANOVAs and LSD post hoc tests were conducted for SRI and the dependent variables of WFC, WIF and FIW to determine how the SRI's differed from each other in terms of their means for WFC. Effect sizes were calculated using Cohen's *d* (1988) computations. These effect sizes were calculated as the mean of the traditional group minus the mean of the proximal stability group divided by a pooled standard deviation. In line with Cohen's (1988) recommendations: small effect size (0-0.30), medium effect size (0.30 – 0.50) or large effect size (≥ 0.80). The results from these analyses are presented in Table 10 below.

Table 10

One-way ANOVA for SRI and WFC

		<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>
Mean WFC	Between Groups	7.23	6	1.20	4.00**
	Within Groups	78.51	26	.30	
	Total	85.73	27		

* $p < .05$ (95% significance), ** $p < .01$ (99% significance)

The ANOVA results show that SRI groups differ significantly with regards to their WFC, $F(6,261) = 4.00$, $p < .01$. The descriptive statistics of the WFC means for the SRI's are described in Table 11.

Table 11

Mean Scores on WFC as a function of SRI

SRI	<i>M</i>	<i>SD</i>	<i>SE</i>	95%<i>CIM</i>	Min	Max	<i>M</i>
A-	2.66	.57	.078	2.51	2.82	1.00	3.78
A+	2.40	.57	.079	2.24	2.56	1.28	3.44
F+	2.44	.54	.065	2.31	2.57	1.50	4.00
F-	2.79	.60	.094	2.60	2.98	1.33	3.83
M+	2.48	.46	.138	2.18	2.70	1.50	3.28
M-	2.53	.41	.094	2.33	2.72	1.61	3.22
Au	2.87	.58	.106	2.65	3.09	1.94	3.89
Total	2.57	.57	.035	2.51	2.64	1.00	4.00

Positive androgynous groups experienced the lowest WFC ($M = 2.40$, $SD = .57$), followed by positive feminine groups ($M = 2.44$, $SD = .54$). Conversely, undifferentiated individuals experienced the greatest WFC ($M = 2.87$, $SD = .58$) followed by negative feminine individuals who had a mean WFC of 2.79 ($SD = .60$). The results from these descriptive statistics are illustrated in the means plot for WFC as a function of SRI in Figure 3 below.

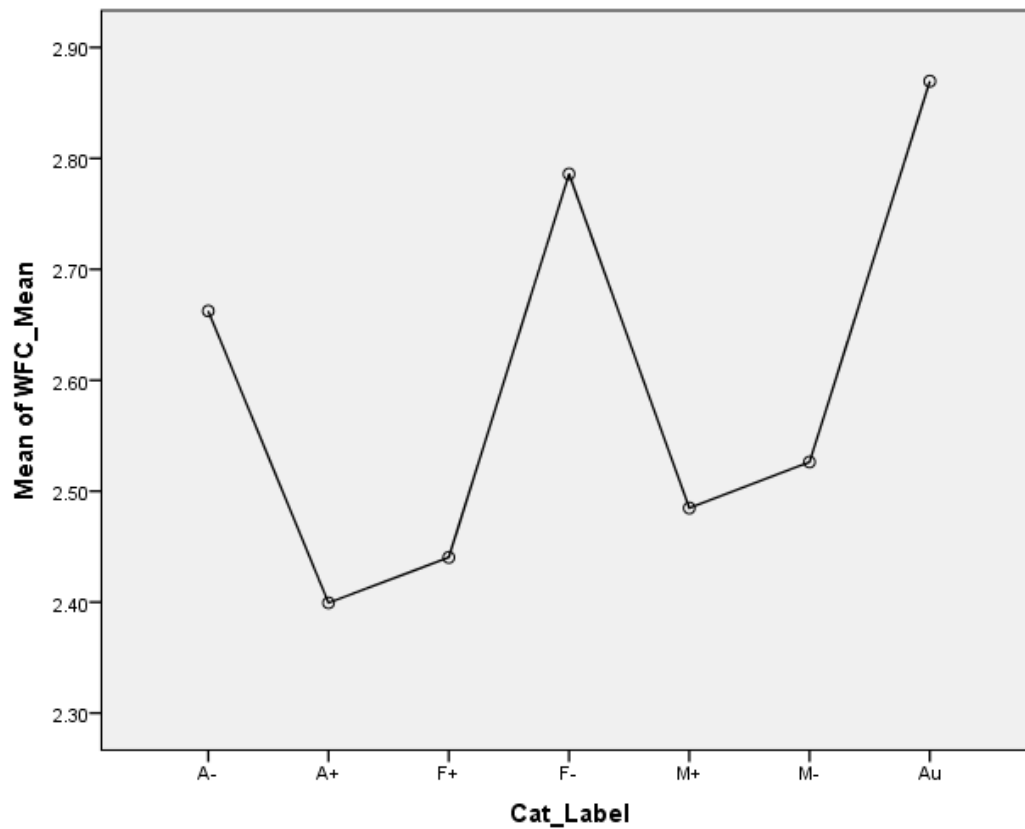


Figure 3: Means plots of WFC for SRI

As illustrated in the means plot, positive androgynous, positive feminine and positive masculine had the lowest WFC levels. Negative masculine followed subsequently whilst the highest WFC was present among undifferentiated, negative feminine and negative androgynous groups. An LSD post-hoc analysis was conducted to determine which SRI groups differed from each other in terms of their WFC. The results are presented in Table 12.

Table 12

LSD Post-hoc Test for WFC

SRI		Mean Diff. (I-J)	SE	Sig.	95%CI		Cohen's <i>d</i>
					Lower Bound	Upper Bound	
A-	A+	0.26	0.11	.014	0.05	0.47	.48
	F+	0.22	0.10	.028	0.02	0.42	.41
	F-	-0.12	0.11	.280	-0.35	0.10	-.23
	M+	0.18	0.18	.329	-0.18	0.54	.32
	M-	0.14	0.15	.354	-0.15	0.42	.25
	Au	-0.21	0.14	.132	-0.48	0.06	-.38
A+	A-	-0.26	0.11	.014	-0.47	-0.05	-.48
	F+	-0.04	0.10	.684	-0.24	0.16	-.07
	F-	-0.39	0.11	.001	-0.61	-0.16	-.71
	M+	-0.09	0.18	.638	-0.44	0.27	-.16
	M-	-0.13	0.15	.387	-0.42	0.16	-.23
	Au	-0.47	0.14	.001	-0.74	-0.20	-.86
F+	A-	-0.22	0.10	.028	-0.42	-0.02	-.41
	A+	0.04	0.10	.684	-0.16	0.24	.074
	F-	-0.35	0.11	.002	-0.56	-0.13	-.63
	M+	-0.04	0.18	.803	-0.40	0.31	-.08
	M-	-0.09	0.14	.546	-0.37	0.19	-.16
	Au	-0.43	0.13	.001	-0.69	-0.17	-.78
F-	A-	0.12	0.11	.280	-0.10	0.35	.23
	A+	0.39	0.11	.001	0.16	0.61	.71
	F+	0.35	0.11	.002	0.13	0.56	.63
	M+	0.30	0.19	.107	-0.07	0.67	.55
	M-	0.26	0.15	.089	-0.04	0.56	.47
	Au	-0.08	0.14	.559	-0.37	0.20	-.15
M+	A-	-0.18	0.18	.329	-0.54	0.18	-.32
	A+	0.09	0.18	.638	-0.27	0.44	.16
	F+	0.04	0.18	.803	-0.31	0.40	.08
	F-	-0.30	0.19	.107	-0.67	0.07	-.55
	M-	-0.04	0.21	.842	-0.45	0.37	-.08
	Au	-0.38	0.20	.054	-0.78	0.01	-.70
M-	A-	-0.14	0.15	.354	-0.42	0.15	-.25
	A+	0.13	0.15	.387	-0.16	0.42	.23
	F+	0.09	0.14	.546	-0.19	0.37	.16
	F-	-0.26	0.15	.089	-0.56	0.04	-.47
	M+	0.04	0.21	.842	-0.37	0.45	.08
	Au	-0.34	0.17	.045	-0.68	-0.01	-.63
Au	A-	0.21	0.14	.132	-0.06	0.48	.38

A+	0.47	0.14	.001	0.20	0.74	.86
F+	0.43	0.13	.001	0.17	0.69	.78
F-	0.08	0.14	.559	-0.20	0.37	.15
M+	0.38	0.20	.054	-0.01	0.78	.70
M-	0.34	0.17	.045	0.01	0.68	.63

Dependent variable WFC

* $p < .05$ (95% significance), ** $p < .01$ (99% significance)

There were significant difference and moderate effect sizes between A+ and A- groups ($p < .05$, $d = .48$). F- and F+ groups also differed significantly from each other; there was also a medium effect size for these differences ($p < .01$, $d = .63$). Differences between A- and F+ categories groups also reached statistical significance, with a small practical significance ($p < .05$, $d = .41$) as did A+ and F- categories however, these groups had a moderate effect size ($p < .01$, $d = .71$). There were statistically significant differences and large effect sizes found between Au and F+ ($p < .01$, $d = .78$); and Au and A+ ($p < .01$, $d = .86$). Au and M+ SRI's had significant differences and moderate effect sizes ($p < .01$, $d = .70$) as did Au and M- ($p < .05$, $d = .63$). Differences among the SRI's in WFC were further analysed by separating WFC into its directional components namely WIF and FIW. The results for WIF will be provided first, followed by those from FIW. Table 13 displays the results for the ANOVA for conflict emanating from the work arena.

Table 13

ANOVA for WIF as a function of SRI

		<i>SS</i>	<i>Df</i>	<i>MS</i>	<i>F</i>	<i>Sig.</i>	<i>ηp2</i>
Mean WIF	Between Groups	6.836	6	1.139	2.231	.041	.049
	Within Groups	133.259	261	.511			
	Total	140.095	267				

* $p < .05$ (95% significance), ** $p < .01$ (99% significance)

The analysis shows that there was a statistically significant difference between the SRI groups and WIF, $F(6, 260) = 2.23, p < .05$. Based on this analysis the mean scores for WIF for each of the seven SRI's were computed. Findings are provided in Table 14.

