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The Sex-Role Identities Adopted By Black And White Working Females in South Africa

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THE SEX-ROLE IDENTITIES ADOPTED BY BLACK AND WHITE WORKING FEMALES IN SOUTH AFRICA

By

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ABSTRACT

In this study, the sex-role identities adopted by young, middle-aged, and older working females South African were compared. The rationale of the study is based on changes which occurred within South Africa with regards to gender, race, education, as well as work place participation for women. Two hundred females from two South African organisations participated in the study. Two self-report questionnaires were utilised: a demographic questionnaire and Bem's Sex-Role Inventory. Data was interpreted statistically, by means of Analysis of Variance (ANOVA) and frequencies. Results revealed that younger women have adopted more masculine characteristics than middle-aged and older females. Results further indicated that black women are more likely to reflect sex-role identity changes on age than white women, given that changes in the South African society many have been more impactful on them. Results on the levels of masculinity amongst the younger group of females are consistent with a study done on working females in India.

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DECLARATION

I declare that this thesis is my own unaided work. It is submitted for the degree of Master of Arts (Industrial Psychology) by Coursework and Research Report in the University of the Witwatersrand, Johannesburg. It has not been submitted before for any other degree or examination in any other university.

Natasha Snyman
June, 2011

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NOMENCLATURE

Z-score = The difference between a score and the mean, divided by the standard deviation

Z_{Mas} = Z-score of masculinity

Z_{Fem} = Z-score of femininity

$\overline{X}_{Mas}$ = Mean of masculinity

$\overline{X}_{Fem}$ = Mean of femininity

Sd_{Mas} = Standard deviation of masculinity

Sd_{Fem} = Standard deviation of femininity

Masculinity = Sum of masculinity

Femininity = Sum of femininity

(df) degrees of freedom = (number of categories – 1)

N = Number of subjects

Introduction and aim of study

The term sex-role identity has been explored to a great extent within research (e.g. Bem, 1975; Bem and Lenney, 1976; Bem, 1974; Bem (1981); Levit, 1991; Albertyn, 2005; Smit, 2005; Singh and Agrawal, 2007). Many researchers have attempted to explore reasons behind the behaviour of men and women. The current study aims to contribute to our knowledge on sex-role identity within the South African context. More particularly, it seeks to examine how changes within the South African society may have impacted the sex-role identities of working women. The understanding of sex-role identity is based on both biological and social influences on men and women. Sex-role identity has been defined by Bem (1981) as being comprised of four sets of identities: Traditional identity refers to females who adhere to a highly sex-typed identity (either highly feminine women or highly masculine males). Androgynous individuals adopt both highly masculine and feminine characteristics. Undifferentiated individuals would be the case whereby individuals display low levels of both masculine and feminine behaviours. In the present study, sex-role identity will be defined in accordance with Bem's writings.

Over the years, people have been socialised into believing that traditional or sex-typed identities are the most appropriate. This stemmed from societies' view of what is considered as acceptable behaviour for women and men. These perceptions may be ingrained in society to the extent that appropriate behaviour is almost dictated to the individual based on existing standards. Within the South African culture, the ideology of patriarchy has been promoted for many years. "The ideology of patriarchy suggests that men and women have to display different characteristics and values that are important in different areas of life." (Smit, 2005, p. 2). This meant that masculine characteristics were more suitable in public and feminine characteristics more esteemed in households (Smit, 2005). "In South Africa, women were associated with and valued for certain characteristics like self-sacrifice, nurturance and subordination" (Coetzee, 2001 as cited in Smit, 2005, p. 2). By women adhering to these

behaviours, they would have earned respect within society, but at the same time, they would be subjecting themselves to the system of patriarchy (Smit, 2005).

Oppression against women has been a great challenge within the South African culture. It had its roots not only in gender oppression but racial discrimination as well. "South African women are divided by race, class, culture, urban and rural situation, education, language and other variables" (Albertyn, 1995, p. 2). These divisions restrained women from free and fair participation in society and bound them to the structures of domination (patriarchy). Coetzee (2001) as cited in Smit (2005) proposed that an ideology that has been entrenched within a society for extended periods may shape people's view of the world. The current research adopts the view that the patriarchal system within South Africa has shaped women's thoughts about their position within society.

By women adopting an inferior view to men, they place themselves in a position where they are not able to experience true equality (Smit, 2005). However, the changes that took place within the new democratic society were aimed at dissolving inequality on the basis of gender and race oppression. Prinsloo (1992) in his study on gender stereotypes within South Africa predicted that traditional sex-role identities will not be adhered to as closely in the near future. He stated that women will gradually move away from traditional sex-role identities towards identities such as androgyny (Prinsloo, 1992). This implies that women may be adopting a more conscious approach to their rights and sex-role identities. However, it does not implicate that societal changes automatically result in the adoption of less traditional sex-role identities. The current study therefore seeks to contribute to our knowledge and understanding of sex-role identity amongst South African women in light of the changes within society.

The research questions of the present study are the following:

1) Do young South African women exhibit different sex-role identities than middle aged and older women?
2) Are black women more likely to reflect sex-role identity changes on age than white women, given that changes in the South African society many have been more impactful on them?

The research report is structured in the following order: Literature Review, Methodology, Results, and Discussion. The literature review explores constructs such as sex, gender, sex-role identity and androgyny. It also focuses on previous research pertaining to the key construct (sex-role identity) done within South Africa as well as other countries. The methodology section outlines the methods that were employed in the study, a description of the sample and sampling strategy, the data gathering process, the measuring instruments used, and the statistical analyses carried out. The results chapter presents the actual findings gathered from the statistical analyses that were conducted. This is followed by the discussion chapter which presents a discussion of the key findings based on the arguments in the literature review as well as limitations and recommendations for future research.

Chapter One: Literature Review

1.1 Sex-Role Identity

In understanding sex-role identity within the context of a changing society, it is necessary to distinguish between the constructs of sex and gender. At the most basic level, sex has been defined as a set of biological characteristics which distinguish human beings as being either male or female, while gender refers to the cultural expectations and opportunities associated with men and women (World Health Organisation, 2002). In classifying the behaviours of men and women, Bem (1976) referred to people's behaviour as being either sex-typed or cross-typed. Sex-typed behaviour is characterised by displaying behaviours considered appropriate for men and women within one's culture (Bem, 1976). Cross-typed behaviour is displaying characteristics that are considered to be sex-inappropriate behaviour within one's culture (Bem, 1976). Bem and Lenney (1976) asserted that sex-typed individuals would prefer to engage in sex-appropriate activities even if it disadvantages them. If required to engage in cross-typed activities, they would experience a sense of discomfort and it may affect their self-esteem (Bem and Lenney, 1976). Cross-typed individuals on the other hand, find it easier to adapt to sex-appropriate behaviours when the situation requires (Bem and Lenney, 1976). One gathers from the above that people are likely to take on sex-role identities which give them confidence in who they are and essentially create a place for them in the world.

Standards of appropriate behaviour stem from the two dimensions of sex-role identity - masculinity and femininity. Masculine and feminine roles are defined as "the degree to which men and women have incorporated traits considered to be "womanlike" and "manlike" by their culture into their self perceptions" (Best and Williams, 1997, p. 155). The "womanlike" traits involve behaviours associated with being emotional, considerate, loving, caring, and warm towards others (Bem, 1974). The "manlike" behaviours include the display of more aggressive, demanding, and independent characteristics (Bem, 1974).

The behaviours assigned to males and females may not always be desirable for all situations. Bem (1975) proposed that a range of studies (e.g. Cosentino and Heilbrun, 1964; Gall, 1969; Gray, 1957; Sears, 1970; Webb, 1963) have proven that "highly feminine behaviours in females were correlated with high levels of anxiety, low self esteem and low social acceptance, and high masculinity in males has been correlated during adulthood with high anxiety, high neuroticism, and low self-acceptance" (Bem, 1976, 635). Bem (1975) also pointed out that highly sex-typed individuals "have lower overall intelligence, spatial ability and lower creativity" (Maccoby, 1966 as cited in Bem, 1976, p. 635). She therefore suggested that individuals who are able to utilise both masculine and feminine behaviours would adapt better to different situations and constraints (Bem, 1975). These individuals are referred to as being androgynous.

Bem (1975) proposed that a non-androgynous sex role can be very limiting to an individual as there is a broader range of behaviours that they can choose from. That means that androgynous individuals are in a position to better adjust their thoughts and behaviours in line with the environment or situation at hand (Bem, 1977). They seem to be more flexible in their approach to changing and uncertain situations. Research has therefore concurred with the fact that there is a correlation between androgyny and positive attributes, such as confidence in one's sex-role identity development, self esteem, as well as intellectual intelligence (Bem, 1974). Thus, androgyny proves to be accommodative of different perspectives and approaches towards situations indicating a healthier state of mind (Bem, 1974). An androgynous identity appears to allow for individuals to automatically adjust to changes without feeling any sense of discomfort with regard to the behaviours they display in changing situations.

In deriving a mean for evaluating Androgynous individuals, Bem (1974) developed a method of measurement which one could use to predict androgynous individuals. This was done using the Bem Sex Role Inventory (BSRI). This instrument allowed individuals to be scored

for masculinity, femininity, and androgyny (Bem, 1979). The BSRI requires a participant to indicate responses on a 7-point Likert scale based on how well the characteristics of masculinity and femininity may describe them (Bem, 1979). The essential idea which one should consider when interpreting the scores for masculinity and femininity is that, if a person indicates a greater masculinity score than femininity, then the person possesses a masculine sex role, and if the person indicates a greater femininity score, they then possess a feminine sex role, regardless of biological sex (Bem, 1979). If an individual has approximately equal scores for Masculinity and Femininity, they would be considered to have an androgynous sex role identity (Bem, 1979). The BSRI is therefore a good tool in assisting individuals in establishing how close or how far they are from their sex-typed behaviour. It may also serve as a step towards a conscious realisation for some women in terms of being aware of how closely they are still adhering to sex-role stereotypes.

It is important to consider the expectations from society when discussing the formation of sex-role identity. From a very young age (between three and six years), children become aware of what appropriate sex-roles are within society (Smit, 2005). It is at this stage that they construct their own sex-role identities. It should however be mentioned that societies view on appropriate behaviour for men and women is coupled with stereotypes associated with each sex. These stereotypes may "unfortunately promote beliefs about the restricted skills and abilities of boys and girls" (Smit, 2005, p. 13). This may have implications for adulthood whereby women or men may feel inadequate when performing certain tasks considered to be done better by the opposite sex (Smit, 2005).

Sex-role stereotypes are evident in all societies and racial groupings. Littrell and Nkomo (2005) claim that "the morals and existing standards maintained within a society later propagate throughout society and form stereotypes which dictate the behaviour of males and females" (p. 13). In most societies the behaviour of males are associated with traits such as "aggressiveness, assertiveness, dominance, supremacy, and control" (Byrne and Marsh, 1990, p. 250). Femininity on the other hand, is related with "gentleness, nurturance, empathy, expressiveness and emotional behaviour" (Byrne and Marsh, 1990, p. 250). During the

apartheid era in South Africa, these stereotypes were entrenched in the system. Smit (2005) proposed that "it is imperative that the effects of these stereotypes are eliminated so as to provide equal career opportunities and possibilities for men and women" (p. 38). It is also important that individuals are made aware of the value of both masculine and feminine characteristics. In this way, there would be an appreciation and integration of both characteristics in different situations. This essentially illustrates the notion of androgyny.

As valuable as the integration of characteristics are, one still finds that within the South African society, sex-role stereotyping is still evident (Smit, 2005). Many women still hold the view that they are not capable of accomplishing and excelling in society and the workplace. Smit (2005) proposed that "women should be made aware of all the possibilities open to them and if it is their choice, they should be helped to recondition years of socialisation" (p. 39). This is an important factor in establishing equality on all levels. Prinsloo's study done in 1992 on sex-role stereotypes in South Africa, found that "sex-role stereotyping is tenaciously unchanged over long periods of time and across cultures" (p.84). He proposed that this indicates that when change occurs, people are usually inflexible to adapt to the changes (Prinsloo, 1992). This means that although changes have taken place in society, sex-role stereotypes will only be dissolved when people make a conscious decision to change their perceptions about sex-roles.

In support of the above assertion regarding reconditioning of socialisation, a study done by Clarey (1985) as cited in Smit (2005) attempted to re-socialise women with a traditional identity towards the adoption of an androgynous identity. This was done in order to dissolve existing stereotypes in the minds of these women. Through his re-socialisation program, he also aimed at increasing the self-esteem of women and influencing their career choices from traditional to less traditional. Clarey's (1985) re-socialisation program was successful in changing women's beliefs about their sex-role identities and career choices whilst still valuing their traditional feminine characteristics (Smit, 2005). This illustrates the importance of being aware of the value of both masculine and feminine characteristics (Smit, 2005). It also implies that one's sex-role identity has the ability to influence self-esteem and essentially

people's perception of the world (Eccles, 1996). The manner in which sex-role identities are formed and later displayed are discussed below.

