

GENDER PERCEPTIONS OF FACTORS AFFECTING THE CAREER ADVANCEMENT OF FEMALE ACADEMICS IN SOUTH AFRICA

By

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DECLARATION

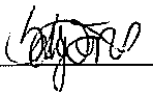
I, Sophia Welma Lyons, declare that Gender perceptions of Factors affecting the career advancement of female academics in South Africa is my own unaided work both in content and execution. All the resources I used in this study are cited and referred to in the reference list by means of a comprehensive referencing system. Apart from the normal guidance from my study leaders, I have received no assistance, except as stated in the acknowledgements.

I declare that the content of this thesis has never been used before for any qualification at any tertiary institution.

I, Sophia Welma Lyons, declare that the language in this thesis was edited by Teresa Kapp.

Sophia Welma Lyons

Date: 30 September 2013



Signature

ABSTRACT

Background and aim:

In several universities, the academic staff complement is dominated by men, regardless of the implementation of employment equity. The fact that the integration of women at all levels of academia is so slow is seen as a serious problem in some countries (Badat, 2010; Rogg, 2001). Koen (2003) stated that, regardless of the endeavours to promote staff equity, there are considerable differences in gender and race representation, and women and blacks are overrepresented in lower-ranked jobs. Women still remain underrepresented at senior levels, also in South African universities. Studies have found that women come across explicit complications in trying to build successful careers in academia (Ismail, Rasdi, & Wahat, 2005; Prozesky, 2008). The main purpose of the present study was to explore the differences in the perceptions of the genders regarding factors that affect the career advancement of female academics in South African higher education institutions (HEIs).

Method:

Convenience sampling was used for this study. The Career Advancement Questionnaire for Women, developed by Zhong (2006), was distributed to male and female academics in South African HEIs. It was used to determine the facilitating factors, constraining factors, and gender issues affecting female academics' career advancement.

Results:

- Female and male academics were in agreement on factors that facilitate women's career advancement. Our findings indicate that the main facilitating factors for female academics' career advancement are job knowledge, attitude toward work, and effective communications skills.
- Male and female respondents were in disagreement on the factors that constrain women's career advancement, although both groups agreed that there are high-level constraining factors that have a negative impact on female academics' career advancement.
- Male and female respondents were in disagreement that certain gender issues prevent women's career advancement.

Both the null and alternative hypotheses were partially accepted with reference to the following:

- There are significant differences between the gender groups in terms of the facilitating factors affecting the career advancement of female academics.
- There are significant differences between the gender groups in terms of the constraining factors affecting the career advancement of female academics.
- There are significant differences between the gender groups in terms of the gender issues affecting the career advancement of female academics.

Practical relevance:

As far as could be determined, not many studies of this kind have been done in South Africa to date. The benefit of the present study, from a theoretical perspective, is that it will contribute to the body of knowledge on the career advancement of female academics. Unlike previous studies that only focussed on other countries or other industries, the present study examined the specific factors that affect the career advancement of female academics in South African HEIs. The practical contribution of this study is that it gained insight into the perceptions of male and female academics regarding factors that constrain and facilitate female academics' career advancement. By identifying the most common constraining and facilitating factors, recommendations could be made to HEIs to improve female academics career advancement.

Keywords: *facilitating factors, constraining factors, female academics, gender issues, higher education institutions, career advancement*

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CHAPTER 1: INTRODUCTION AND BACKGROUND



Figure 1-1: Chapter 1 in Context

This chapter forms the basis for the study on gender differences regarding factors that affect the career advancement of female academics. It will outline the introduction and background to this study through an overview of the research problem, the problem statement, research objectives, the benefits and importance of the study, and the assumptions made by the researcher in this study. The general introduction and overview of the research problem are discussed first.