Table 14

Descriptive Statistics for WIF as a function of SRI

Variable	SRI	<i>M</i>	<i>SD</i>	<i>SE</i>	95% <i>CIM</i>	Min.	Max.	<i>M</i>
WIF	A-	2.87	.74	.10	2.67	3.07	1.00	4.67
	A+	2.69	.67	.10	2.58	2.87	1.56	3.89
	F+	2.62	.70	.08	2.45	2.79	1.00	4.33
	F-	3.01	.84	.13	2.74	3.27	1.11	4.56
	M+	2.99	.73	.22	2.50	3.48	2.00	4.78
	M-	2.75	.49	.11	2.51	2.98	1.56	3.56
	Au	3.05	.70	.15	2.75	3.35	1.89	4.00
	Total	2.80	.724	.04	2.72	2.89	1.00	4.78

When it comes to conflict arising from the work domain, positive feminine individuals reported the lowest WIF ($M = 2.62, SD = .70$). Positive androgynous individuals followed second with a mean WIF of 2.69 ($SD = .67$). On the other hand, undifferentiated groups reported the highest WIF ($M = 3.05, SD = .70$) and M+ groups had the second highest mean of WIF ($M = 2.99, SD = .73$). Table 15 illustrates the post hoc tests for the different gender-roles in terms of their FIW.

Table 15

LSD Post hoc Test for WIF

Sex Role Identity		Mean Difference (I-J)	SE	Sig.	95% CI		Cohen's <i>d</i>
					Lower Bound	Upper Bound	
A-	A+	.18	.14	.195	-.09	.45	0.25
	F+	.25	.13	.050	-.00	.51	0.35
	F-	-.13	.15	.361	-.42	.15	-0.18
	M+	-.11	.24	.619	-.58	.34	-0.15
	M-	.12	.19	.518	-.25	.49	0.17
	Au	-.18	.18	.324	-.52	.17	-0.25
A+	A-	-.18	.14	.195	-.45	.09	-0.25
	F+	.08	.13	.563	-.18	.33	0.11
	F-	-.31	.15	.034	-.60	-.02	-0.43
	M+	-.30	.24	.209	-.76	.16	-0.42
	M-	-.06	.19	.767	-.43	.31	-0.08
	Au	-.36	.18	.047	-.70	-.00	-0.50
F+	A-	-.26	.13	.050	-.51	.00	-0.36
	A+	-.08	.13	.563	-.33	.18	-0.11
	F-	-.39	.14	.006	-.67	-.11	-0.55
	M+	-.37	.23	.109	-.83	.08	-0.52
	M-	-.13	.19	.475	-.49	.23	-0.18
	Au	-.43	.17	.013	-.77	-.09	-0.60
F-	A-	.14	.15	.361	-.15	.42	0.20
	A+	.32	.1	.034	.02	.60	0.45
	F+	.3	.14	.006	.11	.67	0.55
	M+	.02	.24	.940	-.45	.49	0.03
	M-	.26	.20	.192	-.13	.65	0.36
	Au	-.04	.19	.829	-.40	.32	-0.06
M+	A-	.12	.24	.619	-.34	.58	0.17
	A+	.30	.24	.209	-.16	.76	0.42
	F+	.37	.23	.109	-.08	.83	0.52
	F-	-.02	.24	.940	-.49	.45	-0.03
	M-	.24	.27	.373	-.29	.77	0.34
	Au	-.06	.26	.824	-.57	.45	-0.08
M-	A-	-.12	.19	.518	-.49	.25	-0.17
	A+	.06	.19	.767	-.31	.43	0.08
	F+	.13	.19	.475	-.23	.49	0.18
	F-	-.25	.20	.192	-.65	.13	-0.35
	M+	-.24	.27	.373	-.77	.29	-0.34
	Au	-.29	.22	.177	-.73	.13	-0.41

Au	A-	.17	.18	.324	-.17	.52	0.24
	A+	.36	.18	.047	.00	.70	0.50
	F+	.43	.17	.013	.09	.77	0.60
	F-	.04	.19	.829	-.32	.40	0.06
	M+	.06	.26	.824	-.45	.57	0.08
	M-	.30	.22	.177	-.13	.73	0.42

Dependent Variable WIF

* $p < .05$ (95% significance), ** $p < .01$ (99% significance)

Statistically significant differences were found between F+ and F- groups ($p < .01$, $d = .55$); these groups had moderate effect sizes. In addition, A- and F+ ($d = .35$) as well as A+ and F- ($d = .43$) individuals differed significantly in their WFC ($p < .05$) and both differences were at a moderate level of practical significance. Au groups also differed statistically and practically significantly from A+ ($d = .50$) and F+ ($d = .60$) identities ($p < .05$). Figure 3 shows the means plots for WIF.

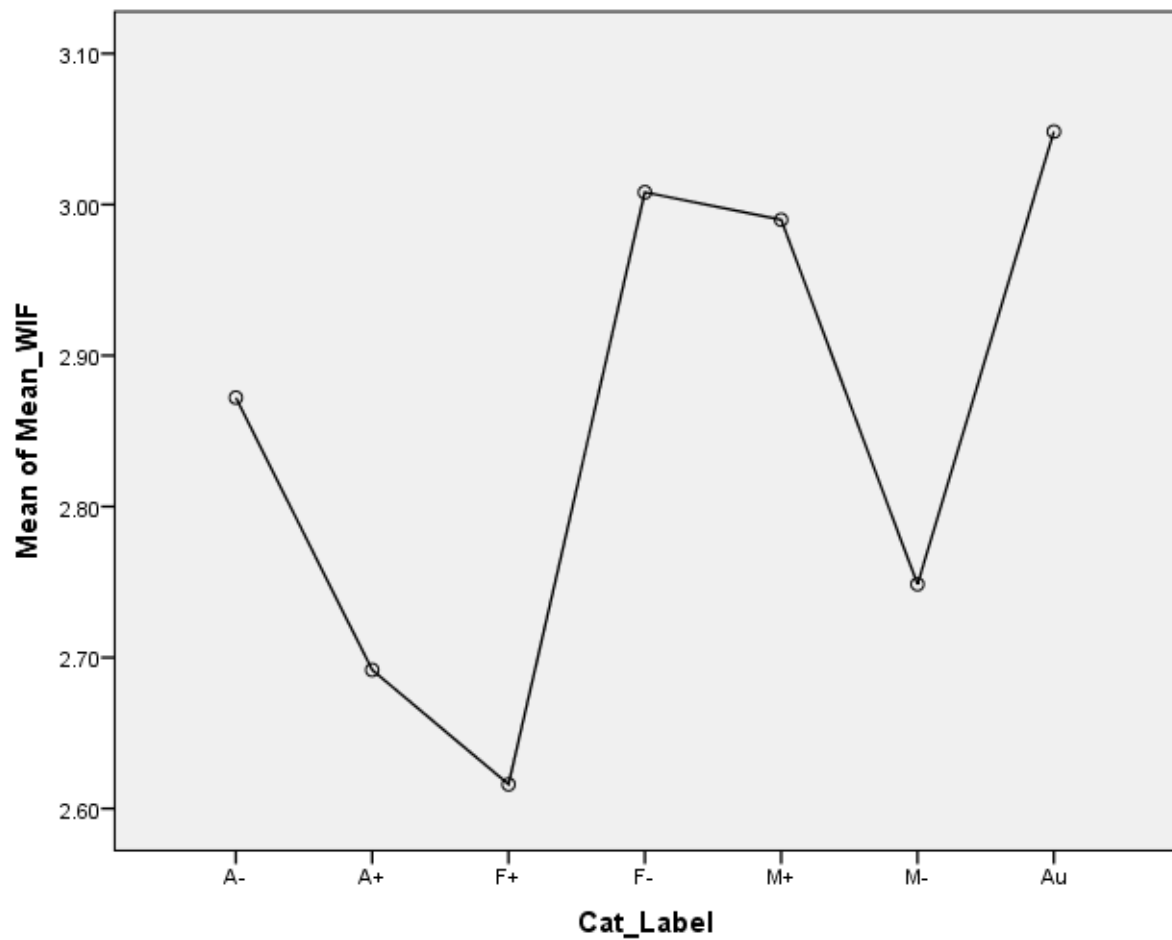


Figure 2: Means plot of WIF for SRI

The means plots indicate that F+ women reported lowest WIF and A+ followed subsequently. Conversely, Au, F-, M- and A- groups experienced high conflict emanating from the work arena. The descriptive statistics for conflict that arises from the family domain are presented in Table 16.

Table 16

ANOVA for FIW as a function of SRI

		<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>Sig.</i>	<i>η p2</i>
Mean FIW	Between Groups	10.269	6	1.71	5.50	.000	.112
	Within Groups	81.231	261	.31			
	Total	91.500	267				

The one-way ANOVA for FIW suggests that SRI groups differed significantly in terms of their experience of FIW, $F(6, 267) = 5.5, p < .01$. Based on this analysis, the descriptive statistics for the SRI's were computed. Findings are illustrated in Table 17.

Table 17

Descriptive Statistics for FIW as a function of SRI

Variable	SRI	<i>M</i>	<i>SD</i>	<i>SE</i>	95% CIM	Min.	Max.	<i>M</i>
FIW	A-	2.45	.60	.08	2.28	2.61	1.00	4.22
	A+	2.10	.59	.08	1.94	2.26	1.00	3.33
	F+	2.26	.56	.06	2.13	2.39	1.00	3.67
	F-	2.56	.57	.08	2.39	2.74	1.56	3.89
	M+	1.98	.40	.12	1.71	2.25	1.00	2.67
	M-	2.30	.49	.11	2.07	2.53	1.67	3.67
	Au	2.69	.47	.09	2.49	2.89	2.00	3.89
	Total	2.34	.59	.03	2.27	2.41	1.00	4.22

In contrast to their high WIF, M+ groups experienced the lowest FIW ($M = 1.98, SD = .40$). A+ gender role identities reported the subsequent lowest WFC ($M = 2.10, SD = .59$). Once again, Au had the highest conflict ($M = 2.69, SD = .47$) and F- had the second highest FIW ($M = 2.56, SD = .57$). The following figure (Figure 4) illustrates the means plots for the above information.