1.2 Gender schema theory and social identity theory

Various theorists have put forward their views regarding sex-role identity and its origins. "The gender schema theory suggests that children use gender as a cognitive organising principle or a schema" (Smit, 2005, p. 15). Bem (1983) suggested that the way in which individuals perceive gender, is how they will respond to the operation of society. Their perception of gender will also determine the range of connections that will be formed in their minds (Bem, 1983). In other words, children assimilate information that they learn about gender, then organise new information according to their knowledge of appropriate gender behaviour, which then forms a schema in their minds (Schmitt et al., 1993). Once they are able to classify themselves as being male or female, they will know how to classify others (Smit, 2005). They are then able to make decisions on what is appropriate behaviour for their gender and what is not. One should also understand that the formation of gender schema's in the mind of a child is not a passive process. Bem (1993) proposed that children do not automatically receive the messages that society puts out there. They in fact take that time to understand how society operates and where in society do they see themselves in terms of sex-role identity (Bem, 1993). Children therefore seek sex-role identities that they are most comfortable with.

The above discussion highlights that children's perceptions of the sex-typing process is an important part in the formation of sex-role identity (Smit, 2005).

In addition to the above, the formation of sex-role identity also comprises the willingness of individuals to identify themselves with a social group. People have to be susceptible to the changes and identify with the changes in order to be a part of it. The concept of social identity encompasses this idea. According to Tajfel (1974) as cited in Willemyns, Gallios, and Callan (2009), social identity is the process of individuals being able to identify

themselves with a social group and value the significance thereof by sharing in the social and emotional aspects of the group. Social identity theory therefore rests on the fact that one's social identity stems from social relations and affiliations and one's self-concept from the personal abilities an individual possesses (Willemyns et al., 2009). This means that individuals with strong social identities, are more likely to conform to the identity of the social group in which they find themselves.

Having discussed the theories above, it appears that the idea behind the gender schema best accounts for the development of sex-role identities. The gender-schema theory proposes the idea that the individual exercises more of an independent mind when adopting a sex-role identity. This could in fact be a result of individuals observing the different identities displayed within society and then forming schemas of what appears to be acceptable. They then create a place for themselves within society by adopting identities which are in line with the changes in society and with which they feel most comfortable with.

1.3 Sex-role identity and age

Sex-role identity has been studied across various aspects of life. In the current study it will be viewed in relation to age. It is important to note that sex-role identity is formed at very early ages of children's lives. At this stage, young children are socialised into society and exposed to sex-appropriate behaviours. The educational system also plays a vital role in the construction of sex-role identities amongst young children (Smit, 2005). "In pre-school, children are rewarded for behaviour congruent with what is expected for their sex and may be punished for behaviour associated with the opposite sex" (Smit, 2005, p. 13). This immediately reinforces the idea of sex-role stereotypes. It forces children to believe that the display of behaviour other than their sex-role is inappropriate. Smit (2005) proposes that "this pattern of reward and punishment can also be seen in interactions between parents and their children" (p. 13). Parents are the prime reinforces of sex-typed behaviour. This is often seen in the activities they expose their children to and the games and toys they give them. Girl children are usually given gifts such as baby dolls whereby they are taught how to play the

role of a mother, whilst boy children are given cars and wrestling games as toys, whereby they are taught how to dominate and attract attention in the public sphere. Lopater and Westheimer (2002) as cited in Smit (2005) "believes that the family and psychosocial milieu are more significant than biological factors in the development of sex-roles" (p. 13). Thus, one gathers that sex-role stereotypes are created within homes by "parents and then reinforced by the media and educational systems" (Smit, 2005, p. 13). These structures all aid in the development of sex-role identities for boys and girls.

As children grow older, their sex-role identities are further influenced by the educational system and the social ties they make with others. Kenkyu (1996) examined "the relation of age, gender, and sex-role identity to role expectation in same-sex friends (SSF). The results from the study showed that senior high school and undergraduate students expected more self-enhancement from SSF than junior high students. Junior and senior high school students expected more companionship than undergraduates. Undergraduates expected more authenticity and less self-disclosure than junior high school students. And male students expected more companionship, information, and similarity, but less self-disclosure, self-enhancement, and respect from SSF than females. Clear results of the relationship between sex-role identity and role expectation in SSF weren't found" (Kenkyu, 1996, p. 232). In this study, we see that as students grew older, their expectations changed. This may be due to the fact that as they mature, their social needs begin to change. All of the above points to the possibility that at different stages of younger people's lives, males and females' decisions and expectations are being shaped by the media and educational systems. These systems therefore have the ability to influence the sex-role identities of young people.

In South African society, in recent years, black, coloured and asian women have been exposed to equal education opportunities as their white counterparts. This may however be dependent on the level of income amongst women in these race groups. It has been observed that only a small percentage of women in these race groups are exposed to private schooling due to affordability reasons. Education opportunities is also mostly realised in the urban areas as most women in rural areas are still exposed to poor education which may limit them

tremendously in advancing into successful careers within organisations (Letlaka, et al., 1997). Despite the disadvantaged few, overall, younger women have been afforded opportunities which were once denied to their older counterparts during the apartheid era. During this era, Smit (2005) proposed that "women's aspirations and career opportunities were severely restricted by the patriarchal system" (p. 13). This patriarchal system, as mentioned earlier influenced the sex-role identities that women adopted.

In view of the reasons underlying the adherence to traditional sex-role identities by older women as the current study hypothesises, one may propose an alternate hypothesis in addressing this issue. The alternate hypothesis would be that women may change their sex-role identities as they grow older based on their experience in life and not necessarily the changes in society. However, research has shown that "girls adopt an increasingly feminine sex-role identity as they grow older and experience a decrease in masculinity" (Antill and Nicholson, 1981; Massad, 1981; and May and Spangenberg, 1997 cited in Smit, 2005, p. 11). This study indicates that as women mature, they are likely to adhere to more feminine sex-role identities. However, the study is not a representation of the entire population group. Further research is therefore necessary in addressing the reasons for women adopting more sex-typed behaviours in old age within South Africa. The current study will contribute to research on sex-role identities based on changes in the South African culture.

With the changes that took place within the South African society, younger women may be realizing the need to adapt their behaviour to the changes. This would mean adhering to less traditional sex-role identities. They would respond more flexibly to changing circumstances. One should also note that certain women would adhere more closely to less traditional sex-role identities than others. However, Lategan and Spangenberg (1993) cited in Smit (2005) "stated that masculine characteristics like autonomy and determination are very important in assisting young South African women to manage their lives. Despite this, the significance of feminine characteristics like empathy and tenderness should not be underestimated. Through the elimination of sex-role stereotypes, both women and men will be freer to express themselves in which ever way they find best suited" (p. 37). Thus, in coping with the changes

in society, it may be necessary that young women realise the importance of being more flexible in their approach to sex-role identity.

1.4 Sex-role identity and culture

Sex-role identity has also been looked at in relation to culture. Bem (1993) proposed that our behavioural choices are highly influenced by our cultural expectations for our gender. This assists us in forming our self-concept (Bryant; Noll; and Smith, 1999). Once our self-concept has been constructed, we create a place for ourselves in the world as mentioned earlier. Individuals usually become comfortable with their chosen sex-role identities congruent to the expectations of their culture. They may experience a sense of loyalty to traditional sex-role identities, and would then feel uncomfortable exhibiting less-traditional sex-role identities (Smit, 1988 as cited in Smit, 2005).

Placing sex-typed women in situations whereby sex-appropriate behaviour is not required may result in discomfort or decrease in self esteem (Bem and Lenney, 1976). Smit (2005) proposed that "South African women often feel guilty and ambivalent when they deviate from the gender norms encouraged by the patriarchal South African society" (p. 36). Research done on South African women who closely adhere to their sex-typed identities reveals how ineffective they may be. Smit (1988) as cited in Smit (2005) found that "women who remain loyal to traditional sex-roles prescribed by the community reveal achieving styles consistent with their sex-role identities (lower achievement behaviour), while those who deviate from the traditional roles exhibit achievement behaviour congruent to that of men (higher achievement)" (Smit 2005, p. 36). A study done by Setton (1981) as cited in Smit (2005) revealed that "sex-typed persons performed significantly worse than androgynous person's in a learnt helplessness induced experiment. They found that feminine sex-typed women were especially vulnerable to societal and internal pressures resulting in depressive features such as passivity, low motivation and low self-esteem" (p. 42). The point made here is that traditional sex-role identities are not easily overcome and may therefore have destabilising effects on

women. It is therefore important that women realise the value of both masculine and feminine characteristics and respond accordingly (Smit, 2005).

The situation presented above regarding long-term loyalty to traditional sex-role identities is highly influenced by cultural expectations. Cultural expectations have in many ways influenced the perception of traditional feminine women regarding less traditional behaviours (Carter and Kaslow, 1992 as cited in Smit, 2005). This creates the misperception that women are incapable of being successful and changing their circumstances (Smit, 2005). Women need to realise that they do have a place in society, and by exhibiting certain masculine characteristics in certain situations, does not make them less of a women. Smit (1988) as cited in Smit (2005) suggested that South African women, if wanting to be successful in the workplace, should be informed about the obstacles that may hinder them from excelling.

1.5 Research in other cultures

Various studies in other cultures have recently reported on the effect of culture on sex-role identity. Studies conducted on gender on North American samples have indicated that "one of the major changes in the United States since 1972 has been the tremendous growth in the number of women in the work force" (Harris, 1994, p. 242). This growth resulted in power and autonomy which allowed women to become more self-assured and secure in their jobs (Harris, 1994). In terms of race and culture, Ladner (1972) cited in Harris (1994) suggests that "young African-American women are taught to be independent, strong, and prepared to take on the responsibility of supporting as well as raising their families…" (p. 243). Shaw (1996) also put forward that "African Americans thought of themselves to be capable of strong, active, moral, and productive behaviour, African professional women saw themselves in this way and acted accordingly" (Stimpson, 1996 cited in Shaw, 1996, p.1). He further indicates that despite the fact that white women were in a more favourable position in terms of the civil liberties and opportunities that were afforded to them, black females did not allow their state of oppression to get the best of them, instead they fought against the system and went the extra mile to get what they want, regardless of the limitations and restrictions that

were set for them (Shaw, 1996). Harris (1994) however, researched that in the more traditional Anglo American homes, feminine stereotypes of sex-typed behaviour are still entrenched. These women may most likely still be subjected to the effects of patriarchy which can be very oppressive and limiting. The above accounts denote how one's culture may influence the extent to which individuals would adopt either more or less traditional sex-role identities.

Another study done by Agrawal and Singh (2007) studied masculinity and femininity among working women within Indian urban culture. The aim of the study was to validate Bem's gender roles by comparing three groups of women in terms of age and status and to see whether there was a difference in the traditional gender roles adopted by working urban Indian women (Agrawal & Singh, 2007). They based their argument on the findings of previous research that indicated that men possess more sex-typed roles than women. They assert that masculine behaviours have received more support in society than feminine behaviours have. Pennell and Ogilvie (1995) cited in Agrawal and Singh (2007) suggested that masculine behaviour is considered to hold more influential power than feminine roles. Furthermore, if females exhibit more masculine characteristics, it is likely that they will be valued and given more recognition (Burnett et al., 1995 cited in Agrawal & Singh, 2007). Based on this research, Agrawal and Singh (2007) maintained that due to the vast changes in society, women have adopted a more flexible approach to gender roles. The rationale for their study was based on the fact that the Indian society was experiencing changes with regard to fast urbanisation, industrialisation, and westernisation for a long period of time (Agrawal and Singh, 2007). This occurrence ignited their interest in enhancing knowledge and awareness of existing stereotypes in India (Agrawal and Singh, 2007).

Results for their study indicate that 37% of younger and middle age women showed more masculinity identities, and only 26% of the older women. Forty four percent of younger women showed androgynous identities, and only 18% of older women indicated androgynous characteristics. For undifferentiated identities, the older group indicated the highest percentage (40%), while the middle aged and youngest group showed (33%) and (27%)

respectively (Agrawal and Singh, 2007). This gives one a clear indication that as society transforms and is reshaped, different gender roles may be taken up. Agrawal and Singh (2007) produced evidence that younger Indian females have adopted more androgynous behaviours as they have become more flexible in the behaviours they choose to display and have now taken up roles that they previously and historically were denied (Agrawal and Singh, 2007).

The current study takes the view that in South Africa, this may be evident with the major changes which transpired within society as well as the workforce. The major transitions within the workforce, in terms of affirmative action (whereby designated or previously disadvantaged "groups have equal employment opportunities and are equitably represented in all occupational categories and levels in the workforce of a designated employer" (Employment Equity Act, 1998, p. 18), employment equity (achieving "equity in the workplace" (Employment Equity Act, 1998, p. 12) and gender equity (equality amongst men and women) may have steered young women to adapt to the changes by adopting a more flexible approach to their sex-role identities. However, it must be noted that although younger women may have adopted less traditional sex-role identities, the degree to which younger white women have changed in relation to their older counterparts, may be less than the degree to which younger black women have changed in relation to their older counterparts. Black females experienced inequality and oppression with regard to education, gender, race and affirmative action. White women on the other hand were disadvantaged only in terms of gender and affirmative action. This consideration will now be discussed and applied to the South African society moving through various stages of transition.