1.1 Background

In several universities, the academic staff complement is dominated by men, regardless of the implementation of employment equity. The fact that the integration of women at all levels of academia is so slow is seen as a serious problem in some countries (Badat, 2010; Rogg, 2001). A range of issues exacerbate the problems in higher education in South Africa, such as globalisation and rising competitiveness across markets, the aging workforce, a decline in younger workers entering the labour force, a lack of sufficient state and research funding, uncompetitive remuneration packages and research incentives, and

a decline in the quality of the workforce in developing countries and employment equity initiatives (Blitzer, 2008; Coen, & Pienaar, 2009; De Villiers, & Steyn, 2009; Netswera et al., 2009; Ntshoe, Higgs, Higgs, & Wolhuter, 2008). Legislation, global pressures that affect South Africa as an associate of the international community, as well as economic and social changes in the country have resulted in the higher education system in South Africa to undergo great changes over the past decades (Boughey, cited by Rothman, & Jordaan, 2006).

Koen (2003) stated that, regardless of the endeavours to promote employment equity, there are considerable differences between gender and race representation, coupled with the fact that women and blacks are overrepresented in lower-ranked jobs. Women still remain underrepresented at senior levels, including at universities, in South Africa; in 2010, 7% were professors, 9 % were associate professors, 27 % were senior lecturers, and 51% were lecturers (Boshoff, & Bosch, 2012). In 2007, only three of South Africa's 23 vice-chancellors and five of 23 registrars were women, according to HERS-SA (Moodie, 2010).

The phenomenon of the underrepresentation of women in senior academic positions seems not to be a limited to South Africa. Just 35% of permanent academic positions at UK universities are filled by women, while 35% of lecturer positions are occupied by women and 10% are professors (Bagilhole, 2002). Even though most universities in the UK have been active in promoting equal opportunities, female academics continue to be disadvantaged (Bagilhole, 2002).

Studies have found that women face explicit complications in trying to build successful careers in academia (Ismail, Rasdi, & Wahat, 2005; Prozesky, 2008). One of the main contributors to the limitations in female academics' careers is cultural barriers (Rogg, 2001). According to Valian (2004), the reason for the lack advancement of women in professions (including academia) is the genders' schemas through which men and women distinguish and evaluate women.

Prozesky (2008, p. 47) stated the following:

Although women have been strengthening their representation at South African Higher Education Institutions (HEIs), a recent analysis of a bibliometric database of peer-reviewed journal articles and their South African authors (termed SA Knowledgebase) demonstrates that, between 1990 and 2001, men at HEIs published in aggregate almost twice as much as their female counterparts did (Prozesky, 2006).

According to Prozesky (2008), the gap can be explained by three reasons: 1) The Difference Model, according to which men and women differ in behaviour, goals, and outlook, 2) The Deficit Model, according to which women are limited in the number of research resources available and are excluded from the male-dominated network, and 3) non-workplace factors and family responsibilities.

Moorosi (2007) stated that, even though South Africa implemented employment equity, women are still fighting a continuous battle against discrimination on two levels: the social and the organisational level. Chisholm (as cited by Moorosi, 2007 p. 508) stated that, “At the organisational level women are prejudiced by traditional and deeply embedded patriarchal values and practices that devalue transformation processes aimed at achieving gender equity.” On a social level, “Women are hindered by the lack of support from their families and the cultural association of principalship with masculinity, which assumes every principal has some form of support at home” (Moorosi, 2007 p. 508). Previous research addressed several aspects of the career advancement of women in different industries (Mamaril, & Royal, 2008; Hill, Corbett, & Rose, 2010; Budworth, & Mann 2010). Very limited research has been done on female academics’ career advancement in the South African context, as far as could be determined.

1.2 Problem statement

This study investigated the gender differences regarding factors affecting the career advancement of female academics, and also if there is a significant difference between the factors that affect the career advancement of female academics, based on their

demographic characteristics. Previous research on these phenomena did not focus on the academic environment.

1.3 Research objectives

This study will be guided by the following research objectives:

- **Objective 1:** To determine the current gender perceptions regarding factors that facilitate the career advancement of female academics.
- **Objective 2:** To determine the current gender perceptions regarding factors that constrain the career advancement of female academics.
- **Objective 3:** To determine the current gender perceptions regarding gender issues that influence the career advancement of female academics.
- **Objective 4:** To determine if there are significant differences between the gender groups in terms of the facilitating factors affecting the career advancement of female academics.
- **Objective 5:** To determine if there are significant differences between the gender groups in terms of the constraining factors affecting the career advancement of female academic .
- **Objective 6:** To determine if there are significant differences between the gender groups in terms of the gender issues affecting the career advancement of female academics.