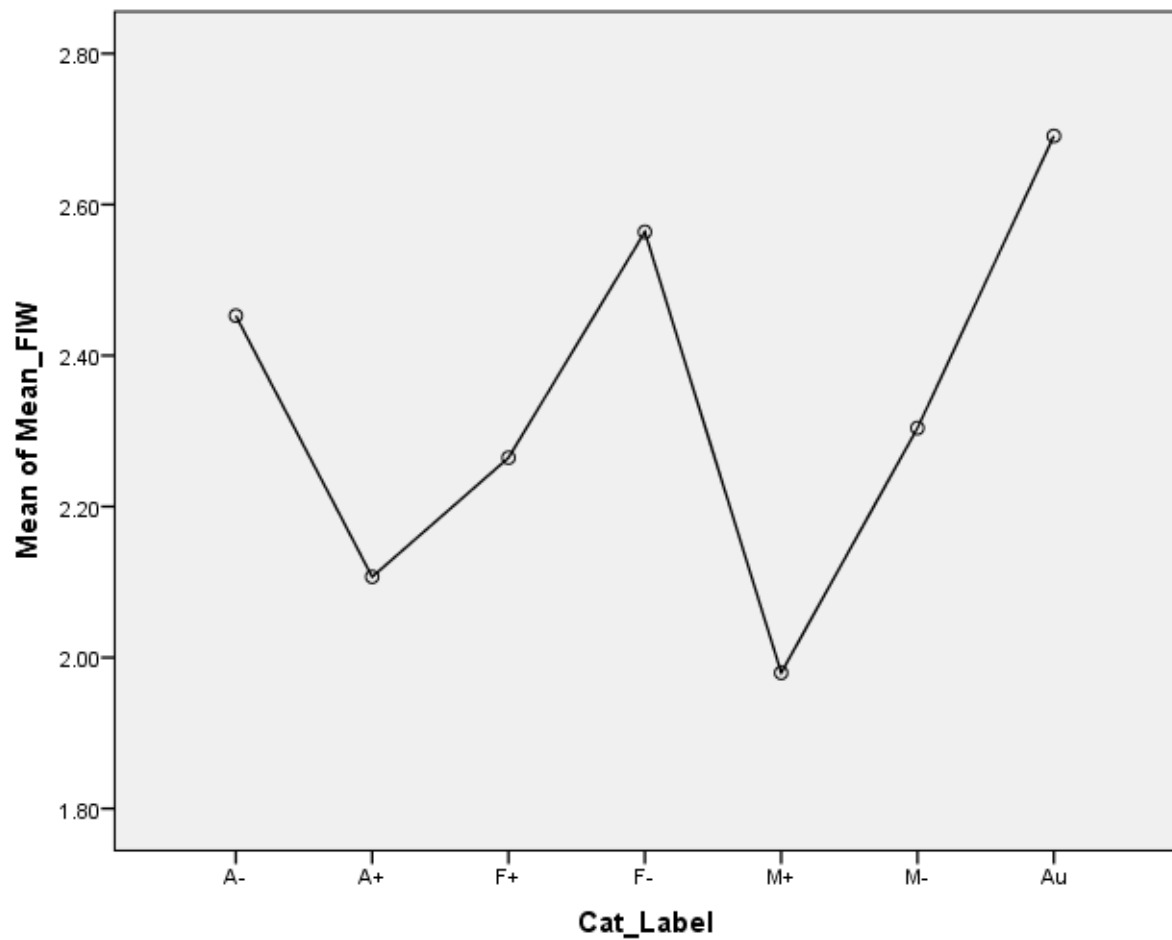


Figure 3: Means plot of FIW for SRI

As demonstrated in the means plots figure, M+ experienced the lowest FIW, followed by A+ and then F+ groups. On the other hand, those categorised as Au, F- and A- experienced high WFC. In order to determine which SRI differ significantly from each other in terms of FIW, LSD post-hoc tests were performed, Table 18 displays these outcomes.

Table 18

LSD Post hoc Test for FIW

Sex Role Identity	Sex Role Identity	Mean Difference (I-J)	SE	Sig.	95%CI		
					Lower Bound	Upper Bound	Cohen's D
A-	A+	.35	.11	.002	.13	.55	0.63
	F+	.19	.10	.067	-.01	.38	0.34
	F-	-.11	.12	.340	-.33	.11	-0.20
	M+	.47	.19	.011	.10	.83	0.84
	M-	.15	.15	.320	-.14	.44	0.27
	Au	-.24	.14	.089	-.51	.03	-0.43
A+	A-	-.35	.11	.002	-.55	-.13	-0.63
	F+	-.16	.10	.124	-.35	.04	-0.29
	F-	-.46	.12	.000	-.68	-.22	-0.83
	M+	.13	.19	.492	-.23	.49	0.23
	M-	-.20	.15	.187	-.49	.09	-0.36
	Au	-.58	.14	.000	-.85	-.30	-1.04
F+	A-	-.19	.10	.067	-.38	.01	-0.34
	A+	.16	.10	.124	-.04	.35	0.29
	F-	-.30	.11	.007	-.51	-.08	-0.54
	M+	.28	.18	.117	-.07	.64	0.50
	M-	-.04	.14	.786	-.32	.24	-0.07
	Au	-.43	.13	.002	-.69	-.16	-0.77
F-	A-	.11	.12	.340	-.11	.33	0.20
	A+	.46	.12	.000	.22	.68	0.83
	F+	.30	.11	.007	.08	.51	0.54
	M+	.58	.19	.002	.21	.95	1.04
	M-	.26	.15	.095	-.04	.56	0.47
	Au	-.13	.15	.383	-.41	.15	-0.23
M+	A-	-.47	.18	.011	-.83	-.10	-0.84
	A+	-.13	.18	.492	-.49	.23	-0.23
	F+	-.29	.18	.117	-.64	.07	-0.52
	F-	-.58	.19	.002	-.95	-.21	-1.04
	M-	-.32	.21	.126	-.74	.09	-0.57
	Au	-.71	.20	.001	-1.11	-.30	-1.28
M-	A-	-.15	.15	.320	-.44	.14	-0.27
	A+	.20	.15	.187	-.09	.49	0.36
	F+	.040	.14	.786	-.24	.32	0.07
	F-	-.26	.15	.095	-.56	.04	-0.47
	M+	.32	.21	.126	-.09	.7	0.57
	Au	-.39	.17	.026	-.72	-.04	-0.70
Au	A-	.24	.14	.089	-.03	.51	0.43

A+	.58	.13	.000	.30	.85	1.04
F+	.43	.13	.002	.16	.69	0.77
F-	.13	.15	.383	-.15	.41	0.23
M+	.71	.20	.001	.30	1.11	1.28
M-	.39	.17	.026	.04	.72	0.70

Dependent Variable FIW

* $p < .05$ (95% significance), ** $p < .01$ (99% significance)

A+ and A- groups differed significantly from each other and had moderate effect sizes ($p < .01$, $d = .63$). F+ and F- groups also differed significantly from each other with similar effect sizes as they maintained the moderate effect size ($p < .01$, $d = .54$). A-SRI's also differed significantly from M+ and had large effect sizes ($p < .01$, $d = .84$). A+ identities showed significant differences to F- groups, with the differences having large effect ($p < .01$, $d = .83$). F- and M- identities were also significantly different to each other with a moderate effect size ($p < .01$, $d = .74$). Lastly, Au groups differed significantly from A+ ($p < .01$, $d = 1.04$) and M+ ($p < .01$, $d = 1.28$). The effect sizes for the difference between Au and A+ as well as Au and M+ ($d = 1.56$) were found to exceed Cohen's (1988) convention for a large effect ($d = .80$). Au groups also differed statistically and practically from F+ ($p < .01$, $d = .77$) and M- ($p < .05$, $d = .70$) categories, with both differences being of moderate effect.

CHAPTER V

Discussion

The current study aimed to contribute to research in the areas of SRI and WFC as no research to date has examined the relationship between socially desirable and socially undesirable SRI's and WFC. Under the COR framework, this study demonstrated that sex-role personality traits serve as resources that influence individual experiences of WFC. Overall the results from this study supported the androgyny model by demonstrating that females who combined virtues from masculine and feminine gender-roles had the lowest conflict between the work and family domains. Perhaps the most noteworthy finding was that positive and negative SRI's were associated with different WFC outcomes, which supports the differentiated model of SRI.

In this chapter the key findings from this study will be described. This section will commence with an explanation of the internal consistency of the SRI and WFC instruments. The demographic profile of the sample will then be explored. Following this, the descriptive statistics for the sample and inter-correlations will be examined. The research questions and the hypotheses will subsequently be answered by means of a series of one- and two-way ANOVA's and LSD post hoc tests.

Internal Validity

This was the first study to empirically test the EPAQ –R developed by Bernstein (2012). The modification of the EPAQ was primarily undertaken in order to address the low reliabilities of the original EPAQ instrument, especially on the negative femininity component. Therefore it was essential for this new instrument to have good internal consistencies. Indeed, the EPAQ-R met its objectives as the internal consistencies for all the

EPAQ-R subscales (M+, M-, F+ and F-) were all high as they exceeded the satisfactory level of .7 (Nunnally & Bernstein, 1994). More specifically, the alpha coefficient for the negative feminine scale was .785 which significantly exceeded the alpha value of .51 for the negative femininity subscale on the EPAQ. Therefore, this study confirmed Bernstein's proposition that the EPAQ-R has good reliabilities when conducted on a South African sample. The WFC instrument also upheld the high reliabilities that this instrument has consistently demonstrated (Carlson et al., 2000). Both directions of conflict showed high internal consistencies which provided further evidence for the bi-directional nature of WFC.