1.6 South Africa transitioning

The South African society over the last decade has promised to liberate women through equal and fair opportunities. This was done through the implementation of various Acts such as the Employment Equity Act (To achieve equity in the workplace through equal opportunity, unfair discrimination, affirmative action measures and equitable representation (Employment

Equity Act, 55 of 1998)), The Labour Relations Act ("advancing economic development, social justice, labour peace and the democratisation of the workplace" (Labour Relations Act, 66 of 1995, p. 3)) as well as the Bill of Rights in the South African constitution ("the cornerstone of democracy in South Africa...affirms the democratic values of human dignity, equality and freedom" (Chapter two of the Constitution, Act 108 of 1996, p. 7). These acts of law govern our society by acting in the interests of all people. Through this freedom and equality, as Prinsloo (1992) predicted, women may be shifting towards less traditional sex-role identities. However, although women have been given opportunities, it is not as yet clear as to whether all women are effectively embracing those opportunities and adopting the necessary characteristics required in certain roles, especially in leadership positions within the workplace.

Recent research has shown that "in 1997, an outstanding 33% of the representatives in parliament were Black women" (Letlaka, et al., 1997, p. 9). According to Tshabalala-Msimang (2009), South Africa has "soared from seventeenth place to third position in the global ranking of women in Parliament following 22 April 2009 elections. This translates to an 11% increase in representation of women in the national assembly from 34% to 45%" (Tshabalala-Msimang, 2009, p.2). Tshabalala-Msimang claimed that "this is a remarkable feat for women in the country given that prior to 1994 there was only 2, 7% women in Parliament, in 1994 we stood at 27% and fifteen years later we stand at 45%" (Tshabalala-Msimang, 2009, p.1). These noticeable indications of female authority and influence may have led to the enhancement of women's sense of identity and self-worth, and may encourage the younger generation of women to be aware of the fact that women have as much ability and skill as men do (Letlaka, et al., 1997).

The above indicates that by women occupying positions within the political arena, they may often be required to respond more flexibly to changing circumstances requiring them to be either more assertive or compassionate, depending on the situation at hand.

Thus, in seeking to establish whether there has been a shift towards less traditional sex-role identities within South Africa, the present study bases its rationale on the significant

differences highlighted in Agrawal and Singh's (2007) study amongst the younger, middle-aged, and older generations of women. Results indicated that women are beginning to adopt more masculine and androgynous identities due to the changes within society and the workplace. Similar results are thus expected for the current study as it is evident that in South Africa the younger group of women have been exposed to more opportunities, rights and education which place them in a position to be more susceptible to the adoption of less traditional roles than their middle-aged and older counterparts. As with the study of Agrawal and Singh (2007), it is further speculated that middle-aged and older women in turn display more feminine traits than the younger group. This may be due to the fact that they were not exposed to the same opportunities as the younger generation has. Differences between the white and black race group is also anticipated due to the historical background in the South African society which encouraged unfair opportunities and discrimination between the black and white race groups.

1.7 Conclusion

Considering the major changes within South Africa, the current research seeks to examine the sex-role identities adopted by younger working females as compared to the older generation. The study further attempts to explore the variation of sex-role identities adopted by younger white women versus older white women and draws a comparison to younger versus older black women. The researcher speculates that the differences that may be identified could be justified by the autonomy and education opportunities that have been afforded to the younger females in the new South Africa, more particularly younger black females. The need therefore to examine the experiences of these women and determine what patterns of masculinity or androgyny they have adopted in comparison to older generations, remains of great interest.

Chapter Two: Methodology

2.1 Introduction

This chapter outlines the methods that were used in the current research. Firstly, a description of the research design is outlined, followed by a description of the sample and sampling strategy, the data gathering process, the measuring instruments that were used, the statistical analyses that were carried out and lastly, the ethical considerations that had to be taken into account.

2.2 Research Design

The current study adopts a quantitative approach. It was a non-experimental research design as it did not employ a control group, random assignment did not exist, and there was no intention from the researcher to manipulate an independent variable (Niele & Liebert, 1986). The research design was also cross-sectional in nature as participants were only assessed at that one single point and all data was collected at that time. Data was analysed statistically. Section 2.9 on page 50 will discuss in detail the statistical tests used to analyse the data in the current research.

2.3 Sample

A total of 250 questionnaires were sent out and the researcher received a response rate of 200 women. Data was collected from two South African organisations: a transport organisation and a consultancy. The two organisations were used based on their positive response to a request to conduct research at their organisations. After receiving access to the organisations, women available on the day that the research was conducted were asked to participate in the study by completing the questionnaires. The sampling strategy was non-probability, whereby one cannot determine who will be chosen to be part of the research (Whitley, 2002). Convenience sampling was also applied, whereby whoever is within the setting when the research takes place, would then be part of the study (Whitley, 2002).

Of the 250 questionnaires distributed, the researcher received a response rate of 200 participants. These participants were used for analysis as they completed 70% of the questions. Due to the fact that thirty five participants completed less than 25% of the questionnaire, the researcher observed that there were certain aspects of the BSRI that appeared to be more difficult to understand for certain individuals, such as, 'conscientious', 'conventional', and 'yielding', among others, as they were most frequently omitted (see Appendix C for greater detail of these aspects). The researcher hoped that a larger sample would yield a good representation of the sex-role identities within the population. A conscious effort was taken when selecting the two organisations as much diversity was anticipated in terms of race, age and education and were therefore considered important for addressing some of the key variables of the present research. The number of people in each category is outlined in Table 1 below.

Table 1: Demographic Characteristics

CATEGORY	LEVELS	PERCENTAGE	N
Race	Black	72%	144
	White	11%	22
	Coloured	14%	28
	Indian	3%	6
Totals		100%	200
Age	20 – 35 years	44%	87
	36 – 50 years	43%	86
	51 – 65 years	13%	27
Totals		100%	200
Educational levels*	Lower than standard eight	15%	30
	Standard 8 – 9	5%	10
	Matric	33%	66

CATEGORY	LEVELS	PERCENTAGE	N
	Diploma	33%	66
	Degree	9%	18
	Post-grad degree	3%	6
Totals		98%	196
Home language	English	14%	28
	Afrikaans	14%	28
	Zulu	25%	50
	Xhosa	10%	20
	Sotho	12%	24
	Other	25%	50
Totals		100%	200
Marital status	Single	56%	112
	Married	36%	72
	Divorced	8%	16
Totals		100%	200
Job grading	Lower	42%	84
	Middle	40%	80
	Senior	16%	32
Totals		98%	196
Salary	R0 - R5000	31%	62
	R6 000-R10 000	25%	50
	R11 000-R15 000	28%	56
	R16 000-R20 000	8%	16
	> R21 000	8%	16
Totals		100%	200
Dependents	None	17%	34
	One	26%	52
	Two	23%	46
	Three +	34%	68

CATEGORY	LEVELS	PERCENTAGE	N
Totals		100%	200
Level of education of parents	Lower than standard eight	54%	108
	Standard 8 – 9	12%	24
	Matric	17%	34
	Diploma	10%	20
	Degree	6%	12
	Post-grad degree	1%	2
Totals		100%	200
Geographical location of home	Rural	42%	84
	Urban	58%	116
Totals		100%	200

The above information was derived from the demographic questionnaire used in the research. This section inquired into the respondents' race, age, home language, marital status, level of education, job grading, salary, dependents, level of education of parents, and geographical location of home.

Frequency distributions demonstrated that the participants' ages ranged from 20 to 62, with a mean age of 32.7. Eighty seven participants (44%) were between the ages 20 and 35 years, another eighty six participants (43%) were between the ages 36 and 50 years, and a further twenty seven (13%) were between the ages 51 and 65 years.

In terms of educational levels, 66 participants (33%) had a Matric and another 66 participants a Diploma qualification; thirty participants (15%) had less than a standard eight qualification, whilst only ten participants (5%) had a standard eight or nine qualification. A small percentage (12%) of the sample indicated that they obtained a degree or post-graduate degree. With regard to home language, due to the fact that the majority of the sample (144 participants - 72%) was Black, the total percentage of African home languages totalled 71% (144 participants) of the sample. On the other hand, English and Afrikaans each composed

(14% - 28 participants). The sample further indicated that 112 women were single (56%), 72 were married (36%), and sixteen (8%) were divorced.

While only 32 participants (16%) held senior positions in their organisation, eighty four (42%) had lower positions, and eighty (40%) middle level positions. Of these participants, 62 people's salaries (31%) ranged between R1000 and R5000. The highest paid participants comprised only eight percent of the sample (16 participants). Thirty four participants (17%) indicated that they had three or more dependents. Lastly, the majority of the sample (108 participants 54%) across all race groups indicated that their parents' level of education was below standard eight, only twelve participants (6%) had a degree and two (1%) had a post-graduate degree. Overall, 116 participants (58%) originated from an urban area.

2.4 Procedure

The data was collected by means of two self-report paper-pencil measures (Demographic Questionnaire and Bem's Sex-Role Inventory) administered at one sitting to a group of working females at the two South African organisations on different days. The procedure followed for collecting the data is described below.

Before conducting the study, ethical clearance from the University was obtained. The researcher then contacted the relevant managers from the two organisations to discuss the nature of the research and the possibility of using company time to conduct the study. The researcher explained that the study was to be done in partial fulfilment of a Master of Arts degree in Industrial Psychology, it would be conducted on working females in South Africa only, and that participation would entail completing a questionnaire which would take no longer than 15 minutes. This was also stipulated in the participant information letter (refer to appendix A).

Having received access agreement from the organisations, the managers from the transport organisation and the consultancy organisation agreed that the researcher could come in to the organisation to address the females and questionnaires were distributed on the same day. This means of data collection saved time for both the researcher and participants. The managers

from both organisations suggested that the researcher arrive at a time and day suitable for all females in the organisation – the first organisation agreed to a time during their weekly meetings and the other at their annual women's conference. Questionnaires were collected immediately after completion at both organisations on the same day of distributing the questionnaires.

On both days of data collection, the researcher arrived thirty minutes before scheduled time in order to prepare for the process. As women workers were congregated in one room, questionnaires were distributed and women were placed with at least one free seat between them in order to ensure confidentiality. Women that were willing to participate were then asked to complete the questionnaire and immediately place it in a sealed box provided by the researcher. Those not willing to participate sat in their seats for the duration of the process.

After the data collection, the researcher proceeded to enter the responses into an excel spread sheet and then imported it into the computer programme "SAS Enterprise Guide 4" where the different statistical analyses were conducted. The descriptive statistics were analysed first, followed by the reliability analyses for each scale. Thereafter, frequencies and Analysis of Variance (ANOVA) were carried out.

2.5 Measuring Instruments

The following discussion presents an overview of the different measures used in the study, and includes information on the psychometric properties of the tests, such as reliability and validity. "The reliability of a measure refers to its degree of consistency and the validity of a measure is its degree of accuracy" (Whitley, 2002, p. 124). Reliability information is therefore important as it provides confirmation of how consistent a scale really is (Murphy & Davidshofer, 2001), while validity concerns "what the test measures and how well it does so" (Anastasi & Urbina, 1997, p. 113). "While reliability is dependent on what the instrument is used for, estimates of .80 or more are regarded as moderate to high reliability" (Murphy & Davidshofer, 2001, p. 302). The assessment of validity on the other hand, involves for

example, the scrutiny of the actual content of the test to establish its suitability as well as its correlations between constructs (Murphy & Davidshofer, 2001).

Two sets of questionnaires were handed to participants as part of the self-report questionnaire pack in gathering data. The first questionnaire consisted of variables relating to biographical data. This data was used to summarise the sample. The second questionnaire was the Bem's Sex-Role Inventory (BSRI) which was used to measure sex-role identity. These tools are discussed in detail below.

2.5.1 The demographic questionnaire

The demographic questionnaire (see Appendix B) consisted of 11 items. It asked respondents to state their race (to determine any significant differences amongst the races), age (to compare the younger, middle, and older age groups), sex (to guarantee that the sample was comprised of only females), home language, marital status (to examine current roles and responsibilities in the home and whether traditional sex-role identities have been challenged), job grading/level, salary band, the number of dependents (to decipher responsibility within the home and its impact on sex-role identity), level of education (to compare differences amongst the various age groups and determine whether the younger generation would be more educated than the middle and older females based on the opportunities afforded to younger females), level of education of parents (to determine the history of their parents education and how it has changed with their generation), and geographical location of home. Only key variables in the above information were used in addressing the research questions of the current study. These results are revealed in Figure 1 and Figure 2 of the following chapter.

The questionnaire was administered in English only because it is the language of communication within the organisation and the first language of the researcher. The researcher however, observed that participants whose home language was not English, more especially the older Black females, had difficulty understanding the questionnaire and required assistance.