1.4 Importance and benefits of the proposed study

The benefits of this study, from a theoretical perspective, will be that it will contribute to the body of knowledge on the career advancement of female academics. Unlike previous studies, which only focussed on other countries or other industries, the proposed study will examine the specific factors that affect the career advancement of female academics in South African HEIs. This will be the first study of this kind to be done in South Africa, as far as could be determined.

The practical contribution of this study will be to gain insight of the perception of male and female academics regarding factors that constrain and facilitate female academics' career

advancement. Identifying these factors will make it possible to make recommendations to HEIs to improve female academics' career advancement.

The rest of this chapter consists of four sections. First, the delimitations and assumptions will be discussed. Then, the key definitions will be explained. In the third part, the literature study will be explained. The literature study will focus on four areas, namely the career development of women, factors constraining women's career advancement, factors facilitating women's career advancement, and gender issues. Subsequently, the research design will be discussed.

1.5 Assumptions

It has to be assumed that the following will apply in this study:

- That participants in this study will clearly understand the terms and questions in the survey;
- That female and male academics in HEIs in South Africa will cooperate;
- That all the respondents will answer the questions honestly; and
- That the sources of statistics and data are accurate.

The assumptions stated above will guide the research. In the final section of this chapter, a list of definitions and abbreviations that will be used in this study is provided.

1.6 Delimitations

The proposed study has several delimitations. Firstly, the study will only focus on male and female academics. Secondly, the study will only focus on male and female academics aged between 18 and 65 years, as they are usually self-reliant and legally able to work. Thirdly, the study will be limited to academics residing in South Africa and working in public HEIs.

1.7 Definition of key terms

There is a need to define the most central and core components and terms in order for the reader to fully understand the contents of this study. These terms are listed in alphabetical order below.

Female academics: Women working at universities in South Africa.

The glass ceiling: The U.S. Department of Labour (as cited by Zong, 2006) describes the glass ceiling as false difficulties based on organisational bias in the workplace that limit women from proceeding to management positions in their organisations

Facilitator: Situations or attributes that assist the development of female academics (Zong, 2006).

Constraint: Situations or attributes that prevent women's capability to move forward in their careers within South African HEIs (Zong, 2006).

Table 1-1: Abbreviations used in this document

Abbreviation	Meaning
HEI	Higher education institution
UK	United Kingdom
US	United States of America

1.8 Chapter outline of the study

The chapter outline of this research study is as follows:

Chapter 1: Introduction and background

This chapter gives an introduction of the topic being investigated. It starts by giving an overview of the background, followed by the problem statement, the research objectives, the implications and benefits of the research, as well as the applicable delimitations and assumptions made in the study. The last part of the chapter identifies the key terms to be used in this study, as well as the applicable abbreviations.

Chapter 2: Literature review

Chapter 2 will discuss and identify the literature currently available relating to the career advancement of female academics. The literature review will consist of four main sections: 1) Career development of women, 2) Facilitating factors, 3) Constraining factors, and 4) Gender issues.

Chapter 3: Research design

The aim of this research will be to determine what the gender differences are regarding factors affecting the career advancement of female academics. This chapter will discuss the research paradigm, the strategy of enquiry, sampling, data collection procedures and data analysis. The chapter will also focus on the possible bias and errors that might be present, as well as the reliability and validity of the entire study. Finally, the chapter end with the ethical concerns that need to be considered.

Chapter 4: Results

This chapter incorporated the results obtained from the analysis of data according to the design and research methodology and will discuss all the results of statistical tests performed on the data with respect to the objectives. This chapter will be structured in four

distinct phases. The first phase, sample description, will explain the demographics of the sample group used in this study, with regards to the biographical information supplied by the respondents. The second and third phases will discuss the statistical analysis of the different concepts involved in the study. During the last phase, the hypotheses are tested.