Distribution of SRI's

Approximately 40% of the sample of working mothers was classified into the positive and negative femininity groups. These findings are consistent with previous research that demonstrated females to score higher on positive and negative femininity than on the other SRI's (e.g., Smit, 2005). Based on these findings it is apparent that a significant proportion of females remained loyal to feminine stereotypes. In keeping with the social and cultural construction of gender-roles, it is apparent that to some extent society still encourages mothers to embrace feminine gender-roles.

Nonetheless, the exact same amount of females (40%) who endorsed feminine traits also embraced androgynous sex-roles. Therefore 40% of the women drew virtues from masculine and feminine gender-roles by incorporating both aspects into their personality.

When masculine and undifferentiated groups are combined with the androgynous identities, they comprise over 60% of the participants. This indicates that the majority of the women transcended traditional gender-roles. These findings are reflective of contemporary societal and cultural environments where there is greater equality and less power distance between the sexes and thus gender-role disparities have, to a large extent,

been reduced. Therefore, many females adapted to these changing gender norms by embracing masculine and androgynous traits in addition to their feminine sex-roles.

However it must be mentioned that very few women (11%) adopted masculine sex-roles alone, be they socially desirable or undesirable in nature. The small number of participants that were categorised into these positive and masculine negative categories (7% and 4% respectively) reflects Woodhill and Samuel's finding in which merely 8% of the participants (of whom the majority were females) were considered negative masculine and only 11% positive masculine. In addition, in both the current research and in Woodhill and Samuel's (2003) study there were a minimal amount of females who were classified into undifferentiated gender-roles. Undifferentiated individuals have weak gender identities and consequently these results indicate that the majority of women who participated in the study had consolidated and well-defined SRI's.

Perhaps the most noteworthy finding from this SRI dispersion is that just over half of the women reported having socially undesirable SRI's and accordingly, approximately half the sample embraced positive gender-roles. Therefore, just over half the females in the sample had dominant negative traits and may not be able to adopt or cultivate the socially desirable components of their SRI's (Korabik & McCreary, 2000; Spence et al., 1979).

The manifestation of negative traits in individuals is clear from these findings as just over 50% of women adopted these undesirable SRI's. In light of this finding, it seems incongruous that the vast majority of research has completely neglected the presence of these undesirable personality traits in individuals by only accounting for the desirable sex-role traits that endure in individuals. Studies that only look at a uni-dimensional model of SRI are therefore theoretically and methodologically unsound. This preliminary descriptive analysis of SRI indicates from the onset the importance of distinguishing between the socially desirable and undesirable sex-role personality traits in theory and practice. There are only a

few other studies that stress the need to distinguish between these SRI's (e.g., Aube, 2008; Korabik & McCreary, 2000; Woodhill & Samuels, 2003). These findings provide support for the differentiated model of SRI that considers positive and negative gender-roles as distinct entities. The descriptive statistics for the dependent variable, WFC, provide further insight into the sample and their experiences of work and family interference.

Descriptive Statistics for Work-Family Conflict

The sample of working mothers had relatively high levels of WFC. Many researchers suggest that this high conflict is a function of sex differences between males and females (e.g. McElwain, Korabik, & Rosin, 2005; Parasuraman & Greenhaus, 2002). In contrast to these academics, this study explores a gender-role perspective by suggesting that it is socially and culturally defined SRI and not biological sex that are the prime contributors to the experience of WFC. Since over half the sample endorsed socially undesirable sex-roles it was expected that half the sample had relatively high WFC as these negative SRI's have been demonstrated to be associated with unfavourable psychological outcomes (e.g., Aube 2008, Helgeson & Fritz, 1999).

An additional expected finding was that the sample experienced more WIF than FIW. Research has consistently demonstrated WIF conflict to exceed FIW even among employed parents (Adam, 2008, Frone, 2003, Frone et al., 1992). Thus, the interference from work onto the family domain is more damaging for working women than the negative transference that they experience from family onto the work domain. Based on this finding one can infer that time, strain and behaviour experienced at work have more harmful effects on the family domain for working mothers than vice versa.

Perhaps a possible reason WIF was more prevalent for working women than FIW could be owing to the uncompromising nature and obligatory structure of work which often

forces women to give preference to work over their family roles. These work conditions often cause individuals to devote less time and effort to family responsibilities which subsequently increases the interference from work on family lives (Carlson et al., 2000; Premeaux et al., 2007). Compromising family roles and responsibilities is damaging to women, especially those who have a high family-role salience. Although to a lesser extent than WIF, working mothers still experience relatively high FIW in which their family roles negatively interfere with their work responsibilities. The majority of women had a child or children between the ages of 4-8; children in this age group are often very demanding and require a lot of care and nurturing from their mothers. Therefore, it is not surprising that the working mothers experienced relatively high FIW. The following section elaborates on how the SRI's of individuals are related to the degree of conflict that they experience.

Correlations between EPAQ-R subscales

Understanding the relationships between the SRI subscales is important in order to understand the differences and similarities between these SRI's in their experience of WFC. Similar relationships between the gender-roles were expected to be found in the ANOVA post hoc analyses. The positive correlation that was found between the two positive gender-roles (M+ and F+) is contrary to the majority of research that demonstrates these positive gender-roles to be unrelated (e.g., Bakan, 1966; Helgeson, 1994; Helgeson & Fritz, 1999; Spence, Helmreich, & Holahan, 1979; Spence, Helmreich, & Stapp, 1975; Ward, 2000). Despite this empirical research, this association has been established in a limited amount of research (e.g. Aube & Koestner, 1995; Ghaed & Gallo, 2006). Perhaps the presence of this positive correlation is because both these SRI's are demonstrative of favourable psychological functioning among individuals. Both these SRI's are reflective of the positive aspects of personality and therefore, despite the fact that masculinity is usually associated

with instrumental outcomes and femininity with expressive variables, these gender-roles share the desirable aspects of sex-role dispositions.

A positive association was also found between positive masculine and negative masculine groups. This finding concurs with research that found the two masculine SRI's to be positively related (e.g., Helgeson & Fritz's, 1999; Ghaed & Gallo, 2007). While negative masculine traits typify the extreme side of masculinity, they share similar qualities to their mitigated form of agency. The positive correlation between these masculine identities could therefore be a function of this shared focus on the self which underlies the masculine SRI. As will be explained when exploring the ANOVA results, the differences in WFC, WIF and FIW for the M+ and M- groups did not reach statistical significance. In addition, M- was the only "so called" maladaptive SRI to show favourable levels of inter-role conflict. Based on these findings one can infer that the two components of masculinity may be more similar than expected and thus it is logical to understand their positive association.

In contrast, there was no correlation between negative feminine and positive feminine personality traits. When McCreary and Korabik (1994) used the Wiggins' (1979) Interpersonal Adjectives Scale (IAS) they also found a lack of association between the two components of femininity. Contrary to these findings, previous research has found a positive correlation between these aspects of femininity (Helgeson & Fritz, 1999; Ghaed & Gallo, 2006). A possible reason for the lack of significant relationship in this study could be because of the divergent outcomes between the adaptive and maladaptive dimensions of femininity. Positive femininity is usually associated with desirable outcomes whilst its negative associate is often equated with adverse effects, including depression, self-neglect and psychological distress (Helgeson & Fritz, 1998; Korabik & McCreary, 1999). These opposing psychological outcomes seem to override the similarity of their shared focus on others. Thus, the positive

and negative traits associated with masculinity seem to be more similar than those of femininity.

There was also no association between negative masculine and negative feminine SRI's which suggests that socially undesirable masculine and feminine traits are not only different in terms of their focus on self versus others but also different in terms of their wellbeing outcomes. In confirmation of the current findings, Helgeson and Fritz (1999) advocate that unmitigated masculinity and unmitigated femininity can either be uncorrelated or negatively correlated but not positively correlated as "the two constructs are conceptually incompatible (i.e. one cannot focus on the self to the exclusion of others and focus on others to the exclusion of the self at the same time)" (p. 134). The lack of relationship between the undesirable SRI's has indeed been replicated in previous research (e.g., Saragovi, Aubé, Koestner & Zuroff, 2002).

The moderate negative relationships between positive masculine and negative feminine SRI's and negative masculine and positive feminine SRI's corroborates research that suggests that unmitigated agency is not mitigated by communion and unmitigated communion is not mitigated by agency (e.g., Ghaed & Gallo, 2006; Helgeson & Fritz, 1999; Helmreich, Spence, & Wilhelm, 1981; Saragovi, Koestner, Aube, & DiDio, 1997). Furthermore, these findings corroborate Yu & Xie's proposition (2008) that the larger the desirable masculine traits, the smaller the undesirable feminine traits, and similarly, the larger the desirable feminine traits, the smaller the undesirable masculine traits.

The moderate inverse associations between these variables indicate that there are vast differences between positive masculine and negative feminine as well as positive feminine and negative masculine personality dispositions. For example, a female who possesses positive masculine traits such as competitiveness, worldliness and assertiveness is highly unlikely to be very needing of the approval of others, cry a lot and be very anxious. Similarly,

a female who exhibits negative masculine traits such as being cynical, dictatorial and greedy is unlikely to display the positive feminine traits of being eager to soothe others' feelings, being very kind, supportive and forgiving. These two natures are seemingly incompatible and not therefore not coexist in individuals. Based on these results it is evident that unmitigated agency and unmitigated communion are conceptually and empirically distinct from their socially desirable associates.