2.5.2 The Bem Sex Role Inventory (BSRI)

Sex-role identity was assessed by using the Bem Sex Role Inventory (BSRI). This tool is made up of 60 items. "Twenty of these variables are socially desirable for men (comprising the masculinity scale), a further 20 are socially desirable for women (comprising the Femininity scale), while the remaining 20 traits act as neutral or filler items. The measure works on a 7-point Likert type scale ranging from 'never or almost never true' to 'always or almost always true'. The scale yields a *Masculine score* for the masculine items and a *Feminine score* for the feminine items" (Bem, 1974; 1975, p. 155). Bem also realised that it is possible to calculate an Androgyny score (Bem, 1974). In the current research, this was operationalised using the score obtained on each scale. For femininity, higher scores indicated more stereotypical feminine traits. For masculinity, a score was calculated from the masculinity scale to represent the extent to which individuals identified with stereotypically masculine traits. The androgyny score was obtained using the equation below:

$$Androgyny = \left| \frac{Z_{Mas} - Z_{Fem}}{Z_{Mas} + Z_{Fem}} \right|$$

$$Z_{Mas} = \frac{Masculinity - \overline{X}_{Mas}}{Sd_{Mas}}$$

$$Z_{Fem} = \frac{Fe\min inity - \overline{X}_{Fem}}{Sd_{Fem}}$$

(Bem, 1974, p. 155)

The above equation assists one in calculating the androgyny score. "The BSRI groups people into the various categories of sex-role identity (masculine, feminine, androgynous and undifferentiated by applying the median split method" (Bem, 1974, p. 155). This method assists the researcher in classifying individuals into four categories from the group of subjects and then finding the score which corresponds to 50% of the observations below it when the observations are place in numerical order (Howell, 2004). A score yielding high on the

Masculinity scale and low on the *Femininity* scale, implies that an individual is *masculine*, and a score yielding low on the *Masculinity* scale and high on the *Femininity* scale is indicative of a *feminine* individual (Bem, 1976). An *androgynous* person strikes a balance between the *Femininity* and *Masculinity* scale using the equation provided above (Bem, 1976). Low scores on both scales indicate that the individual adopts an *undifferentiated/neutral* identity (Bem, 1976).

2.5.3 Psychometric properties of the BSRI

In examining the rationale behind the use of the BSRI in the current study, it is considered appropriate to provide the reader with a range of studies that have been done using the BSRI, and the reliability scores which were derived from the utilisation of the BSRI. With the development of the BSRI in 1971, Bem realised that she had to substantiate her instrument through the gathering of normative data. This was achieved through the administration of the BSRI to 441 male and 279 female students in fundamental psychology classes at Stanford University, as well as Foothill College to 117 male and 77 female volunteers. Overall, the scale reflected good internal consistency: for the Foothill sample, results showed Masculinity =.86; Femininity =.82 and Social Desirability =.70. In the same way, the Stanford sample also indicated internal consistency, yielding coefficients of .86 for Masculinity; .80 for Femininity and .75 for Social Desirability) (Bem, 1974, p. 77). Thus, all three scales were considered as "highly reliable" (Donsky, 1981). The BSRI was also re-administered on the Stanford sample and indicated further high internal consistency: Masculinity: r =.90; Femininity: r =.90; Social Desirability: r =.89 (Bem, 1974). Given the above, one gathers that the BSRI has displayed a sound reliability over the years when measuring Sex Role Identity.

A South African study done by Schneider in 2005 assessing gender identity using this measure yielded a Cronbach alpha coefficient of .79 for the Masculinity scale. The feminine scale indicated a slightly higher reliability of .82. Another South African study done by Bryant, Noll, and Smith (1999), looked at Masculinity and Femininity across six contexts using the BSRI. For Masculinity, coefficient alphas calculated to .80 and the Femininity scale yielded a coefficient alpha of .81 also showing a slight correlation between the two scales

(Bryant, Noll, and Smith, 1999). Furthermore, Forshaw (1991) in her study on Masculinity, Femininity, Self-esteem and subclinical depression, also indicated sound reliabilities for Masculinity (0.87), Femininity (0.80), and Undifferentiated (0.66). The above citations suggest a sound reliability record for the BSRI and hence support and confirm the reliability found in the current study.

In the current study, Cronbach alpha coefficient for the Masculinity scale was 0.82. The Femininity scale had reliability with a raw Cronbach Alpha Coefficient of 0.77 and a standardised coefficient of 0.78. The Androgyny score was calculated differently as it was considered as a function of the masculinity and femininity items, and therefore reliability could not be calculated.

Whilst the reliability for the BSRI was found to be quite high, the validity was more of a challenge. Various researchers such as Pedhazur and Tetenbaum, 1979; Locksley and Colten, 1979; and Kelly and Worrell, 1977 also questioned the construct validity of the BSRI. Locksley and Colten (1979) argued that by establishing predictive validity, one is not automatically guaranteed that construct validity is established. In addressing this critique, Bem (1979) responded by directing focus to the theory underlying her instrument. She asserted that: "because the theory underlying the BSRI does not require that the domains of femininity and masculinity be unidimensional, it is only the existence of that small fourth factor (the factor defined by the items 'masculine' and 'feminine') that is unanticipated by the theory…the theory is a theory of process, not content…" (Bem (1979, p. 1049, 1051). This means that Bem afforded more credibility to the theory underlying the BSRI rather than the validity of the constructs used in the BSRI in order to establish whether they measure what they are intended to measure.

2.6 Statistical Analysis

In view of the hypotheses posed in the current study and type of design used, the most appropriate statistical procedures were descriptive statistics, frequencies and Analysis of Variance (ANOVA). Descriptive statistics were used to describe features of the sample and

calculate means and standard deviations. Frequencies assisted in drawing a summary of how frequent situations occurred within the data set in categories related to a nominal scale (Kaplan, 1987). ANOVA was used to compare the differences in the means of the three age groups (20-35; 36-50; and 51-65 years) in terms of their level of significance with regard to the sex-role identities they adopt. These categories were grouped based on the time periods of transition within the South African society. The ANOVA procedure assisted in answering the proposed hypotheses.

2.6.1 Cronbachs Alpha

To examine the reliability of the measuring scales, Cronbach's alpha was utilised. Firstly, the reliability of each measure was determined. The criterion surrounding internal consistency was employed for this purpose. "In order to determine the reliability of a scale, one ought to investigate its internal consistency which is based on the principle that each component of the test should be consistent with all the other components" (Hammond, 1997, p. 56). In order to estimate how reliable a test is, one needs to look at the number of items on a scale and the intercorrelation between those items (Murphy and Davidshofer, 1998).

Cronbach's alpha determines the reliability (internal consistency) of the set of data (Murphy and Davidshofer, 1998). "Measures of internal consistency evaluate the extent to which the different items on a test measure the same ability or trait. They all will give low estimates of reliability if the test is designed to measure several traits" (Kaplan, 1987, p. 65). The reliability of a test can be improved if all the items are measuring the same attribute (Kaplan, 1987). A Cronbach alpha of 0.6 is generally found to be an acceptable level of reliability. Accordingly, it is important that alpha values should exceed 0.6 before the measure can be used (Page and Meyer, 2000). For the present study, Cronbach alpha all scales were above 0.6.

2.6.2 Descriptive Statistics

Descriptive statistics can be defined as "those methods involving the collection, presentation and characterisation of a set of data in order to properly describe the various features of that set of data" (Berenson and Levine, 1983, p.426). It is used in this study to calculate means and standard deviations. "Means are found by adding the scores and dividing the sum by the number of scores" (McCall, 1990, p.6). Standard deviation is based on the mean and "…gives an 'average distance' between all scores and the mean" (Neuman, 1997, p. 301). In the present study, this method is illustrated in Table 3 of the following chapter.

2.6.3 Frequencies

A frequency distribution groups data into different categories in order to establish the number of observations (Xenofontos, 2002). When data is grouped or condensed into frequency distribution tables, the process of data analysis and interpretation is made more manageable and meaningful. In order to ease the progress of the analysis, one should form the percentage distribution. "The relative frequency distribution is formed by dividing the frequencies in each class of the frequency distribution by the total number of observations" (Berenson and Levine, 1983, p.426). This is illustrated in section 3.5 in the next chapter.

2.6.4 Hypothesis Testing

Significance Level

"A significance level implies the extent to which one is willing to reject the null hypothesis when it is proven true (Xenofontos, 2002). The significance level is normally set at .01 percent or .05 percent (Page and Meyer, 2000). Once this has been established, one needs to recognise whether the data is meaningful/significant. This is done using parametric procedures. The current study placed the level of significance at 0.05 as the researcher considers the likelihood that there is a difference of 95% in the population.

2.6.5 One-way Analysis of Variance (ANOVA) Test

In order to examine the difference between two or more groups, analysis of variance was utilised. Analysis of variance is a statistical technique for testing for differences in the means of several groups (Howell, 2004). "It is applied to a random sample of values for one discrete independent variable and one continuous dependent variable when there are two or more categories for the discrete independent variable. It is a parametric test because it assumes that the distribution of responses for each group is normal and independent, the error variance is the same for all groups and the data does not change over time" (Page and Meyer, 2000, p. 12). ANOVA tests were applied in the present research for the testing of differences in the means of the various race groups and any possible differences in the age groups (18-35 years; 36-50 years and 51-65 years).

Berenson and Levine (1983) maintain that the three major assumptions in the ANOVA are: normality, homogeneity of variance and independence of error:

- *Normality*

  Normality, states that the values in each category are normally distributed (Berenson and Levine, 1983). "For as long as the distributions are not enormously diverse from a normal distribution, then the level of significance of the ANOVA test is not hugely affected by the lack of normality, mainly for large samples" (Berenson and Levine, 1983, p. 426). Normality was assumed for the present research as the distributions amongst the age categories were not enormously diverse.

- *Homogeneity of variance*

  "The second assumption, *homogeneity of variance*, states that the variance within each group should be equal for all groups. This assumption is needed in order to combine or pool the variances within the groups into a single "within group" source of variation. Various procedures have been developed to test the assumption of homogeneity of variance. The simplest and most well known is Hartley's test for Homogeneity of Variance and Levene test for Homogeneity of Variance" (Berenson

and Levine, 1983, p. 426). In the present study, the Levene test was employed to ensure that the variances were not statistically different at the significant level of 0.05.

- *Independence of error*

  The third assumption, *independence of error*, states that "the error (variation of each value around its own mean) should be independent for each value" (Berenson and Levine, 1983, p. 426). In the current study, participants were drawn randomly and independently from the population and thus the assumption of independence of error was met.

The result generated by this statistical method is known as the F-statistic. "After an F-ratio has been found to be significant, the multiple comparison test is implemented to determine which specific means differ significantly from each other" (Berenson and Levine, 1983, p. 426). Example's of multiple comparison tests include: Fisher's Least Significant Difference Test, The Bonferroni Procedure or the Tukey procedure (Howell, 2004). Each of the above could be used to "make comparisons between two or more group means subsequent to an analysis of variance" (Howell, 2004, p. 375).

2.7 Ethical Considerations

The current research did not foresee any risks for participants; however, the following ethical considerations were adhered to in order to protect their wellbeing and interests. In terms of informed consent, the participant information sheet outlined the nature and purpose of the study. It explained that the research was designed to investigate the different sex-role identities adopted by women in the workplace and whether the sex-role identities of younger females would differ in comparison to older females as a function of their age and education. Participants were informed that participation was voluntary, and no employee would be advantaged or disadvantaged in any way for choosing to complete or not complete the questionnaire. Anonymity was assured as there were no identifying characteristics that resulted in the exposure of individual participant's identity.

Participants were also informed that their responses would not be used for any purposes, other than research. Informed consent was assumed by the completion of the questionnaires. However, participants were able to withdraw from the study until such time as they had submitted the questionnaires. The information sheet also stipulated that data would solely be used for academic purposes and would in no way be accessed by the management in the organisation as the organisation would only receive a summary of the overall results. They were also informed that results are presented as group trends, which would make it impossible to identify any particular respondent. In order to keep responses confidential, participants were requested to place the questionnaire in the sealed box provided by the researcher immediately after completion. Only the researcher and research supervisor had access to the responses.

Chapter Three: Results

3.1 Introduction

This chapter reports on the results of the statistical analyses carried out in the present study. As mentioned earlier, the statistical procedures carried out using the statistical computer software programme *SAS Enterprise Guide 4* were: Cronbach alpha, descriptive statistics, Analysis of Variance (ANOVA) and frequencies.

3.2 Scale Reliabilities

Before looking into any statistics derived from the data gathered by means of questionnaires, it is appropriate to consider the degree of consistency of the instruments used. Coefficient alphas for each scale within the BSRI (Maculinity, Femininity, and Neutral) applied in the current investigation are presented in Table 2 below.

Table 2: Cronbach alpha coefficient for each scale

Variable	No. of items	Cronbach alpha coefficient	
		Raw	Standardized
BSRI Masculinity scale	20	0.82	0.82
BSRI Femininity scale	20	0.77	0.78
BSRI Neutral scale	20	0.66	0.69

From the above table, one observes that all scales have acceptable reliability estimates. The reliability figures for the masculinity, femininity and neutral scales displayed in Table 2 are similar to those found by Bem (1974). The average inter-item reliability estimates across her two samples are: 0.86 [masculinity]; 0.81 [femininity] and 0.73 [neutral] (Bem, 1974). It should be noted at this point that Bem (1974) does not provide separate reliability scores for her male and female subjects.

3.3 Descriptive statistics

The following section presents the results of the basic descriptive statistics of the Masculine and Feminine scales of the BSRI including the mean values and standard deviations.