Chapter 5: Discussion of results

This chapter will present the analysis and interpretation of the results presented in Chapter 4. Five research objectives will be either rejected or accepted. This chapter will present an overview of the research findings that emerge from the statistical analysis of the data.

Chapter 6: Conclusions, limitations and recommendations

The last chapter of this study will offer a summary of the entire study. The most important findings gathered from the literature will be presented, as well as a summary of the results. The limitations of the study will be discussed, together with recommendations for further study on the topic.

1.9 Conclusion

This chapter formed the basis for the rest of the study, and gave an overview of what is to come. It started with the background of topic being studied, and ended with an overview of each chapter to follow. The next chapter will discuss the most important literature relating to the study.

CHAPTER 2: LITERATURE REVIEW



Figure 2-1: Chapter 2 in Context

2.1 Introduction

This chapter attempts to identify and discuss the main body of knowledge currently available relating to the career advancement of female academics. The literature review consists of four main sections. The first section discusses the career development of women. The second and third sections elaborate on the facilitating and constraining factors affecting the career advancement of female academics. Lastly, the gender issues affecting the career advancement of female academics are described.

2.2 Theoretical Framework for the Career Development of women

The United Nations's Girls' Education Initiative (2012) identified four main gender descriptions in the development discourse on women: The Women in Development (WID) approach focuses on the inclusion of women to increase economic development and expand the number of girls and women being educated, to ensure gender parity. The Gender in Development (GAD) approach focuses on empowerment, and specialises in finding the origin of causes of gender disparity, in order to increase women's admittance to resources. The post-structuralism theory is preoccupied with identity questions, and holds that gender is not a fixed definition but a flexible form of identification. Schooling is part of

a method that acknowledges and evaluates notions of identity, including gender and marginalised identities. The human rights-based approach (HRBA) states that education is a general, absolute human right that is mutually dependent on other basic human rights. This approach aspires to ensure that every traditionally marginalised group, including but not limited to girls and women, local people, individuals with disabilities, and linguistic and/or cultural minorities, have access to education (UNICEF, 2007). All these approaches have improved the career development of women. Women's career progress is dissimilar from that of men, is often more complex, and is characterised by different career stages.

There are many restrictions to overcome in order for women to reach higher occupational positions. According to Powell (2010), a woman's self-esteem, self-concept, and self-confidence have a significant effect on her career- and academic development. Without self-confidence, she will have difficulty overcoming the barriers she might face during her career. Riordan and Louw-Potgieter (2011) found that female academics in their early and middle careers struggle with specific challenges, for example, young female academics might struggle to adjust to workplace stress, to establish their reputation in the organisation, and to choose to have children and when. Female academics in their middle career might struggle to stay abreast of current developments in their field, sustain excellence, and encourage others, and may re-evaluate their career choices. According Riordan and Louw-Potgieter (2011), the model of a successful female academics is a professor who believes in herself; she has work centrality, prefers to work unconventionally, sees opportunities to make strategic decisions at the university, and has family responsibilities.

Bily and Manoochehri (as cited by Zhong, 2006) explained the development of women's responsibility in the past as follows: The traditional role of a woman has been in the house, doing domestic work, and taking care of children and her husband. Women had to start working during World War II, as the men were at war. Women went back home to be mothers and wives after the war. Women increasingly entered the workplace since the 1960s, and, today, the number of working women is constantly escalating.

According to Larwood and Gutek (as cited in White, 1995), there are two important issues that divide men and women. First, women will consider alternative possibilities, for example, she may give up work and start a family if her career plateaus early. This option is not always possible for men, although some men do prefer to stay home while their wives work. Second, women are still discriminated against, even though they legally have equal opportunities. Work alternatives look more feasible if their advancement in the workplace is slow, and opportunities are few. White (1995) developed a model explaining the different stages for successful women's careers, shown in Figure 2-2.



Figure 2-2: A stage model of the Careers of Successful Women

Adapted from White, B (1995). The career development of successful women. Women in Management Review, Volume 10, Number 3, 1995, pp. 4–15.