Correlations between WFC, WIF and FIW

There were strong relationships between WFC and its two components WIF and FIW, which provides support for the empirical research supporting its bi-directional nature (e.g., Duxbury, Higgins, & Mills, 1992; Frone, 2003). The moderate positive correlation between WIF and FIW indicates that whilst these two directions of WFC are related, they are indeed two separate entities. Empirical research supports the differentiation of the direction from which the conflict arises (Byron, 2005; Casper, Martin, Buffardi, & Erdwins, 2002; Kossek & Ozeki, 1998). More recent research on the bi-directional nature of WFC in fact stipulates that these two concepts have divergent antecedents and outcomes (e.g., Frone, Russell, & Cooper, 1992; Kelloway, Gottlieb, & Barham, 1999). These differential antecedents and outcomes are likely to be leading contributors as to why different SRI's experienced different levels of conflict when the source was from different directions (i.e. work or family). Based on the differentiation between WIF and FIW, it is evident that both these components as well as WFC as a global construct deserve separate analysis and therefore this study explored these variables separately where possible. The associations between these dependent variables and the SRI's are explained in the following paragraphs.

Correlations between EPAQ-R subscales and WFC, WIF and FIW

Results from the correlation analysis indicated that the negative masculine and negative feminine groups were positively related with WFC. Therefore, the more females embraced negative gender-role traits, the more inter-role conflict they experienced. Negative femininity was positively associated with the global construct of WFC as well as with its two directional components (WIF and FIW). This finding suggests that negative feminine individuals are likely to have increased levels of inter-role conflict whether it emanates from the work or family domain. Previous research supports this finding as it has found negative SRI's to be associated with poor psychological health and wellbeing (e.g., Hammer & Good, 2010; Helgeson & Fritz, 1998). In fact, throughout research literature negative associations between negative femininity and wellbeing have been demonstrated. For example, Aube (2008) found this SRI to be associated with distress and reflect a vulnerability to depression.

Furthermore, negative feminine groups often exemplify neurotic thoughts and behaviours which are the only traits out of the “Big Five” (Goldberg, 1990) to be significantly related to WIF and FIW (Bryant, 2009). In fact the association between neuroticism and WFC has received the most support out of all individual factors that have been studied in the work and home interaction (Andreassi, 2007; Bruck & Allen, 2003; Smoot, 2005; Wayne et al., 2004).

Negative feminine individuals have a tendency of focusing on gaining approval and meeting the demands of others in order to feel good about themselves. This is unhealthy as the less confidence one has in oneself, the more one needs to gain approval from others. A positive self-image should arise from internal self-worth and therefore it is no surprise why these individuals experience high conflict in the work and family domains-arenas in which they continuously strive to meet the demands of and gain approval from others. In addition, since interpersonal relationships are highly valued by individuals who embody negative

feminine traits, compromising on work or family relationships is likely to have a detrimental effect on the wellbeing of these individuals.

Negative feminine individuals may also encounter problems in their interpersonal relationships as they often repress their own needs, thoughts and opinions to appease or prevent conflict with others. In addition, the passive-aggressive component of their personality may lead to emotional distress for these individuals as they often subtly display their anger and resentment towards others.

On the other end of the continuum, negative masculinity was also found to be positively related to WFC. A person who is focused on themselves to the exclusion of others is also unlikely to have satisfactory relationships whether at work or with family members, which could increase the WFC these groups experience (Helgeson & Fritz, 1999). However, when differentiated into its two directions negative masculinity was associated with FIW and not with WIF. Therefore, adopting negative masculine traits is likely to lead to more conflict spilling over from the family into the work domain than vice versa. Their strong need for achievement could be one of the reasons that participating in family roles makes it hard for these women as they are primarily concerned with their own goals and not on meeting the demands of others such as their family.

As expected, the positive gender-roles were inversely related to WFC; however their correlations did not reach statistical significance. Based on these results one can deduce that the negative SRI's had a stronger effect on the work-home interference than the positive identities. The ANOVA analysis will provide insight into the relationships between the positive and negative SRI's.

Positive and Negative SRI and WFC

This study focused on the effects of SRI on the work-family interaction; these sex-role traits are factors that are internal to the individual. It is internal dispositions, such as these SRI's, that recent research has deemed prime contributors of WFC (Carlson, 1999; Wayne et al., 2004). However, in order to ensure that the proposed relationship between SRI and WFC was not confounded by factors that were external to individuals, a series of two-way ANOVA's were conducted with demographic and situational variables included in the analysis. Results indicated that none of the demographic variables or the family- or work-related variables showed any significant main effect on WFC. There were, however, five variables which seemed to counter the effect of SRI on WFC; however, they did not have a significant main effect on WFC. These included marital status, number of children, amount of hours spouse works each week, organisational tenure and job sharing. If these variables had a significant main effect on SRI then it would have been necessary to analyse their marginal means for WFC.

Not only did none of the demographic or situational variables impact significantly on WFC, but there was in fact no interaction between SRI and these other independent variables. Therefore, one can assume that the effect of SRI on WFC can be generalised for the demographics entered in the analysis including, marital status, race, job level and level of education. Moreover, the contribution of SRI can also be generalised across all levels of family-related antecedents including number of children, age of youngest child, spouse's help with home responsibilities, children's help with domestic tasks, family support and domestic help. Lastly, the influence of SRI can be generalised across the following work-related antecedents: hours worked per week, the presence or lack thereof and use of family friendly policies such as home and teleworking, childcare and maternity leave. From the two-way ANOVA one can infer that SRI contributes to WFC regardless of other examined variables

and subsequently three, one-way ANOVA's were computed in order to answer the research questions which inquire about the relationships between positive and negative SRI's and WFC, WIF and FIW.

The one-way ANOVA for WFC confirmed Hypothesis 1a that positive SRI's (A+, M+, F+) had the lowest WFC whilst negative SRI's (A-, M-, F- and Au) experienced the highest WFC. In ascending order from the lowest to highest WFC, positive androgynous individuals were first, followed by positive feminine, positive masculine, negative masculine, negative androgynous, negative feminine and lastly undifferentiated individuals. These results demonstrated that positive SRI's experienced lower WFC than their negative counterparts who had higher levels of inter-role conflict. The present findings corroborate research that found positive SRI's to be accompanied by psychological health whilst their negative counterparts were associated with lower wellbeing (e.g., Helgeson & Fritz, 1999). The divergent WFC outcomes for desirable and undesirable SRI's provide support for the differentiated model of SRI which distinguishes between the socially desirable and undesirable aspects of personality. Since 1979, Spence et al. have encouraged researchers to use a differentiated model of SRI; nonetheless most research still has a social desirability bias as it fails to measure negative components of SRI.

Although positive androgynous groups had the lowest mean for WFC, followed by positive feminine and then positive masculine identities, post hoc tests revealed that there were no statistically significant differences between these three desirable SRI's with regards to WFC. In addition, no significant differences were found between the negative SRI's. Therefore, one can deduce that the virtues of the desirable SRI's seem to minimise the experience of WFC, whilst all the undesirable gender-roles play a role in augmenting the inter-role conflict.

When separated into its positive and negative components, positive androgynous groups experienced the lowest WFC, whilst negative androgynous individuals were among those associated with heightened interference between work and family. Post-hoc tests confirmed these differential outcomes as positive and negative androgyny showed significant differences from one another. These results therefore confirm the differentiated model of androgyny model which specifies that positive androgyny is associated with the most favourable psychological outcomes whilst its negative associate is inversely related to positive outcomes. Recent research supports these findings by indicating that positive androgynous groups report the highest levels of subjective wellbeing and psychological health (Wajsblat, 2011; Ward, 2000). Woodhill and Samuels (2003) further authenticate the benefits of desirable androgyny as they suggest that these individuals have “the potential to live the more fulfilled and complete lives that Bem (1975) once envisioned (p. 563).

In accordance with the COR theory one can deduce that androgynous individuals use their gender-role traits as resources that protect against the negative perceptions and experiences of conflict between the work and home domains. These individuals are able to use their positive masculine and feminine traits when appropriate in order to minimise their experiences of inter-role stress. For example, these individuals may make use of their feminine traits when in the home domain and employ their masculine qualities in a work situation. It must however, be reiterated that although androgynous individuals had the lowest mean of WFC, their differences to positive masculinity and positive femininity did not reach statistical significance.

When it comes to the highest conflict, all three analyses (with WFC, WIF and FIW as the dependent variables) found undifferentiated groups to be associated with the highest WFC, followed by negative feminine individuals who had the second highest inter-role conflict. It is not surprising that undifferentiated SRI's reported the highest WFC, and

differed significantly from all the positive identities in the post hoc tests, as these individuals are unpredictable and inconsistent in nature and the least functional of all the SRI's (Woodhill & Samuels, 2003). Previous research had also found unfavourable outcomes associated with this unconsolidated SRI; for example Littlefield (2003) found individuals categorised in this weak gender-role to demonstrate highest stress levels.

In addition, it was also expected that negative feminine individuals would experience high WFC as research has repeatedly shown negative feminine individuals to be predictive of the worst psychological outcomes and highest stress levels of all the SRI's (e.g., Helgeson & Fritz, 1998; Ricciardelli & Williams, 1994). Based on the poor outcomes associated with negative feminine and negative androgynous groups, and the superior consequences that are linked to positive feminine and positive androgynous groups, it was consistent that post hoc tests demonstrated significant differences between F- and A+; and F+ and A- SRI's. No significant differences were found between the desirable and undesirable aspects of masculinity with regard to WFC, this lack of association seems to indicate the negligible differences in psychological outcomes between the positive and negative components of masculinity. These interpretations will be elaborated upon when discussing the findings from the WIF and FIW ANOVA's.

The adaptive outcomes for positive androgyny and positive femininity and yet maladaptive outcomes for negative androgynous and feminine groups may provide a reason for the equivocal findings for the competing models of SRI in predicting psychological health. Indeed, the mixed results for these models could be attributed to their failure in distinguishing between positive and negative gender-role traits (e.g. Dimitrovsky, Shiff, & Perl, 2000; Whitley, 1984; Woo & Oei, 2008; Yu & Xie, 2008). The results from the ANOVA's with WIF and FIW as the dependent variables provide further evidence for the need to distinguish between the desirable and undesirable personality dimensions.