Table 3: Mean and Standard Deviation of masculine characteristics among the different age groups

No.	Masculine Characteristics	Mean, S.D. (20-35yrs)		Mean, S.D. (36-50yrs)		Mean, S.D. (51-65yrs)	
1	Act as a leader	5.51	1.30	5.12	1.64	4.67	2.09
2	Aggressive	3.10	1.68	3.21	1.73	3.52	1.72
3	Ambitious	6.28	0.97	5.87	1.22	5.56	1.65
4	Analytical	5.07	1.57	4.23	1.90	3.44	1.94
5	Assertive	5.10	1.49	4.99	1.72	4.30	1.98
6	Athletic	3.46	2.05	3.08	2.12	2.30	1.94
7	Competitive	4.83	1.78	4.27	1.74	4.19	2.18
8	Defend own Beliefs	5.81	1.29	6.07	1.34	5.11	2.12
9	Dominant	4.44	1.44	3.95	1.80	4.33	1.96
10	Forceful	3.15	1.63	3.67	1.83	3.07	2.04
11	Have Leadership Abilities	5.74	1.25	5.49	1.44	5.04	1.85
12	Independent	6.26	1.08	6.12	1.35	5.67	1.49
13	Individualistic	5.70	1.33	4.88	1.77	5.44	1.57
14	Makes Decisions Easily	4.53	1.59	4.35	1.86	4.56	2.15
15	Masculine	2.72	1.84	2.87	2.04	2.11	1.60
16	Self-Reliant	5.95	1.06	5.56	1.55	5.67	1.68
17	Self-Sufficient	5.83	1.37	5.23	1.50	5.48	1.80
18	Strong Personality	6.13	1.21	5.89	1.34	5.96	1.48
19	Willing to Take a Stand	5.92	1.09	5.42	1.50	5.18	2.09

No.	Masculine Characteristics	Mean, S.D. (20-35yrs)		Mean, S.D. (36-50yrs)		Mean, S.D. (51-65yrs)	
20	Willing to Take Risks	5.30	1.51	5.01	1.52	5.22	1.74

The BSRI was scored on a 7-point Likert scale, where 1< less than and 7> more than.

The above findings indicate changes in the mean and standard deviation scores for the masculine characteristics over different generations. The Mean and standard deviation for the younger group was much higher, for example, "Ambitious" ($\overline{X}$ = 6.28; S_D =0.97 for younger group); ($\overline{X}$ =5.87; S_D =1.22 for middle aged group); and ($\overline{X}$ = 5.56; S_D =1.65 for older aged group). Overall, the means of all masculine characteristics were found to be higher in the younger group than the middle aged and older groups.

Table 4: Mean and Standard Deviation of feminine characteristics among the different age groups

No.	Feminine Characteristics	Mean, S.D (20-35yrs)		Mean, S.D (36-50yrs)		Mean, S.D (51-65yrs)	
1	Affectionate	5.62	1.49	5.70	1.35	5.85	1.61
2	Cheerful	5.83	1.06	5.49	1.33	5.81	1.54
3	Childlike	3.46	1.93	3.77	1.91	3.15	2.09
4	Compassionate	5.77	1.10	5.56	1.52	5.26	1.89
5	Does not use harsh language	4.86	1.77	5.10	1.80	5.81	1.44
6	Eager to soothe hurt feelings	5.52	1.46	5.38	1.72	5.44	1.85
7	Feminine	5.65	1.65	5.56	1.82	6.52	1.22
8	Flatterable	4.62	1.66	4.51	1.52	4.78	1.99
9	Gentle	5.64	1.07	5.49	1.59	5.70	1.35
10	Gullible	2.68	1.55	3.01	1.70	2.30	1.23

No.	Feminine Characteristics	Mean, S.D (20-35yrs)		Mean, S.D (36-50yrs)		Mean, S.D (51-65yrs)	
11	Loves Children	6.38	1.00	6.27	1.17	6.07	1.75
12	Loyal	6.26	0.95	6.00	1.39	6.18	1.30
13	Sensitive to needs of others	5.62	1.38	5.83	1.37	5.59	1.78
14	Shy	3.45	1.82	3.80	1.99	3.00	2.13
15	Soft spoken	4.61	1.85	4.86	1.76	5.11	1.93
16	Sympathetic	5.92	1.19	5.67	1.51	5.74	1.53
17	Tender	5.24	1.29	5.08	1.65	4.59	1.53
18	Understanding	5.84	1.21	5.95	1.28	5.15	1.94
19	Warm	5.76	1.15	5.91	1.41	6.00	1.07
20	Yielding	4.23	1.37	4.49	1.20	4.78	1.55

The above findings indicate that the means of eight feminine characteristics out of the twenty have shown higher mean scores in the older group than the younger and middle age groups. However, the total mean and standard deviation for the middle aged group exceeded the younger and older groups. This indicates that middle aged females may be showing more feminine characteristics than the younger and older females. This result is explained below, whereby the Masculine, Feminine, Androgynous, and Undifferentiated characteristics among females were identified by comparing the mean score of the individual items to the overall mean of the sample size in order to determine the group classification. These results are presented in figure 1 below.

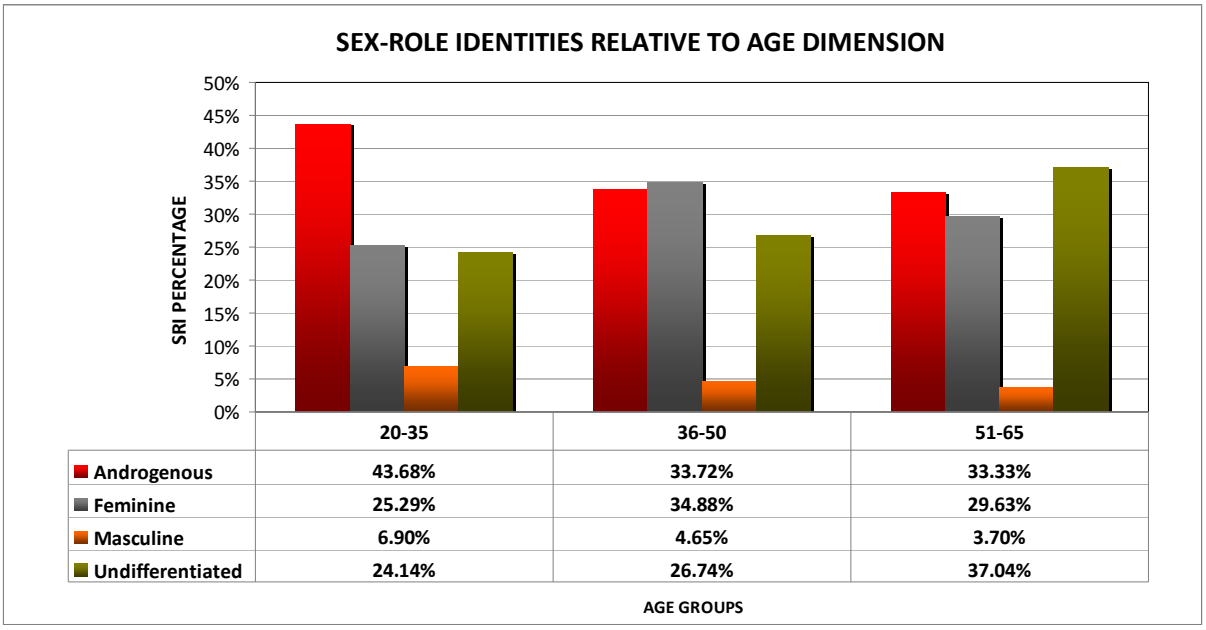
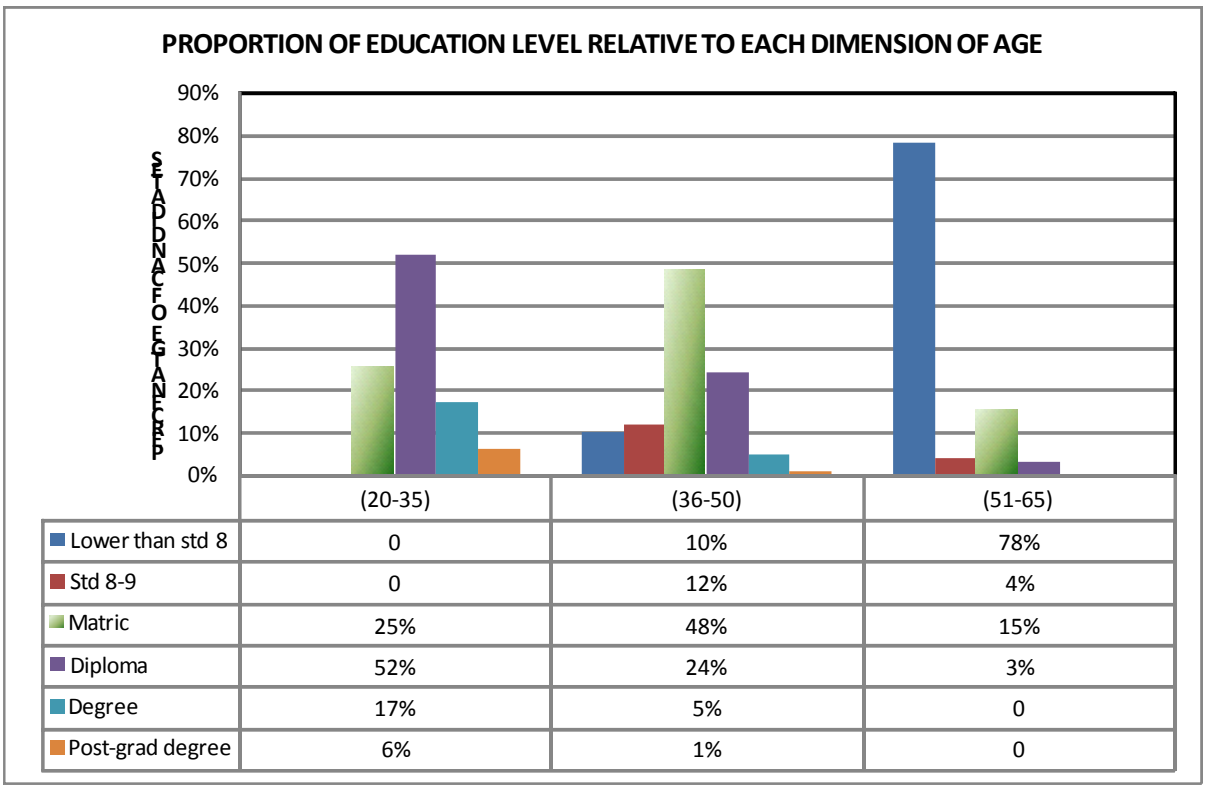


Figure 1: Proportion of Sex-Role Identity (SRI) relative to each dimension of age

The results indicated that of the 200 participants, approximately (44%) of the younger aged group of females were androgynous, approximately (34%) for the middle aged group, and approximately (33%) for the older group of females. Participants who indicated an undifferentiated orientation comprised approximately (24%) of the younger aged group, approximately (27%) for the middle aged group, and approximately (37%) for the older aged females. This is a high proportion of individuals who appear to take on integrated sets of traits as compared to the sex typed (feminine) or cross-typed (masculine) participants. Femininity indicated approximately (25%) for the younger generation, a high percentage of approximately (35%) for the middle aged group, and approximately (30%) for the older group of females. With regard to masculinity, the younger generation exhibited a higher percentage than the middle aged and older generations. The younger group yielded approximately (7%), the middle aged approximately (5%) and the older generation slightly lower with approximately (4%). The above may indicate a growing sense of more androgynous and masculine sex-role identities being adopted by the younger (20-35 years) and middle aged (36-50 years) females as compared to the older generation (51-65 years).



	(20-35)	(36-50)	(51-65)
Lower than std 8	0	10%	78%
Std 8-9	0	12%	4%
Matric	25%	48%	15%
Diploma	52%	24%	3%
Degree	17%	5%	0
Post-grad degree	6%	1%	0

Figure 2: Proportion of Education level relative to each dimension of age

The above summary of results indicates that the younger group of females have obtained a Matric qualification or higher. Amongst the middle aged group, a small percentage of ten and twelve percent had a qualification lower than standard eight and between standard eight and nine, respectively. In comparison to the younger group, a lower percentage of the middle aged group had qualifications above Matric. For the older generation, a higher percentage of participants indicated a qualification lower than Matric. The Matric qualification amongst this group of females also indicated a much lower percentage than the younger and middle aged groups. An even lower percentage was seen for a Diploma qualification and zero percent for a Degree and Post-graduate degree qualification.

3.4 Frequencies

Frequencies were conducted in order to establish the number of observations in the various categories.

Table 5: Frequency results for number of dependents

Dependents	Age groups		
	20-35yrs [%]	36-50yrs [%]	51-65yrs [%]
None	24.42	14.12	3.70
One	38.37	18.82	7.41
Two	22.09	30.59	3.70
Three +	15.12	36.47	85.19

The above indicates that the older aged group has the highest number of dependents. A high number of the middle aged group have two children, and more young people indicate to have only one dependent. The younger group also indicated the highest number of zero dependents.