White (1995) stated that the career development model of successful women resembles Levinson's model of career phases even though it was developed by interviewing men. The successful women had phases of stability, uncertainty and change.

Mainiero (as cited in Powell, 2010), identified four stages of the political maturation process of executive women's careers:

- Being naive about the corporate culture, learning and knowing what to do and say;
- Building trustworthiness;
- Cultivating a style, showing determination, and trusting your leadership style; and
- Taking responsibility or mentoring, and managing a balanced lifestyle.

Bierema (as cited by Powell, 2010) found three career stages that women experience as their self-confidence increases:

- Learning about the environment and culture;
- Gaining competence and professional proficiency; and
- Sharing the gained knowledge with someone else.

When comparing the abovementioned career stages of White, Mainiero, and Bierema, it is evident that, with each stage, women gain more experience, knowledge, and self-confidence, which helps them to succeed in their careers.

2.3 Factors that Facilitate Women's Career Advancement

2.3.1 Hard work

According to Zhong (2006), hard work, energy, and a charismatic personality are the most important qualities women should have in order to be successful. Studies have found that in order for women to demonstrate that they earn a promotion they need to work much harder than men. Valian (2005) stated that women are usually more talented than men,

because they have faced so many difficulties in advancing in their careers. For a woman to be successful in a male-dominated environment, she needs to be hard-working, independent, aggressive, and have perseverance (Powell, 2010). Prozesky (2005) stated that successful South African female professors received excellent teaching appraisals and were involved in community work, while they also had good publication records and were highly qualified, which indicated that hard work does facilitate female academics' career advancement.

2.3.2 Support and guidance from a mentor

Maskell-Pretz and Hopkins (as cited in Gertzen, 2006 p. 27) stated that "Mentoring is designed to provide an avenue for advancement through a supporter who acts as a guide, showing protégés how to navigate organizational barriers." Fagenson (as cited in Gertzen, 2006) stated that research found that, mentoring networks are found in most social situations, such as on the golf course. Most working women are excluded from these benefits.

White (1995) stated that most women gave their bosses credit for believing in them, in spite of their gender, and for providing them an opportunity to reveal their ability. Studies found that the main benefit of mentoring is support and the building of self-confidence. Thus, women have a larger need for psychological affirmation from mentors than men do (White, 1995).

Bennett (2002) found that women receiving early support from peers and managers were expected to move into upper management positions earlier. This gender difference implies that women who desire senior management positions may need more motivation and external support than men, possibly since they have more barriers to face. According to Prozesky (2008), mentors play a very direct and positive role in female academics' publication careers.

2.3.3 Problem-solving and communication skills

Budworth and Mann (2010) stated that individual-level interventions should be considered to educate people how to persevere when dealing with seemingly difficult barrier. For example, Yanar et al. (as cited by Budworth & Mann, 2010) trained women in Turkey with techniques that promote self-confidence in re-employment, to conquer obvious employment discrimination situations in Istanbul. They reported that the education increased women's ability to find employment, although the laws, procedures, and approaches of the employers stayed unaffected.

2.3.4 Family support and personal sacrifice

Ismail et al. (2004) found that family support is one of the main contributors to women's career success. Most female academics indicated that they had a supportive husband, a paid domestic helper, and/or support from other family members. A study found that female doctors were unmarried or, if they were married, did not specialise and had fewer children, compared to male doctors (Buddeberg-Fischer, Stamm, et al., 2010). This indicated that they had to compromise their professional careers. Prozesky (2008) stated that family responsibilities do not impact women's article publication productivity, as single women publish fewer articles than married women, and mothers publish more than women without children. Riordan and Louw-Potgieter (2011) found a positive and direct relationship between family responsibilities and job level, suggesting that single female academics and female academics without children are not more successful than those who do have family responsibilities.