Positive and Negative SRI and WIF

In order to address hypothesis 1b a one-way ANOVA was conducted with WIF as the dependent variable. Results indicated that positive femininity is the SRI associated with the least amount of conflict arising from the work arena and spilling-over into the family domain. Positive androgyny shadowed as second best and was followed by negative masculine, negative androgyny, negative femininity and lastly undifferentiated groups. Despite this order of means of WFC, it must be acknowledged that just as in the WFC analysis, there were no statistically differences between the three positive identities and similarly no such differences were found between the negative SRI's. Despite the negligible statistical differences, the means for the positive and negative identities indeed varied and the following paragraphs will elaborate on potential reasons for these results.

Although the majority of research has suggested that masculine groups are related to better outcomes than feminine groups (e.g., Ward, 2000), research that differentiates between the desirable and undesirable gender-roles has begun to find that positive femininity may in fact be associated with even better functioning than positive masculinity. Post hoc analysis demonstrated that positive feminine and negative feminine groups were significantly contrasted from one another and these contrasting psychological outcomes could be the reason feminine gender-roles are often clouded with less favourable outcomes. When differentiated into its desirable and undesirable traits, Yu and Xie (2008) found positive femininity to be a greater predictor of lower stress levels than masculinity. Livingston, Burley, Springer's (1996) also found lower anticipated interference from work and home to be experienced by women who possessed feminine traits. The high WFC that negative feminine groups experienced in the current analyses indicated the detrimental effect that negative femininity has on wellbeing. Consequently it makes sense that the undesirable

feminine components were the contributors of the negative effects that many researchers have found to be equated with femininity when it is viewed as a global construct.

One of the reasons positive feminine individuals experienced the lowest WIF could be accredited to the high family-role salience that often embodies women with these gender-roles. Individuals with these qualities place a great deal of importance on the quality of life in their family domain and often prioritise family roles over work responsibilities. Given that feminine individuals place a great deal of value in their relationships with family members (Powell & Greenhaus, 2010) they are likely to go to great extents to prevent the time, behaviour or strain from work from negatively impacting on their family life. For example, these individuals may not stay after hours at work and instead attend to their families' needs.

An additional reason that the mothers who embraced desirable feminine traits had the lowest WIF may be that that these individuals employ feminine characteristics at work and therefore, when behaviour from work spills-over into the home domain it is likely to be reflective of communal traits which are beneficial to their family. Family roles require mothers to be understanding, supportive and caring and since feminine individuals personify these traits, their interference from work to family is likely to be minimal. According to researchers, feminine individuals enjoy the benefits of embracing their supportive, nurturing, sensitive and compassionate nature when relating to their family (Deaux & LaFrance, 1998; Eagly, Wood, & Diekmann, 2000).

Furthermore, prior studies have suggested that individuals who typify femininity are comfortable with work and family relationships, unlikely to experience problems in those relationships, and are more likely to have support available (Helgeson, 1994; Helgeson & Fritz, 1998, 1999). These findings provide support for positive feminine individuals having lower FIW as their relationships in both work and family domains are likely to be satisfactorily and this will prevent their experience of inter-role conflict.

In contrast to the low conflict enjoyed by positive feminine groups, women who endorsed positive masculine gender-roles reported high levels of WIF. Just as positive feminine groups had lower WIF, positive masculine individuals had higher WIF. Masculine women may have qualities that are often encouraged in the work domain such as competitiveness and assertiveness; however when it comes to the home domain such qualities are not often welcome. Children and partners may not consider it appropriate for their mothers or partners to use their masculine traits in the home domain, and often prefer their mothers and partners to be empathetic, supportive and nurturing which are qualities that may be hard for positive masculine women to embrace.

Moreover, masculine women are likely to encounter significant agentic backlash from other women as well as men as their behaviour is often considered to violate prescriptive female norms (Rudman & Glick, 2001). These criticisms may create a lot of strain for such women and this tension may negatively impact on their family domain. An additional reason for these individuals being higher up than expected on the WFC scale could be because individuals high in masculinity have been found to work longer hours than the average person and were therefore more likely to report that the source of their stress and conflict was from the work domain (Huffman, 2004). Furthermore, women who embrace positive masculine traits usually have more ambition to succeed at work than those with positive feminine gender-roles and may therefore give much more time to work. Consequently, such individuals may suffer the consequences of not devoting enough time to family roles. Despite these high levels of conflict, in the post hoc tests M+ groups did not differ significantly to any of the other SRI groups, be they positive or negative.

Interestingly, the unmitigated aspects of masculinity had better WIF outcomes than their mitigated contemporaries, though this finding did not reach statistical significance. Perhaps an explanation for this unexpected finding could be due to the specific traits that

negative masculine individuals endorse in the work place. Although negative masculine traits are considered undesirable sex-role traits, many countries encourage the adoption of these gender-roles (Woodhill & Samuels, 2003). Contrary to popular belief, aggressive, hostile and greedy traits may in fact serve as resources which help negative masculine groups acquire more resources and protect their current resources. Moreover, negative masculine individuals often have a tendency for social dominance in organisations. Socially dominant individuals are socially central and often attractive or charismatic individuals who are able to use their personality resources to obtain what they see as fit. These individuals are exceptionally influential in the work domain and are therefore very effective at their work. In fact, many of their colleagues may gravitate towards them, praise them, learn from them and even imitate them (Seyfarth, 1977). Work experiences are likely to be positive for socially dominant individuals as they will get what they want even if it at the expense of others. Consequently, their confidence and positive encounters in the work domain may have a positive effect on their family domain.

Thus, although these traits are certainly not “supposedly” desirable, one can understand how possessing these traits may result in a positive spillover from the work into the family domain. Based on the afore-mentioned explanations one can understand why M- fared better than M+ in terms of WIF. Hypothesis 1b was therefore only partially supported as F+ and A+ had the lowest WIF and Au, F- and A- had the highest WFC.

Positive and Negative SRI and FIW

A one-way ANOVA was conducted to answer hypothesis 1c. In confirmation of this hypothesis, positive identities had the lowest FIW whilst negative gender-roles had the highest WFC. When it comes to FIW, M+ SRI's experienced the lowest WFC; again A+ was in second place; F+ took third place; M- fourth place; A- fifth place, and for the third time F-

took sixth place and Au was the last contestant. Post hoc analyses yet again revealed that there were negligible statistical differences between the three desirable SRI's; and between the four undesirable counterparts.

The lowest levels of FIW experienced by M+ groups is reflective of previous research that found masculine individuals to have the lowest levels of conflict arising from the family arena (Huffman, 2004). Masculine individuals often have a high work-role salience and therefore they do not often compromise their work for family duties. Therefore, they will probably not spend additional hours with family but rather use this time at work, reducing the negative interference from the family domain. Furthermore, these individuals may not be as concerned with time-related stress as their masculine sex-roles give them the ability to cope effectively with tension and the potential loss of resources. Examples of such traits include assertiveness, confidence and independence which positive masculine women embrace in both the work and family arenas. These traits are complementary in the work domain which is often built upon a patriarchal structure and of masculine norms. Therefore, their behaviour at home is conducive to spill-over into the work domain. Lastly, the strain experienced with family is not likely to severely impact on masculine individuals as these individuals have been socialised to be self-reliant and withhold their emotion to appear strong (Misra & McKean, 2000).

Therefore, agentic traits may lower stress levels and increase stress resilience. M+ groups were statistically contrasted from F- and A- groups, which were on the highest end of the FIW scale. In addition, A- and A+ as well as F- and F+ groups contrasted significantly from one another which provides further support for Woodhill and Samuel's (2003) differentiated model of SRI. On the other hand, M- individuals had relatively low FIW and consequently there were no statistical differences between the two masculine SRI's.

To sum up, there were no significant differences between the positive SRI's in all three of the ANOVA's. Therefore, although their means differed, positive groups shared relatively similar levels of interference between work and family. Based on this research, one can infer that the experience of WFC seems to be less related to the extent to which one embraces instrumental or expressive traits and more dependent on the degree to which individuals adopt positive gender-role traits. In accordance with Hobfoll (1989) individuals with desirable SRI's may conserve resources by reinterpreting threats as challenges (p. 519), concentrating on potential gains rather than losses, and maintaining a positive outlook where they believe in their abilities to balance conflicting demands.

Conversely, when individual sex-role traits become extreme or unmitigated, they have a negative impact on the psychological health of individuals and make it more difficult for individuals who embody these traits to manage the stress process. For example, negative thoughts or excessive worry may create strain on individuals which is likely to limit their resources and hamper their wellbeing.

Conclusion

The current study confirms the need to use a differentiated model of SRI when evaluating WFC and its bi-directional components. Results confirmed that positive and negative SRI's are associated with differential outcomes with the positive groups experiencing significantly less inter-role conflict than their negative counterparts. It can therefore be inferred that some of the prime causes and experiences of stress and the way individuals respond to it can be attributed to SRI (Kessler, 2000; Littlefield, 2003). Interestingly, over half of the sample embraced extreme masculine, feminine, androgynous traits as well as undifferentiated traits; this indicates the prevalence of negative traits in working mothers. Additionally, this study confirmed recent research that suggests that

individual dispositions are related to the interference between work and family. For example individuals who are understanding, kind and supportive are likely to experience lower levels of WFC whilst those who are overly submissive, whiny and anxious may experience higher levels of inter-role conflict.

When both directions of WFC (WIF and FIW) are considered, positive androgynous individuals emerge with the lowest WFC. This study therefore confirms the androgyny model as the developmental ideal (Woodhill & Samuels, 2003). Thus individuals may benefit from embracing the virtues from both masculine and feminine genders. In conclusion, results from this study further highlight the theoretical and methodological limitations of previous research that has a social desirability bias when assessing SRI. Thus, research that utilised uni-dimensional models such as the PAQ and the BSRI are severely flawed and their outcomes are likely to be confounded by the presence of undesirable traits in individuals. The EPAQ-R, on the other hand, was validated as a reliable tool to use in the South African context. The rest of the practical and theoretical implications as well as the limitations and recommendations for the current study are provided in the following chapter.