Table 6: Frequency results for marital status

Marital Status	Age groups		
	20-35yrs [%]	36-50yrs [%]	51-65yrs [%]
Single	68.97	44.19	51.85
Married	28.74	41.86	37.04
Separated	2.30	13.95	11.11

Based on the above results, most younger females are single, followed by the older group of females. The middle aged group indicated a high percentage for the married category. This

result corroborates the findings presented in figure 1 of chapter one, which indicates that middle aged females display more feminine traits than younger and older females.

Table 7: Frequency results for job grading

Job Grading	Age groups		
	20-35yrs [%]	36-50yrs [%]	51-65yrs [%]
Lower Level	27.91	41.86	92.31
Middle Level	46.51	45.35	7.69
Senior Level	25.58	12.79	0

The above results suggest that the majority of the older generation of females have lower level jobs. More of the younger group holds middle and senior positions, followed by the middle aged group. The apartheid system is clearly reflected in the results for the older aged group whereby there are no females in senior positions. However, one cannot generalise this finding to all older females; as it only reflects results from two organisations in South Africa with a small sample size of 27 for the older generation.

Table 8: Frequency results for salary scales

Salary	Age groups		
	20-35yrs [%]	36-50yrs [%]	51-65yrs [%]
R0 - R5000	14.04	24.59	87.50
R6 000-R10 000	29.82	24.59	12.50
R11 000-R15 000	35.09	32.79	
R16 000-R2 0000	10.53	9.84	
> R21 000	10.53	8.20	

Salary scales across the various age groups indicate that the younger group of females earn more than the middle aged and older females across all salary bands, except the lowest scale of <R5000 which is indicated by the older group of females. This finding verifies the findings presented for job grading in that the older generation fulfill lower job levels and therefore earn much less than the younger and middle aged females.

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Table 9: Frequency results for level of education of parents

Level of Education of Parents	Age groups		
	20-35yrs	36-50yrs	51-65yrs
Lower than grade 10	41.38	54.65	92.59
Grades 10-11	10.34	16.28	3.70
Matric	21.84	18.60	0
Diploma	13.79	8.14	0
Degree	11.49	2.33	0
Post Graduate Degree	1.15	0	0

The above results reveal that the younger group of females' parents are more educated than the middle aged and older females.

Table 10: Frequency results for geographical location

Geographical Location	Age groups		
	20-35yrs	36-50yrs	51-65yrs
Rural	32.56	38.37	85.19
Urban	67.44	61.63	14.81

From the above, most of the older generation originate from a rural area. Most of the younger females are from urban areas, followed by the middle aged group.

3.5 Analysis of variance

Analysis of variance was conducted to investigate whether there were significant differences between the four race groups (black, white, coloured and indian) classified into the three age groups in relation to the various scales of Masculinity, Femininity, and Undifferentiated (Neutral).

In particular, the study seeks to examine the results to the following research questions using ANOVA:

1) Do young South African women exhibit different sex-role identities than middle aged and older women?
2) Are black women more likely to reflect sex-role identity changes on age than white women, given that changes in the South African society many have been more impactful on them?

The results of the above research questions are represented below:

Table 11: ANOVA for the difference in the levels of **masculinity** amongst the three age groups (20 – 35 years); (36 – 50) and (51 – 60).

$\alpha = 0.05$

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	2	1374.07257	687.03628	4.16	0.0170
Error	197	32556.54743	165.26166		
Corrected Total	199	33930.62000			

R-Square	Coeff Var	Root MSE	Total Masc Mean
0.040497	13.06843	12.85541	98.37000

Source	DF	Anova SS	Mean Square	F Value	Pr > F
AGE	2	1374.072568	687.036284	4.16	0.0170

The level of significance was set at 0.05 which indicates that there is a 95% probability of the null hypothesis being rejected. The null hypothesis proposed in the above analysis states that "There are no significant differences in the levels of masculinity between the three age groups". The results show that the p-value (0.0170) is less than α (0.05) which implies that the null hypothesis is rejected and that the result is therefore significant. The Pr-value of 0.0170 also indicates that the probability of the null hypothesis being true is 0.1%.

Table 12: ANOVA for the difference in the levels of **Femininity** amongst the three age groups (20 – 35 years); (36 – 50) and (51 – 60).

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	2	83.62143	41.81072	0.24	0.7868
Error	197	34300.45857	174.11400		
Corrected Total	199	34384.08000			

R-Square	Coeff Var	Root MSE	Total Masc Mean
0.002432	13.14789	13.19523	100.3600

Source	DF	Anova SS	Mean Square	F Value	Pr > F
AGE	2	83.62143277	41.81071639	0.24	0.7868

The null hypothesis proposed in the above analysis states that "There are no significant differences in the levels of femininity between the three age groups". The results show that the p-value (0.7868) is greater than α (0.05) which implies that the null hypothesis is not rejected and that the result is therefore not significant.

On this basis, the present research has not rejected the null hypothesis and concluded that there are no significant differences in the levels of femininity between the three age groups.

Table 13: ANOVA for the difference in the levels of **Androgyny** amongst the three age groups (20 – 35 years); (36 – 50) and (51 – 60).

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	2	342.07606	171.03803	0.55	0.5796
Error	197	61601.99602	312.70049		
Corrected Total	199	61944.07208			

R-Square	Coeff Var	Root MSE	Total Masc Mean
0.005522	1292.195	17.68334	1.368473

Source	DF	Anova SS	Mean Square	F Value	Pr > F
AGE	2	342.0760566	171.0380283	0.55	0.5796

The null hypothesis proposed in the above analysis states that "There are no significant differences in the levels of androgyny between the three age groups".

Table 14: ANOVA for the difference in the levels of **Masculinity** amongst the three age groups (20 – 35 years); (36 – 50) and (51 – 60) in the **Black race group**.

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	2	2080.00488	1040.00244	5.68	0.0043
Error	141	25837.88401	183.24740		
Corrected Total	143	27917.88889			

R-Square	Coeff Var	Root MSE	Total Masc Mean
0.074504	13.88795	13.53689	97.47222

Source	DF	Anova SS	Mean Square	F Value	Pr > F
AGE	2	2080.004883	1040.002442	5.68	0.0043

The null hypothesis proposed in the above analysis states that "There are no significant differences in the levels of masculinity between the three age groups in the Black race group". The probability of the null hypothesis being accepted is 0.04% which is very low.

Table 15: ANOVA for the difference in the levels of **Masculinity** amongst the three age groups (20 – 35 years); (36 – 50) and (51 – 60) in the **White race group**.

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	2	170.668561	85.334280	0.96	0.4005
Error	19	1688.104167	88.847588		
Corrected Total	21	1858.772727			

R-Square	Coeff Var	Root MSE	Total Masc Mean
0.091818	9.551810	9.425900	98.68182

Source	DF	Anova SS	Mean Square	F Value	Pr > F
AGE	2	170.6685606	85.3342803	0.96	0.4005

The null hypothesis proposed in the above analysis states that "There are no significant differences in the levels of masculinity between the three age groups in the White race group".

Table 16: ANOVA for the difference in the levels of **Masculinity** amongst the three age groups (20 – 35 years); (36 – 50) and (51 – 60) in the **Coloured race group**.

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	2	108.197619	54.098810	0.59	0.5644
Error	25	2310.516667	92.420667		
Corrected Total	27	2418.714286			

R-Square	Coeff Var	Root MSE	Total Masc Mean
0.044734	9.262900	9.613567	103.7857

Source	DF	Anova SS	Mean Square	F Value	Pr > F
AGE	2	108.1976190	54.0988095	0.59	0.5644

The null hypothesis proposed in the above analysis states that "There are no significant differences in the levels of masculinity between the three age groups in the Coloured race group".

Table 17: ANOVA for the difference in the levels of **Masculinity** amongst the three age groups (20 – 35 years); (36 – 50) and (51 – 60) in the **Indian race group**.

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	1	216.7500000	216.7500000	1.99	0.2316
Error	4	436.7500000	109.1875000		
Corrected Total	5	653.5000000			

R-Square	Coeff Var	Root MSE	Total Masc Mean
0.331676	11.17570	10.44928	93.50000

Source	DF	Anova SS	Mean Square	F Value	Pr > F
AGE	1	216.7500000	216.7500000	1.99	0.2316

The null hypothesis proposed in the above analysis states that "There are no significant differences in the levels of masculinity between the three age groups in the Indian race group".

Table 18: ANOVA for the difference in the levels of **Femininity** amongst the three age groups (20 – 35 years); (36 – 50) and (51 – 60) in the **Black race group**.

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	2	450.39214	225.19607	1.17	0.3144
Error	141	27217.04536	193.02869		
Corrected Total	143	27667.43750			

R-Square	Coeff Var	Root MSE	Total Masc Mean
0.016279	14.01906	13.89348	99.10417

Source	DF	Anova SS	Mean Square	F Value	Pr > F
AGE	2	450.3921398	225.1960699	1.17	0.3144

The null hypothesis proposed in the above analysis states that "There are no significant differences in the levels of femininity between the three age groups in the Black race group". The results show that the p-value (0.3144) is greater than α (0.05) which implies that the null hypothesis is not rejected and that the result is therefore significant.

Table 19: ANOVA for the difference in the levels of **Femininity** amongst the three age groups (20 – 35 years); (36 – 50) and (51 – 60) in the **White race group**.

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	2	272.395833	136.197917	1.28	0.3002
Error	19	2017.104167	106.163377		
Corrected Total	21	2289.500000			

R-Square	Coeff Var	Root MSE	Total Masc Mean
0.118976	9.955132	10.30356	103.5000

Source	DF	Anova SS	Mean Square	F Value	Pr > F
AGE	2	272.3958333	136.1979167	1.28	0.3002

The null hypothesis proposed in the above analysis states that "There are no significant differences in the levels of femininity between the three age groups in the White race group".

Table 20: ANOVA for the difference in the levels of **Femininity** amongst the three age groups (20 – 35 years); (36 – 50) and (51 – 60) in the **Coloured race group**.

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	2	171.364286	85.682143	0.77	0.4759
Error	25	2799.600000	111.984000		
Corrected Total	27	2970.964286			

R-Square	Coeff Var	Root MSE	Total Masc Mean
0.057680	10.27759	10.58225	102.9643

Source	DF	Anova SS	Mean Square	F Value	Pr > F
AGE	2	171.364857	85.6821429	0.77	0.4759

The null hypothesis proposed in the above analysis states that "There are no significant differences in the levels of femininity between the three age groups in the Coloured race group".

On this basis, the present research has not rejected the null hypothesis and concluded that there are no significant differences in the levels of femininity between the three age groups in the Coloured race group.

Table 21: ANOVA for the difference in the levels of **Femininity** amongst the three age groups (20 – 35 years); (36 – 50) and (51 – 60) in the **Indian race group**.

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	1	0.0833333	0.0833333	0.00	0.9819
Error	4	570.7500000	142.6875000		
Corrected Total	5	570.8333333			

R-Square	Coeff Var	Root MSE	Total Masc Mean
0.000146	11.18114	11.94519	106.8333

Source	DF	Anova SS	Mean Square	F Value	Pr > F
AGE	1	0.08333333	0.08333333	0.00	0.9819

The null hypothesis proposed in the above analysis states that "There are no significant differences in the levels of femininity between the three age groups in the Indian race group".

Table 22: ANOVA for the difference in the levels of **Androgyny** amongst the three age groups (20 – 35 years); (36 – 50) and (51 – 60) in the **Black race group**.

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	2	9.345490	4.672745	0.49	0.6137
Error	141	1344.645164	9.536491		
Corrected Total	143	1353.990655			

R-Square	Coeff Var	Root MSE	Total Masc Mean
0.006902	1263.267	3.088121	0.244455

Source	DF	Anova SS	Mean Square	F Value	Pr > F
AGE	2	9.34549046	4.67274523	0.49	0.6137

The null hypothesis proposed in the above analysis states that "There are no significant differences in the levels of androgyny between the three age groups in the Black race group".

Table 23: ANOVA for the difference in the levels of **Androgyny** amongst the three age groups (20 – 35 years); (36 – 50) and (51 – 60) in the **White race group**.

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	2	0.4538268	0.2269134	0.01	0.9904
Error	19	448.3635126	23.5980796		
Corrected Total	21	448.8173394			

R-Square	Coeff Var	Root MSE	Total Masc Mean
0.001011	4281.931	4.857785	0.113448

Source	DF	Anova SS	Mean Square	F Value	Pr > F
AGE	2	0.45382681	0.22691340	0.01	0.9904

The null hypothesis proposed in the above analysis states that "There are no significant differences in the levels of androgyny between the three age groups in the White race group". The results show that the p-value (0.9904) is greater than α (0.05) which implies that the null hypothesis is not rejected and that the result is therefore not significant.

Table 24: ANOVA for the difference in the levels of **Androgyny** amongst the three age groups (20 – 35 years); (36 – 50) and (51 – 60) in the **Coloured race group**.