2.3.5 Educational qualifications

The Human Capital Theory (Becker, as cited by Zhong, 2006) states that people who invest in themselves through education, training, and experience will have better career opportunities, as well as higher-paying jobs. Ismail, Rasdi and Wahat (2004) found in their study that female academics felt that their post-graduate experience helped them to identify a need for specialisation in a certain area. They also stated that their doctoral degree helped them to produce good research articles, thus indicating that qualifications

and publication productivity are the main contributors to advancement in academia (Riordan, & Louw-Potgieter, 2011).

2.3.6 Networking opportunities

Shantz, Wright and Latham (2011) found that a network can help a person to be up to date with information regarding the organisation, and can help a person to get to know the corporate culture of the company. Networking can lead to better promotional opportunities, and can increase salary and career satisfaction in the long run (Wolff, & Moser, 2009). Powell (2010) found that women tend to develop their own support network of people who will help them to succeed. More senior executive women need to act as role models and mentors to guide other women to succeed. Ismail et al. (2004) stated that female academics indicated that networking is highly important, and that their post-graduate experience contributed to establishing local and international networks by meetings supervisors, attending conferences, and meeting peer researchers.

2.4 Factors constraining Women's career advancement

The different factors that influence the career advancement of women in the workplace will now be discussed:

2.4.1 Sexual harassment and gender discrimination

Despite the substantial progress made in the past 50 years in the area of eradicating gender discrimination, research indicates that it remains a significant barrier for women (Gertzen, 2006). According to Phillips and Imhoff (1997, p. 47), "Perceptions of sexual harassment have been associated with the status difference between the initiator and the recipient (Tata, 1993), type of workplace (Sheffey, & Tindale, 1992), whether the female complainant was in competition with the accused and whether she was a feminist (Summers, 1991), and normative beliefs about sexual harassment (Ellis et al., 1991)."

A recent study found that staff at higher education institutions in South Africa reported that the implementation of sexual harassment policies was not effective, and that only a small

number of academics receive training on the utilisation of these policies (Joubert, Van Wyk & Rothman, 2011). Only a few sexual harassment cases amongst academic employees at Higher education institutions in South African have been reported, which may be attributed to the confidential and private nature of these complaints (see Joubert, van Wyk & Rothman, 2011).

2.4.2 Work–family conflict

In South African society, women have onerous family responsibilities (Maurtin-Cairncross, 2003). This is especially true in the Indian culture, resulting in the low number of older Indian female academics in South Africa (Prozesky, 2006). Maurtin-Cairncross (2003) stated that female academics build their careers around their husbands and children, which causes them to have discontinuous careers, resulting in most female academics with doctorates being older and less experienced than their male counterparts. This may cause women to be employed in more junior positions where they don't have to produce publications and research.

According to Zhong (2006), the role conflict of work and family responsibilities influenced the career development of women. Despite the fact that the involvement of women in the labour market has increased, gender-role expectations regarding men's and women's roles in society have not changed (Mostert, 2009). Men view childcare and housework as women's work, resulting in employed women having to cope with the demands of both work and family roles (Mostert, 2009). Mallon and Cassell (as cited by Zhong, 2006) stated the probability of working long hours being a major obstacle in applying for promotion for many women. This is the reason why women in top and senior positions are usually single or if they are married they don't have any children (Zhong, 2006).

Dancer and Gilbert (as cited by Phillips, & Imhoff, 1997) found that there is a correlation between couples' perceptions of how housework and family responsibilities should be divided and marital satisfaction. According to Duxbury and Higgins (as cited by Phillips & Imhoff, 1997), studies found that women's involvement with household responsibilities and childcare stayed the same, even though women have additional roles outside of the home.

A recent study found that female physicians with children will work fewer hours compared to male physicians, so that they have time for domestic responsibilities (Buddeberg-Fischer et al., 2010).

According to White (1995), half of successful women have children. These women feel that family and career are equally enriching. The time that these women may have to spend with their families is rare however every moment is valuable. This shows that multiple roles are not always conflicting, and may offer psychological benefits for women, such as growth and security, satisfying the need to belong. On the other hand, Moorosi (2007) stated that, women hesitate to apply for promotion opportunities to management positions because balancing work and family responsibilities does not come naturally for most women.