CHAPTER VI

Practical and Theoretical Implications, Limitations and Recommendations

Theoretical Implications

With no prior research found on the association between positive and negative SRI's and WFC, this was the first study to evaluate this relationship. The current study demonstrated the need to incorporate all seven SRI's as measured by the EPAQ-R when exploring SRI. The revised version of the EPAQ was confirmed for being appropriate for the

South African population in terms of its reliability and successful differentiation of positive and negative gender-roles.

In terms of the competing models of SRI, the current findings lend support to the androgyny model where psychological well-being is a function of coexisting positive masculine and feminine traits. The fact that more females have embraced androgynous traits in their gender-roles provides theoretical implications for the gender-role socialisation process. The social constructionist theory and the gender-schemata theory of sex-role development are both appropriate models for research on SRI as they posit that metaphorical gender is socially and culturally created. In light of the current organisational and societal climate it was expected for a significant amount of females to transcend gender-roles stereotypes and adopt androgynous traits as they indeed did.

This study heeded to the call of researchers for more studies to explore the impact of individual differences when it comes to work and family interaction (Eby et al., 2005; Byron, 2005). These sex-role differences were found to significantly affect how individuals experience work-family stress. Unlike SRI, demographic and situational related variables did not have a significant effect on WFC. This study therefore adds to the encouraging results found in previous studies (e.g., Wayne et al., 2004) that explore the impact of individual dispositions on the work and family interaction.

In terms of WFC theory, in contrast to the majority of research that employs the role conflict theory, this study made use of the COR theory as it demonstrated that individual gender-role traits serve as resources that affect the experience of WFC. SRI can be constructive or destructive resources when dealing with WFC as these gender-roles have the potential to enhance or hinder the stress response.

Practical Implications

This study offers numerous practical implications for individuals and organisations. Previous studies have shown situational variables (i.e. family-friendly policies and work hours) to be the primary predictors of inter-role conflict and consequently these studies have suggested organisations implement employee family-friendly policies to reduce such conflict. This study, however, demonstrated that SRI is a dispositional tendency that plays an important role in the experience of WFC.

By taking this research into account, organisations can employ different tactics when trying to minimise the inter-role conflict of their employees. For example, organisations can apply this knowledge to interventions such as Employee Assistance Programmes (EAP's) or through stress management training programs. These programmes can be tailor-made for each individual in order to facilitate the adoption of positive gender-roles, and to learn how to approach and deal with stressful situations. In addition, organisations can provide training programmes that help individuals and their supervisors understand what gender-roles they embody and identify if any of these traits serve to heighten the experience of WFC. Therefore, perhaps the most important implication from this study is for organisations and individuals to realise that WFC can be reduced by devoting attention to individual personality differences.

A further practical implication is for organisations to realise that masculine individuals do not always fare better in terms of managing stress and conflict. Previous research has shown masculinity to result in higher wellbeing than femininity (Bromberger & Matthews, 1996; Olds & Shaver, 1980). Moreover femininity has often not been associated or has been inversely linked to psychological health. (e.g., Aubé, Fichman, Saltaris, & Koestner, 2001). Consequently, organisations often have preconceived ideas that individuals who adopt more competitive, assertive and domineering traits will function better than individuals who

personify supportive, empathetic and giving traits. This study revealed that this is not the case. Negative femininity is indeed associated with detrimental health and wellbeing outcomes and these results have clouded research that examines femininity as a global construct. As this study demonstrated, females who embody positive femininity are likely to be as, if not more, effective than masculine females in the workplace when it comes to managing stress and conflict. Therefore, organisations should not hire based on the ideal of masculinity and rather appreciate the communal traits that positive feminine individuals embrace.

An additional implication of this study is for individuals to realise that the experience of WFC is not only dependent on their work and family environments but is also largely dependent on their own dispositions and their abilities to manage stress. By understanding their own predispositions to experience WFC, those with negative SRI's can take active steps to minimise their current and future conflict. These individuals can try to incorporate the positive aspects from the opposing gender role into their personality. For example, a female who is aggressive, domineering and self-centred could try focus more on others and becoming more understanding of others in order to balance her undesirable traits with desirable traits from the opposing SRI. Those with undesirable feminine dispositions could try to identify and reduce their neurotic thoughts and approval seeking behaviours that lead to their perceptions of stressful situations and experiences of conflict. Such individuals may benefit from emotion regulation techniques and even cognitive-behaviour therapy to identify their cognitive distortions such as "I can only gain confidence if I get approval from others" and make realistic assumptions instead.

Limitations and Recommendations

While this study is valuable, it contains several limitations that must be addressed when examining and generalising the results. The first limitation is the cross-sectional and non-experimental design of this study which prevents the researcher from determining the causality of the relationships between positive and negative SRI's and WFC. It is therefore advised that a longitudinal study is used in addition to the cross-sectional surveys in order to evaluate the causality of the results.

Convenience sampling only provided 114 responses therefore the researcher also made use of snowball sampling where an additional 154 responses were collected. The participants were therefore not randomly selected from the population which may increase the likelihood of selection biases (Salganik & Heckathorn, 2004). For example individuals who have larger social networks had a greater chance of being contacted than more socially isolated individuals (Berg, 2006).

An additional drawback of this research is that surveys were based on self-report questionnaires which are often influenced by a tendency for participants to answer in socially desirable manners (Lönngqvist, 2008). This study attempted to reduce social desirability bias by explaining to participants that they would remain anonymous and that the questionnaires would remain confidential. Despite these safeguards, respondents may still have felt uncomfortable to indicate their true SRI and personality characteristics as this is indeed personal information.

With regards to the distribution of females over the seven gender-roles, only 4% of the sample was classified as positive masculine and only 7% as negative masculine; therefore findings on these SRI's may not be representative of the entire population. An additional limitation is that the current study only examined working mothers which was beneficial as it gave insight into the WFC experienced by these individuals and additionally, sex was not a

confounding variable. However, it is recommended for future studies to look at males in addition to females to see how their SRI's differ to females and how these impact on their work and family interference. Findings from the current study therefore cannot be generalised to males.

The conflict that arises between the work and family domains was the focus of this study and consequently the potential for work-family facilitation was not explored. According to Frone (2003) work-family facilitation has largely been overlooked in research and there is minimal research literature that predicts the relationships of this construct with work, family, and individual antecedents and outcomes. It is recommended that COR model is be used as a framework for future studies that assess positive interaction between work and family. Just as sex-role personality traits served as resources that protect against work-family interference so too could these roles positively and negatively impact on work-and home facilitation.

Furthermore, family-friendly policies were measured on an ordinal scale and therefore correlations between these variables and WFC could not be computed. Therefore, it is suggested that future studies use an interval scale to measures these variables. Flexi-time benefits were not included in the questionnaire which limits the impact of work-related situational variables as many organisations are using these flexi-time policies. Future studies should include these benefits in addition to other policies.

Lastly, this study evaluated the bi-directional nature of WFC; however according to Carlson et al.'s WFC scale (2000) there are also three forms of conflict which create a six dimensional typology: 1) time-based WIF, (2) time-based FIW, (3) strain-based WIF, (4) strain-based FIW, (5) behaviour-based WIF, and (6) behaviour-based FIW. It is suggested that further research should examine all six components of the work to family interference.

Despite its limitations, the present study makes a valuable contribution to research on SRI and WFC. The differentiated model of SRI was confirmed in this study and future researchers should utilise such a model when exploring SRI. Aside from SRI there are numerous other personality differences that impact WFC and it is advised that researchers examine the effects of these dispositions on individuals.

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Appendices

Appendix A

Cover Letter for Companies



SCHOOL OF HUMAN & COMMUNITY DEVELOPMENT

UNIVERSITY OF THE WITWATERSRAND

Private Bag 3, WITS, 2050

Tel: (011) 717 4500

Fax: (011) 717 4559

Dear

My name is Talia Solomon I am presently completing my Master's degree within the Department of Industrial Psychology at the University of the Witwatersrand. In the fulfillment of this degree my research is designed to investigate the relationship between gender-roles and work-family conflict among working mothers in South Africa. I would like to invite your company to take part in this research study by completing an online anonymous questionnaire consisting of a number of different questions related to gender-roles and work-family conflict as well as demographic information.

Gender-roles are considered to be part of an individual's personality and behaviour and as such they can influence the extent to which individuals deal with conflict between work and family roles. An understanding of this conflict is important as work-family conflict can have a negative impact on employee wellbeing which in turn can influence factors such as job satisfaction, absenteeism, turnover and productivity. Understanding the relationship between gender-roles and work-family conflict is valuable as it will assist in advancing initiatives on how such conflict can be managed, thereby reducing negative outcomes.

In terms of Participation Anonymity and Confidentiality:

The anonymity and confidentiality of participants will be fully ensured in this research as there will be no identifying characteristics that will lead to the exposure of a participant's identity of the participants. While questions are asked about personal circumstances, no identifying information, such as name or I.D. number, is asked for and as such participants will remain anonymous. Participation is voluntary, and no employee will be advantaged or disadvantaged in any way for choosing to complete or not complete the questionnaire.

In terms of Data Collection:

Data will be collected in a way that is as unobtrusively and timeously as possible for the organisation involved. Data will be collected electronically. Staff at the organisation will be provided with a secure encrypted web site through which they can access the survey. The survey will take approximately 20 minutes to complete. Participants will all be provided with a covering letter attached to the survey which outlines all the conditions of participation as mentioned above.

Usage of the Data and Presentation of Results:

Responses will not be used for any purposes, other than research. Informed consent is assumed by the completion of the questionnaires. However, participants will be able to withdraw from the study until such time as they submit the questionnaires.

Be assured that data will solely be used for academic purposes. In this regard, I am more than willing to sign a non-disclosure agreement if the organisation feels that this is necessary. The results will be presented to the organisation, in a written report, as group trends, which make it impossible to identify any particular respondent.