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	2	1763.01574	881.50787	0.39	0.6817
Error	25	56638.16927	2265.52677		

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	2	1763.01574	881.50787	0.39	0.6817
Corrected Total	27	58401.18501			

R-Square	Coeff Var	Root MSE	Total Masc Mean
0.030188	556.4645	47.59755	8.553564

Source	DF	Anova SS	Mean Square	F Value	Pr > F
AGE	2	1763.015744	881.507872	0.39	0.6817

The null hypothesis proposed in the above analysis states that "There are no significant differences in the levels of androgyny between the three age groups in the Coloured race group".

Table 25: ANOVA for the difference in the levels of **Androgyny** amongst the three age groups (20 – 35 years); (36 – 50) and (51 – 60) in the **Indian race group**.

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	1	28.74926056	28.74926056	4.36	0.1050
Error	4	26.36308952	6.59077238		
Corrected Total	5	55.11235008			

R-Square	Coeff Var	Root MSE	Total Masc Mean
0.521648	-439.7617	2.567250	-0.583782

Source	DF	Anova SS	Mean Square	F Value	Pr > F
AGE	1	28.74926056	28.74926056	4.36	0.1050

The null hypothesis proposed in the above analysis states that "There are no significant differences in the levels of androgyny between the three age groups in the Indian race group".

Based on the above findings, the following conclusions were drawn in order to address the proposed research questions:

Research question one

Do young South African women exhibit different sex-role identities than middle aged and older women?

ANOVA results revealed that there are significant differences in the levels of masculinity amongst the younger, middle-aged and older women in the current sample. These differences are derived from the younger group of women as the summary statistics (see Figure 1) indicated that a higher percentage of younger women have adopted more masculine and androgynous characteristics than middle-aged and older women.

Therefore, the results for the current research conclude that younger women have taken on less traditional identities than middle-aged and older women.

Research question two

Are black women more likely to reflect sex-role identity changes on age than white women, given that changes in the South African society many have been more impactful on them?

ANOVA results indicated that there are significant differences in the levels of masculinity amongst the Black race group, whilst results for the White race group indicated no significant differences. Thus, one can conclude that the sex-role identities adopted by younger White females versus older White females show less variation in comparison to younger versus older Black females. It should be noted though that the black race group comprised the majority of the sample (144 participants) while the White group only totalled to (22 participants). One should however consider the results with caution as a bigger sample may have produced different results.

Chapter Four: Discussion

4.1 Introduction

The current chapter will present a discussion of the key findings of the present study based on the arguments presented in the literature review. The results for each hypothesis will be discussed, followed by an integration and conclusion of the various arguments. The chapter will then highlight some limitations of the present research and conclude with recommendations for future research.

The aim of this study was to assess whether younger working females in South Africa have adopted more masculine or androgynous gender roles as compared to the middle and older generation of females, and secondly, whether the sex-role identities adopted by younger White females versus older White females would show less variation in comparison to younger versus older Black females.

The nature of the sample used in the current study in producing the results that will be discussed below was comprised of: Three age groups (young women totalling 87 participants, middle aged women totalling 86 participants, and older women totalling 27participants). The majority of the sample (144 participants) was from the black race group and only 22 participants from the white race group. This information is deemed pertinent for the discussion of results.

4.2 Research question one

"Do young South African women exhibit different sex-role identities than middle aged and older women?"

Femininity, Masculinity, Androgyny, and Undifferentiated

Over the years, society has adhered to very rigid and traditional sex-role identities for men and women (Bem, 1975). Society promoted the idea that behaviour which compliments one's sexual orientation, for example, (masculine males and feminine women), is appropriate behaviour, and anything diverging from that is unacceptable. Women more especially have been socialised into adopting sex-role identities that were not threatening or challenging to men. Thus, masculine behaviours have received more recognition and acceptance within society than feminine characteristics (Agrawal and Singh, 2007). Agrawal and Singh (2007) proposed that "masculine characteristics have been more socially approved than feminine characteristics" (p. 136). Burnett (1995) claimed that people who come across as being more masculine, are likely to be esteemed highly by others in society. The need therefore to display less traditional or less feminine characteristics is escalating more and more as females have been given more opportunity and power which essentially requires them to be more powerful by displaying more masculine characteristics (Agrawal and Singh, 2007).

As discussed in the literature, women's activities have changed dramatically in the last fifteen to twenty years, especially within South Africa in terms of gender equity, employment equity, Black Economic Empowerment (BEE), and education opportunities (Albertyn, 1995). Lindsey (1994) as cited in Agrawal and Singh (2007) affirmed that one's "age, race, and social class/education further define an individuals' role, which influences how men and women interact and the attitudes and behaviours expected of each" (p. 135). Furthermore, Harris (2004) claimed that the modern era has created a different world for young people and "the different world is marked by social and economic character that have forced a fundamental reassessment of the material with which young females are able to craft their

identities and forge their livelihoods" (Harris, 2004, p. 243). This implies that changes in society in terms of gender equality, greater work place participation and education opportunities, exposes women to a different way of viewing the world and constructing their lifestyles. According to Durrheim and Dixon (2005), when situations change, people's attitudes are likely to change as well. This point leads the discussion to a focus on how changed situations within society have prompted change in the sex-role identities of women across different age groups.

Masculinity and Androgyny

Results for the current study regarding masculinity amongst the three age groups (20 – 35 years), (36 – 50 years), and (51 – 65 years) supported the findings of previous research done by Agrawal and Singh (2007) as mentioned earlier. ANOVA results revealed that there are significant differences in the levels of masculinity amongst the younger, middle-aged and older women. Research has shown that in recent years, younger women have been adopting less traditional sex-role identities than older women due to societal changes. Tiwari and Ghadially (2009) "analysed the gender and generational differences in gender identity amongst emerging adults in contemporary India" (p. 313). Their findings indicated that the "gender identity of girls is changing much more than boys as more girls than boys have moved away from traditional personality traits to non-traditional personality traits" (Tiwari and Ghadially, 2009, p. 313). They have attributed this to the opportunity afforded to younger women today to choose which sex-role identity is best suited to them based on the demands of society (Tiwari and Ghadially, 2009). Generation comparison results revealed that younger women have less traditional sex-role identities (Tiwari and Ghadially, 2009). "The results are interpreted in light of socio-historical, political and economic changes occurring in Indian society" (Tiwari and Ghadially, 2009, p. 313). The results for the current study are consistent with the study above.

The above findings suggest that younger women have adopted more masculine characteristics due to the "increasing number of women taking up higher education and employment roles"

in the changing South African society (Tiwari and Ghadially, 2009, p. 313). One could therefore propose that when society changes, in order to keep up with the changes and be successful, individuals need to adapt their behaviour to suit the situation. Tiwari and Ghadially (2009) stated that "globalization and liberalization that is taking place in contemporary society demands developing individualist values of personal agency and independence rather than collectivist values of agency and interdependence" (Markus and Kitayama (1991) and Hernandez and Iyengar (2001) as cited in Tiwari and Ghadially, 2009, p. 313). This means that changes in society are calling for individuals to adopt more masculine characteristics such as independence, assertiveness and dominance in order to function effectively. These behaviours are highly evident in young females occupying leadership roles in organisations in the twenty-first century. Harris (2004) commented that "women are now expected to be in control of their own lives, adapt to the changes in society, and manage their lives effectively" (p. 244). He exclaimed that due to the changes in society, "young women are doubly constructed as ideal flexible subjects; they are imagined as benefiting from feminist achievements and conditions that favour their success by allowing them to put these into practice" (Harris, 2004, p. 244). Schmitt; Voracek; Realo and Allik (2008) further propose that "it is expected that when men and women occupy social roles that are more similar, sex differences will tend to erode" (Eagly & Wood, 1999; Wood & Eagly, 2002, p. 169). One could therefore account for the display of masculine behaviours by younger females as resulting from the changes and opportunities afforded to them in the new economy and society.

Further support for the above findings was indicated by a cross cultural study that was done. "Two large-scale cross-cultural data sets have shown that the gap between the personality traits of men and that of women widens as the society in which they live becomes more modern, economically affluent, and gender egalitarian" (Costa et al., 2001; McCrae et al., 2005, as cited in Schmitt et al., 2008, p. 178). This point illustrates that changes within society, despite cultural differences, have the ability to influence one's sex-role identity.

Other reasons for this finding could be due to the education opportunities afforded to women which has liberated them and allowed for freedom of expression. Summary statistics (Figure 2 of chapter 3) revealed that overall, the younger group of females are more educated than the middle and older group of females. The younger group also indicated more tertiary education qualifications than the middle aged and older group. Amongst the middle-aged group, more women had a matric qualification. The older group had more participants with a lower level of education. This was further illustrated in the low number of older women with a matric qualification and diploma qualification. They also revealed zero percentage for a post-graduate degree qualification (Refer to Figure 2 of Chapter 3). Amongst the black race group, it was evident from the results that younger black women had a higher qualification than younger white women. When comparing the older women from the black race group to the older women from the white race group, black women indicated a very low education background as compared to white women. The level of education of black women's parents also indicated a low level as compared to white women's parents. The above results indicate that through the education reform in South Africa in post-apartheid, fairness and equity in the education system was also achieved. Fiske and Ladd (2004) proposed that "South Africa has made significant development toward equity in education which refers to equality amongst all races" (Fiske and Ladd, 2004, p. 4). This equality, as confirmed by the results above may have further influenced the sex-role identities of younger women.

Thus, one observes that the younger generation has been granted more education prospects which may have had further implications for them with regards to the adoption of less traditional sex-role identities. This finding could be supported by Harris' (2004) argument which stated that "women can no longer rely on marriage to secure their economic status or social standing…women must become successful and income-generating in their own right, and this means doing well academically and professionally" (Harris, 2004, p. 244). This realisation has encouraged women to climb up the corporate ladder within organisations and function independently, even if it meant to the extent that they had to adhere to more masculine sex-role identities in order to be successful. Thus, it is suggested that the changes that have steered women in the direction of being less conscious of traditional identities, have

also allowed them to have an awareness and sensitivity to the different behaviours required in different situations.

One could suggest that younger females who adhere to more masculine roles have decided to accommodate change by exhibiting behaviours that would compliment the demands of society and the working environment. The exposure that younger women are given has provided them with an understanding of where they are and what they need to do to succeed. Women now possess more capacity to grow and develop themselves. The middle aged and older women were not given the prospects that the younger generation have been given and therefore their self-concept may have remained fairly rigid.

Regarding androgyny, the results for the present study contradict many other studies proposing that younger females have adopted more androgynous sex-role identities than older women within a changing society (e.g. Bem, 1975; Bem, 1976; Harris, 1994; Kulik, 1998; Agrawal and Singh, 2007; Schmitt et al., 2008). The current study revealed that there are no significant differences in the levels of androgyny amongst the three age groups (Refer to Table 7). This finding could be linked to a number of reasons. It may be due to the fact that the sample size was not big enough to account for differences in androgyny within the entire population. It may also stem from the possibility that within the current sample, younger women have not as yet adopted a more flexible approach to sex-role identity by incorporating both feminine and masculine characteristics in different situations. As discussed in the literature review, in order for women to experience true equality, they need to be made aware of the value of both masculine and feminine characteristics and respond accordingly (Smit, 2005). Thus, although younger women have adopted more masculine sex-role identities to keep up with the changes, they may not be holding on to their traditional feminine characteristics as a valuable contributor to certain situations.

Femininity

Amongst the three age groups of women, ANOVA results indicate that there are no significant differences in the levels of femininity (Table 6 of chapter 3). This indicates that not one group appears to be significantly different from the other with regards to femininity. This finding does not support the study of Agrawal and Singh (2007) which proposed that middle-aged women are more feminine than younger and older women. This finding may be based on the effects of changes that have taken place in the South African society. Middle-aged women these days may not be adhering as closely to sex-typed behaviours as middle aged women have done many years ago. This may be a result of the influence of society on their perception of sex-roles. A study done by Sik-ying (2007) on "Eternal Mothers or Flexible Housewives" amongst middle aged Chinese married women concurred with the findings of the present study. Sik-ying (2007) particularly looked at "how Hong Kong Chinese women position themselves in relation to this stigmatised social category of "Si-nai" (middle aged-housewives) and the prevailing norms and values regarding women's role?" (p. 249). Findings indicated that "women showed the fluidity of their roles as mothers (and wives). These roles change with reference to social context, life circumstances, and life course. Many middle-aged women have tried to resist becoming "mad housewives" and have learnt to be "flexible housewives" by actively decentering their role as mothers" (Sik-ying, 2007, p. 249). The above study indicates that women no longer make their homes their world as they are now exposed to more responsibilities within their jobs. Middle-aged women now have to balance their work and family roles in order to keep up with the demands of changes in society.

Coleman (1994) explained that "middle-age is a time when participation in the work, marital, and parental roles is likely to be highest for women" (p. 156). Middle-age women may take on a range of roles which may require less feminine characteristics. Thus, one gathers that at this stage of women's lives, there is usually an overlap of roles. This overlap of roles within their homes and workplace may often lead to stress and fatigue, compromising both their work and family life.

Research done on gender roles and coping with work stress were shown to have been related to sex-role socialisation influences. Fitzgerald and Betz (1983) as cited in Gianakos (2000) examined "gender-role effects on women's career development and adjustment" (p. 1061). Results were "attributed to gender-role socialization, which accounted for twice the amount of variance in career aspirations than did gender (Powell & Butterfield, 1981). This implies that the way in which women have been socialised into society, has a greater influence on their careers than their actual gender.