Moorosi (2007, p. 516) made an important statement:

The lack of understanding and the expectation by spouses for woman principals to perform culturally gendered chores in the home seemed to be pervasive, and as has been seen was experienced mostly by the younger woman principals who were still raising children. Therefore, men as partners could play a crucial role in helping their wives cope with the demands of their work as principals, but without this support, women found it difficult to strike a balance between work and home.”

2.4.3 The glass ceiling

Weisenfeld and Robinson-Backmon (2007) explained the glass ceiling phenomenon as job discrimination that is not relevant to job characteristics, such as past qualifications and education, experience, and achievements. According to Knitson and Schmidgall (as cited by Zhong, 2006), the glass ceiling refers to unseen obstacles that hinder women with the right qualifications, to develop and grow within their organisations to accomplish their goals. Williams (2005) described it as the dearth of women at the top. There are many

restrictions to overcome in order for them to research higher occupational positions such as the ‘the glass ceiling.’ According to White (1995) women can see where they want to go, but find it impossible to reach it Zhong (2006) further states that There are disproportionately large numbers of women in the lower levels of organisation, and inadequately represented number of women at senior levels.

Williams (2005) provided two reasons for the existence of the glass ceiling. One is that women need to work twice as hard to achieve half as much. The second reason includes situations where successful women are penalised for doing their job too well. Schwartz (cited in Bily, Manoochehri, & Zhong, 2006, p. 19) illustrated the glass ceiling as part of the management pyramid.

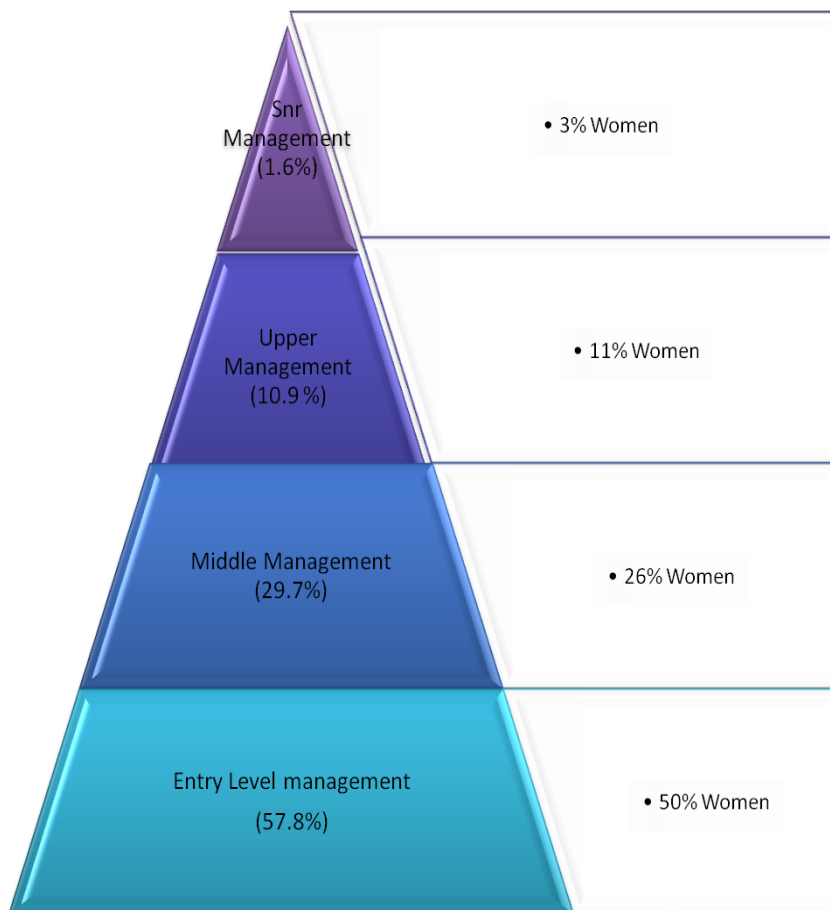


Figure 2-3: The management pyramid.