This research study is an independent study which will be conducted under the supervision of an Industrial Psychologist at Wits University. Please contact me should you have any further questions. If you wish to meet with me for a discussion and/or wish to see a copy of my survey please feel free to contact me and I will meet with you and/or provide you with survey details. Your company's participation in this study would be greatly appreciated.

Kind Regards

Talia Sarah Solomon
Masters Student in Industrial Psychology
University of the Witwatersrand

Research Supervisor: Colleen Bernstein

Appendix B
Cover Letter for Participants



SCHOOL OF HUMAN & COMMUNITY DEVELOPMENT
UNIVERSITY OF THE WITWATERSRAND

Private Bag 3, WITS, 2050
 Tel: (011) 717 4500
 Fax: (011) 717 4559

Dear Employee

My name is Talia Solomon; I am presently completing my Master's Degree within the Department of Industrial Psychology at the University of the Witwatersrand. In the fulfillment of this degree my area of research is designed to investigate the relationship between gender-roles and work-family conflict. I would like to invite you to take part in this research study by completing an online anonymous questionnaire consisting of a number of different questions related to gender-roles and work-family conflict as well as demographic information.

Gender roles are considered to be part of an individual's personality and behaviour and as such they influence the extent to which individuals deal with conflict between work and family roles. Given the psychological and economic costs of work-family conflict it is important for organisations to understand the importance of gender-role factors in this relationship. Understanding these differences can help organisations maximise the effectiveness of development and training programmes. Developing innovative practices will help reduce conflict between work and family and thus help thus attract and retain knowledgeable, skilled, and motivated employees.

Informed consent will be assumed by the completion of the questionnaires. Be assured that data would solely be used for academic purposes. Anonymity is assured as there are no identifying characteristics that will lead to the exposure of an individual participant's identity. Participation is voluntary, and no employee will be advantaged or disadvantaged in any way for choosing to complete or not complete the questionnaire.

Participants will be provided with a secure encrypted web site through which they can access the survey electronically. The survey will take approximately 15 minutes to complete. The research study is an independent study which will be conducted under the supervision of an Industrial Psychologist at Wits University. Your participation in this study would be greatly appreciated.

Kind Regards
 Talia Solomon
 Master's Student in Industrial Psychology
 University of the Witwatersrand

Research Supervisor: Colleen Bernstein

Appendix C

Questionnaires

Demographic Questionnaire

Gender-Role Questionnaire

Work-Family Conflict Questionnaire

Demographic Questionnaire

Please indicate your response, provide a cross (X) where necessary

1. Please state your age (in years) _____

2. Please indicate your race

- ☐ Black
 ☐ Coloured
 ☐ White
☐ Indian
 ☐ Asian
 ☐ Other, please specify _____

3. Please indicate your marital status

- ☐ Single
 ☐ Cohabiting
 ☐ Married
☐ Divorced
 ☐ Separated
 ☐ Widow

4. Please indicate your level of education

- ☐ Less than Grade 10
 ☐ Grade 10
 ☐ Matric
☐ Diploma
 ☐ Undergraduate Degree
 ☐ Honours Degree
☐ Masters Degree
 ☐ Doctoral Degree

5. Please indicate your job level:

- ☐ Entry Level
 ☐ Intermediate
 ☐ Junior Management
☐ Middle Management
 ☐ Upper Management
 ☐ Executive

6. Please indicate your current job title _____

7. Please indicate your job industry i.e. marketing, insurance, engineering, banking

8. Please indicate the number of years you have been employed in your current organisation_____

9. Please indicate how many children you have _____

10. Please indicate the ages of each of your children_____

11. Please indicate the amount of hours you work each week _____

12. Please indicate your spouse's working hours _____

13. Please indicate your spouse's help with home responsibilities

☐ A Little help

☐ Moderate help

☐ A lot of help

11. Please indicate you spouse's help with children

☐ A Little help

☐ Moderate help

☐ A lot of help

12. Please indicate your children's help with domestic tasks

☐ A Little help

☐ Moderate help

☐ A lot of help

13. Please indicate your level of family support

☐ A Little help

☐ Moderate help

☐ A lot of help

14. Please indicate your level of domestic help

☐ No help

☐ Once a week

☐ Twice a week

☐ More than twice a week

☐ 5 days a week or more

15. Please indicate whether your company offers the following family-friendly policies

☐ Job Sharing

☐ Home and Teleworking

☐ Maternity Leave

☐ Childcare

16. Please indicate which of these policies you make use of

☐ Job Sharing

☐ Home and Teleworking

☐ Maternity Leave

☐ Childcare

Gender-Role Questionnaire

The items below inquire about what kind of person you think you are. Each item consists of a pair of characteristics, with the letters A-E in between. For example:

Not at all artistic	A	B	C	D	E	Very Artistic
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Each pair describes a contradictory characteristic. That is you cannot be both at the same times such as very artistic and not artistic at all. The letters form a scale between the two extremes. You are to choose a letter which describes where you fall on the scale. For example if you have no artistic ability you would choose A. If you think you are quite good you may choose D and if you are only medium you may choose C, and so forth.

Note: Please answer each statement as honestly as possible. This questionnaire is totally anonymous and confidential. In no way will you be judged by your answers and in no way will anyone have access to your answers or be aware which answers belong to you specifically.

		A	B	C	D	E	
1.	Not at all aggressive						Very aggressive
2.	Not at all whiny						Very whiny
3.	Not at all independent						Very independent
4.	Not at all arrogant						Very arrogant
5.	Not at all emotional						Very emotional
6.	Very submissive						Very submissive
7.	Not at all dominant						Very dominant
8.	Not at all boastful						Very boastful
9.	Not at all panicked in a crisis						Very panicked in major crisis
10.	Not at all passive						Very passive
11.	Not at all egotistical						Very egotistical
12.	Not at all able to devote oneself completely to others						Very able to devote oneself completely to others
13.	Not at all spineless						Very spineless
14.	Not at all tough						Very tough
15.	Not at all complaining						Very complaining
16.	Not at all helpful to others						Very helpful to others
17.	Not at all considerate						Very considerate
18.	Not at all competitive						Very competitive
19.	Not shy at all						Very shy
20.	Subordinate oneself to others						Never subordinate oneself to others
21.	Not at all greedy						Very greedy
22.	Not at all kind						Very kind
23.	Not at all anxious						Very anxious

24.	Not at all forgiving					Very forgiving
25.	Indifferent to the approval of others					Very needful of the approval of others
26.	Not at all dictatorial					Very dictatorial
27.	Not at all eager to soothe hurt feelings of others					Very eager to soothe hurt feelings of others
28.	Not at all nervous					Very nervous
29.	Feelings are not easily hurt					Feelings are very easily hurt
30.	Does not nag at all					Tends to nag a lot
31.	Not at all aware of the feelings of others					Very aware of the feelings of others
32.	Not at all hard headed					Very hard headed
33.	Does not worry at all					Tends to worry a lot
34.	Not at all adventurous					Very adventurous
35.	Has difficulty making decisions					Can make decisions easily
36.	Not at all soft hearted					Very soft hearted
37.	Not at all willing to take risks					Very willing to take risks
38.	Not at all fussy					Very fussy
39.	Gives up very easily					Never gives up easily
40.	Not at all cynical					Very cynical
41.	Never cries					Cries very easily
42.	Not at all selfish					Very selfish
43.	Not at all daring					Very daring
44.	Not all self confident					Very self confident
45.	Looks out for oneself only - Unprincipled					Does not only look out for oneself- Principled
46.	Not at all outspoken					Very outspoken
47.	Tends to feel very inferior					Never tends to feel inferior
48.	Not at all hostile					Very hostile
49.	Not at all understanding of others					Very understanding of others
50.	Never feels superior					Feels very superior
51.	Not at all bossy					Very bossy
52.	Very cold in relations with others					Very warm in relations with others
53.	Not at all subservient					Very subservient
54.	Very little need for security					Very high need for security
55.	Not at all gullible					Very gullible
56.	Goes to pieces under pressure					Stands up well under pressure
57.	Very worldly					Very home oriented

58.	Not at all active						Very active
59.	Not at all gentle						Very gentle
60.	Not at all abrupt						Very abrupt

Work-Family Conflict Scale

The Work-Family Conflict scale consists of 18 items. Please answer the following questions by using the rating scale below:

Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
1	2	3	4	5

	Item	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
1	My work keeps me from my family activities more than I would like	1	2	3	4	5
2	The time I must devote to my job keeps me from participating equally in household responsibilities and activities	1	2	3	4	5
3	I have to miss family activities due to the amount of time I must spend on work responsibilities	1	2	3	4	5
4	The time I spend on family responsibilities often interfere with my work responsibilities	1	2	3	4	5
5	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	1	2	3	4	5
6	I have to miss work activities due to the amount of time I must spend on family responsibilities	1	2	3	4	5
7	When I get home from work I am often too frazzled to participate in family activities/responsibilities	1	2	3	4	5
8	I am often so emotionally drained when I get home from work that it prevents me from contributing to my family	1	2	3	4	5
9	Due to all the pressures at work, sometimes when I come home I am too stressed to do the things I enjoy	1	2	3	4	5
10	Due to stress at home, I am often preoccupied with family matters at work.	1	2	3	4	5
11	Because I am often stressed from family responsibilities, I have a hard time concentrating on my work	1	2	3	4	5
12	Tension and anxiety from my family life often weakens my ability to do my job.	1	2	3	4	5
13	The problem-solving behaviours I use in my job are not effective in resolving problems at home	1	2	3	4	5
14	Behaviour that is effective and necessary for me at work would be counterproductive at home	1	2	3	4	5
15	The behaviours I perform that make me effective at work do not help me to be a better parent and spouse	1	2	3	4	5
16	The behaviours that work for me at home do not seem to be effective at work	1	2	3	4	5
17	Behaviour that is effective and necessary for me at home would be counterproductive at work	1	2	3	4	5
18	The problem-solving behaviour that works for me at home does not seem to be as useful at work.	1	2	3	4	5