Within the South African context, "the historical background of Black women in South Africa did not allow them to participate in the labour force" (Beckett, 1976; Bell, 1974; Lerner, 1972, cited in Coleman, et al., 1994, p.158). This meant that they were actively involved in various other roles within their homes (i.e., work, marriage, and parenthood) (Beckett, 1976; Bell, 1974; Lerner, 1972, cited in Coleman, et al., 1994). Some women also worked as cleaners and domestic workers for white raced families. This means that these women suffered the effects of gender oppression and discrimination which dictated to them what the most appropriate sex-role identity should be. However, in the post-apartheid era, more women have joined the work force and participate in more challenging roles at work. As discussed in the literature review, women have taken leadership roles in parliament and the number of female representation in the workplace has increased on a large scale (Tshabalala-Msimang, 2009). Thus, women's roles have increased and have become more challenging and time-consuming which may compromise the time and effort that they invest in the lives of their families. This further supports the results which indicate that middle-aged women do not display more feminine behaviours than younger or older women.

Undifferentiated

The older age group yielded the highest percentage for undifferentiated characteristics. This implies that most females from this group adhere to strongly masculine or strongly feminine schemas. This result corresponded with Agrawal and Singh's (2007) study done on women in India. This finding may be explained by the different stages of life and development that older females have gone through and eventually adopt an undifferentiated perspective on life and the way in which they behave. These demographic findings are however to be considered as speculative as it is not based on actual hypothesis testing. According to Coleman et al., (1994) older age is a time of major role loss and role change for many women. At this stage, most of their children are grown, married and no longer residing with them. Coleman et al., (1994) alluded that "of the roles that women exercise in their families, either employment, marriage, and parenthood, older women enact one or none of these roles, especially amongst the Black race" (p. 125).

A study done by Strough; Leszczynski; Neely; Flinn; and Margrett (2007) examined sex-roles "from adolescence to later adulthood: femininity, masculinity, and androgyny in six age groups" (p. 385). In particular, they looked at "timing of historical events in individuals' lives to examine age-related differences in self-reported masculine, feminine, and androgynous personality traits in a cross-sectional sample of American men and women" (p. 385). Results showed that "old women were less likely than younger and middle aged women to endorse masculine and androgynous traits" (p. 385). This study indicates that older women would most probably be less likely to endorse strongly masculine behaviours or strongly feminine behaviours. This may be explained by the stage at which they are at in their lives. Older women may have learnt through experience the types of behaviours to display and therefore may not indicate any preference for either masculine or feminine characteristics.

Frequency results indicate that the majority of the older generation of females are single but have the highest number of dependents (Refer to Table 20 of Chapter 3). These dependents may however, be married and living independently with families of their own. The job

gradings for these older females are very low and the majority of respondents occupy lower level positions in their organisation (92%). This certainly results in a lower income for these women. The rationale behind these findings is the fact that the majority of the sample is Black females who were deprived from education opportunities and were therefore unable to develop themselves and be successful. For education, results for the older group of females indicated a high percentage (78%) of females with a qualification lower than standard eight and all other levels of education a much lower percentage, ending in zero percent for a degree and post-graduate degree qualification.

These findings have their roots in the apartheid era in South Africa, whereby "all tasks and responsibilities of life were carried out separately and no contact between races occurred except in the workplace which also transpired on inequitable terms" (Moller, 1998, p. 29). This indicates some of the phases that older women have gone through in terms of constructing their sex-role identity based on societal influences. Moller (1998) also highlighted that "the social mobility of the Black sector of the population was severely restricted as a result of inferior 'bantu' education, reservation of non-menial jobs, influx controls which regulated access to centre's of employment, and restrictions on entrepreneurship and access to capital markets" (Moller, 1998, p. 29). Residing in South Africa in a time when women were not allowed to express themselves and were treated unequally, may have resulted in an inflexible self-concept and rigid way of thinking. One would expect these women to adopt more sex-typed roles. However, for reasons considered above, whereby their roles in their families and society has changed at this stage of their lives, they may consider embracing more undifferentiated roles such as "reliable", "adaptable", "secretive", "helpful", "happy", "likeable", "unpredictable", "sincere", "friendly", among others.

Results also indicated that the majority of older women are single and occupy lower level positions in their jobs. This translates into them having low salaries, their parents possessing a lower education (92%) with an education lower than standard eight. It was also proven that

most of them came from rural areas which could account for the lack of opportunities they were exposed to.

4.3 Research question Two

"Are black women more likely to reflect sex-role identity changes on age than white women, given that changes in the South African society many have been more impactful on them?"

ANOVA results indicate that there are significant differences in the levels of masculinity between the three age groups in the black race group (see Table 8). Descriptive statistics also reveal that younger black females indicated a significantly higher mean for masculinity (5.34) than the older generation (4.86) (see Table 3). For the white race group, no significant differences were seen in the levels of masculinity between the three age groups (see Table 9).

The findings therefore suggest that due to the changes within society, young women from the black race group have been exposed to opportunities which have required them to adhere more closely to more masculine sex-role identities, different from those of their parents. Today, women from the black race have been placed on the same plane as all other races (Albertyn, 1995) and therefore are more flexible in their thinking and the sex-role identities that they choose to adopt. For the white race, because white women were not as disadvantaged as blacks were, they were still able to educate themselves and find good opportunities, which gave them more freedom of expression. This may therefore account for the non-significant differences in the levels of masculinity amongst the younger and older white women.

In the literature discussed, Bem (1974) suggests that if gender schemas are not fully assimilated, androgyny can be the result. This is indicative of the fact that as society changes, traditional sex-role identities are also changing. This supports the assertion made by Prinsloo (1992) stating that "social, political, economic, and increased participation of women in the

workforce, as well as greater education opportunities, create distinctive patterns of masculinity or femininity" (p. 78).

Overall, findings for the current hypothesis suggest that the variation between older white women and younger White women are less than the variation between older black women and younger black women. One therefore concludes that the results revealed do support the proposed hypothesis. However, one should also consider the fact that the white race group had a smaller sample size than the black race group which may have influenced the results.

4.4 Integration and Conclusion

While much attention in research has been afforded to the study of femininity, masculinity, and sex-role identities, the current research aimed at contributing further to this work within the South African context. This section will briefly integrate the findings for this research discussed previously with respect to the proposed aims of the research.

The first aim of the present research was to assess whether younger females in South Africa have adopted more masculine or androgynous gender roles as compared to the older generation of females. The findings suggested that younger females have adopted more masculine sex-role identities as compared to the middle aged and older group of females. This particular finding supported the work of Agrawal and Singh (2007). However, results for androgyny was contrary to the study of Agrawal and Singh (2007) as no significant differences were seen in the levels of androgyny. The second aim of the research was to assess whether black woman were more likely to reflect sex-role identity changes on age than white woman. These findings proved to be congruent to what was proposed as the variation between older white females and younger white females are less than black females. The results for coloured and Indian woman were not included in the discussion chapter as these results may not be a true reflection of the two population groups due to the limited number of participants for these races.

4.5 Limitations of the study

In reviewing the present study, one observes that the study has certain limitations which should be considered in light of the present findings. Firstly, "the use of non-probability sampling also places a limit on the generalisation of the findings of the present research with respect to both population validity and ecological validity" (Rosnow & Rosenthal, 1996, p. 301). This is because the sample used in the current research was taken from only two organisations within South Africa and therefore likely to have a limited diversity and may not be a true representation of the entire population of working South African women. One could therefore not generalise the findings to all working females from different organisations in South Africa. Moreover, while ethically necessary, "the use of volunteers in the present study may also limit the generalisability of the findings due to the possibility of volunteer bias" (Rosnow & Rosenthal, 1996, p. 301). While these factors do not make the findings for the present research invalid, one should always consider generalisations with caution. The fact that the sample was unequally distributed across the three age groups, the results for the older age group cannot be assumed to represent the majority of older working females in South Africa.

Another limitation identified in this study is the fact that only the difference between Black and White race groups were compared with regard to the younger and older age groups of these races. As mentioned before, this was done due to the fact that these races existed at opposite ends of each other during the apartheid era; and was therefore considered a matter of interest based on the changes in society proposed in the present study. However, a comparison between the other race groups may have yielded significant differences in results in this regard. It is important to be aware, regardless of the degree of discrimination and prejudice; all races were impacted upon by the apartheid system. Therefore, it will be crucial in future research efforts to examine further comparisons between other race groups, for example between black Africans and indians, or white Africans and coloureds, etc.

Another limitation in the study was the sample size which was not big enough to be a true representation of the South African population.

In terms of the BSRI questionnaire itself, certain words such as "conventional", "yielding", "theatrical", "solemn", "conscientious", among others, appeared to be more complex than others and were thus most frequently omitted. This could be due to respondents not fully understanding the meanings of these traits. Furthermore, the use of a self-reported measure is a possible limitation to the current study. Self-report behaviour measures have been criticised to be subjective in nature.

4.6. Recommendations for Future Research

From the findings of the current research study, it was found that the younger generation of females adopts more masculine sex-role identities than the middle aged and older females in South Africa. Due to the fact that femininity cannot exist without masculinity, as discussed in the literature review, sex-role identity does not apply solely to females. For this reason, it can be recommended that further study be done on younger, middle aged and older working males in South Africa, with a comparison to working females.

The similarities and differences between the various races, as well as the different age groups, it could be recommended that further study provide a more comprehensive picture of these factors.

With regard to the instrument used in the present research, further study is strongly recommended to investigate the applicability of BSRI items on larger samples from all races; as well as in various organisations within South Africa. Having encountered the complexity of certain items on the BSRI as mentioned earlier, there is a need to evaluate the items on the BSRI with particular reference to recent trends of the items in the post-apartheid South

African culture. It may also be beneficial to include terms that are simpler to understand for individuals who do not use the English language as their first dialect.

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Appendix A: Participant Information Sheet

School of Human & Community Development
University of the Witwatersrand
Private Bag 3, WITS, 2050
Tel: (011) 717 4500 Fax: (011) 717 4559

Dear Sir / Madam

My name is Natasha Snyman, and I am presently completing my Masters degree in Industrial Psychology at the University of the Witwatersrand. In the fulfillment of this degree my area of research is designed to investigate the different sex-role identities adopted by women in the workplace and whether the sex-role identities of younger females would differ in comparison to older females as a function of their age and education. Participation is voluntary, and no employee will be advantaged or disadvantaged in any way for choosing to complete or not complete the questionnaire.

Anonymity will be assured as there will be no identifying characteristics that will lead to the exposure of individual participant's identity. While questions are asked about your personal circumstances, no identifying information, such as your name or I.D. number, is asked for, and as such you will remain anonymous. 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 would solely be used for academic purposes and would in no way be accessed by the management in the organisation as the organisation will only receive a summary of the overall results. The results will be presented as group trends, which make it impossible to identify any particular respondent.

Your participation in this study would be greatly appreciated. This research will contribute both to a larger body of knowledge on sex-role identities adopted by South African women, as well as to your organisation's understanding of your workplace dynamics. This can help to assist in management techniques in dealing with the different personality traits and behaviours that female employees possess.

The research study is an independent study which will be conducted under the supervision of an Industrial Psychologist at Wits University. Please contact me or my supervisor should you have any questions.

Kind Regards

NATASHA SNYMAN
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Appendix B: Demographic Questionnaire

Please answer the following sets of questions as honestly as possible. You are not obliged to answer any or all questions if you choose not to. The information will be used for statistical purposes only.

1) Race: _____

2) Age: _____

3) Sex: _____

4) Home language: _____

5) Marital Status: _____

6) Level of education: _____

7) Job grading/level: _____

8) Salary band: _____

9) Number of dependents: _____

10) Level of education of parents: _____

11) Geographical location of home: _____

Appendix C: The Bem Sex Role Inventory

Below you will find a list of personality characteristics. Please indicate on a scale from 1 to 7 how true each of these characteristics is in describing yourself.

1	2	3	4	5	6	7
Never or almost never	Usually not true	Sometimes but infrequently true	Occasionally true	Often true	Usually true	Always or almost always true

Defend my own beliefs		Adaptable		Flatterable	
Affectionate		Dominant		Theatrical	
Conscientious		Tender		Self-sufficient	
Independent		Conceited		Loyal	
Sympathetic		Willing to take a stand		Happy	
Moody		Love children		Individualistic	
Assertive		Tactful		Soft-spoken	
Sensitive to needs of others		Aggressive		Unpredictable	
Reliable		Gentle		Masculine	
Strong personality		Conventional		Gullible	
Understanding		Self-reliant		Solemn	
Jealous		Yielding		Competitive	
Forceful		Helpful		Childlike	
Compassionate		Athletic		Likeable	
Truthful		Cheerful		Ambitious	
Have leadership abilities		Unsystematic		Do not use harsh language	
Eager to soothe hurt feelings		Analytical		Sincere	
Secretive		Shy		Act as a leader	
Willing to take risks		Inefficient		Feminine	

Warm		Make decisions easily		Friendly	