Source: Schwartz, F. N. (cited in Bily, Manoochehri, & Zhong, 2006, p. 19). *Breaking with tradition: Women and work; the new facts of life.* Warner Books, p. 155.

The percentages of management in each category are presented by the numbers in the middle of the pyramid. The numbers on the right correspond to the percentage of women at every level. For example, women constitute 26% of middle management, while only accounting for 3% of senior management positions (Zhong, 2006). This figure shows that women still remain poorly represented at the senior levels.

2.4.4 Lack of equity in pay, training, and promotion decisions

Weisenfeld and Robinson-Backmon (2007) found that the glass ceiling also implies higher turnover rates for women, since they are more inclined to be dissatisfied with their promotional opportunities and pay increases. Women also perceive more pay discrimination than men; when compared to their male counterparts, women earn less. Prozesky (2006) found that an important barrier for women without postgraduate qualifications and black women is the fact that they have very little confidence to publish articles. Studies found that female academics in South Africa receive less recognition and reward for good work, and they face many challenges in South African higher education (Bezuidenhout, & Cilliers, 2010).

2.4.5 Old boy network

Women rarely benefit from the old boy network (Buddeberg-Fischer et al., 2010). Powell (2010) stated that women have had difficulty overcoming some barriers throughout the last decade. Due to the changing global economy, executives have an uphill battle to keep their jobs, which makes it even more difficult for women to find an executive job. However, even though the old boy network banned women from top-level vacancies, it seems as if both genders have recently been experiencing difficulty in keeping a position. Shantz, Wright, and Latham (2011) stated that, because women have children and domestic responsibilities, it is difficult for them to network and develop influential social relationships. Prozesky (2008) stated that one of the reasons why men publish more than women is because women are banned from male-dominated networks.

2.4.6 Lack of role models and mentors

Buddeberg-Fischer et al. (2010) found that women receive less career support, mentoring, and networking opportunities than their male counterparts, because there are fewer female role models. Mentoring became a way through which covert forms of inequality operate as evident discrimination has been replaced by it (Baldi, & McBrier, as cited by Weisenfeld, & Robinson-Backmon, 2007). According to Prozesky (2008), the lack of mentors for female academics in South Africa contributed to young female academics not being aware of their responsibility to publish or the importance of publications to their academic credibility.

2.5 Female academics and gender issues

When women are compared to men, certain remain issues in all fields. Women experience slower advancement and promotion, lower income, underrepresentation in the top tiers, and fewer prizes and awards (Valian, 2005). As indicated by Valian (2005), the reason for these issues is the gender schemas through which women and men evaluate and observe women. Valian further (2005, p. 198) stated that “The gender schemas that we all share result in our overrating men and underrating women in professional settings, only in small, barely visible ways: those small disparities accumulate over time to provide men with more advantages than women.”

Studies have found that women who are employed in organisations where they work closely with female managers have better chances of being promoted into middle and lower management positions than women who work in a more male-dominated organisation (Bennett, 2002).

According to Larwood and Gutek (1987), there are two important issues that separate men and women. First, a woman will consider alternatives if, for example, if a woman realised that her career has reach a state of no progress after some time she may choose to resign from work and start a family This alternative is not always possible for a man. Second, women are still discriminated against, even though they legally have equal opportunities. As promotional opportunities are fewer, women’s advancement is slower, which may make other options more attractive (White, 1995).

According to Valian (2005) gender inequalities in the science, technology and engineering industries can be explained as follows:

- A pipeline problem: Only a few women obtain PhDs in computer science, natural sciences, engineering and mathematics. The percentage of women from student to graduate to professionals decreases. This indicates that there is a leak in the pipeline.
- Women's childcare responsibilities prevent them from having sufficient time for research. Women with children usually become part-time workers because few men do their part of the housework and childcare, and not enough institutions offer their employees daycare facilities.
- Men and women's principles and preferences are relatively diverse. Men are more eager than women to sacrifice a balanced life to reach their goals.
- An acculturation problem: Men receive more information on how to be successful than women do.

Valian (2005) gave a few suggestions, as shown in Figure 3, regarding what intuitions can do to promote gender equity.

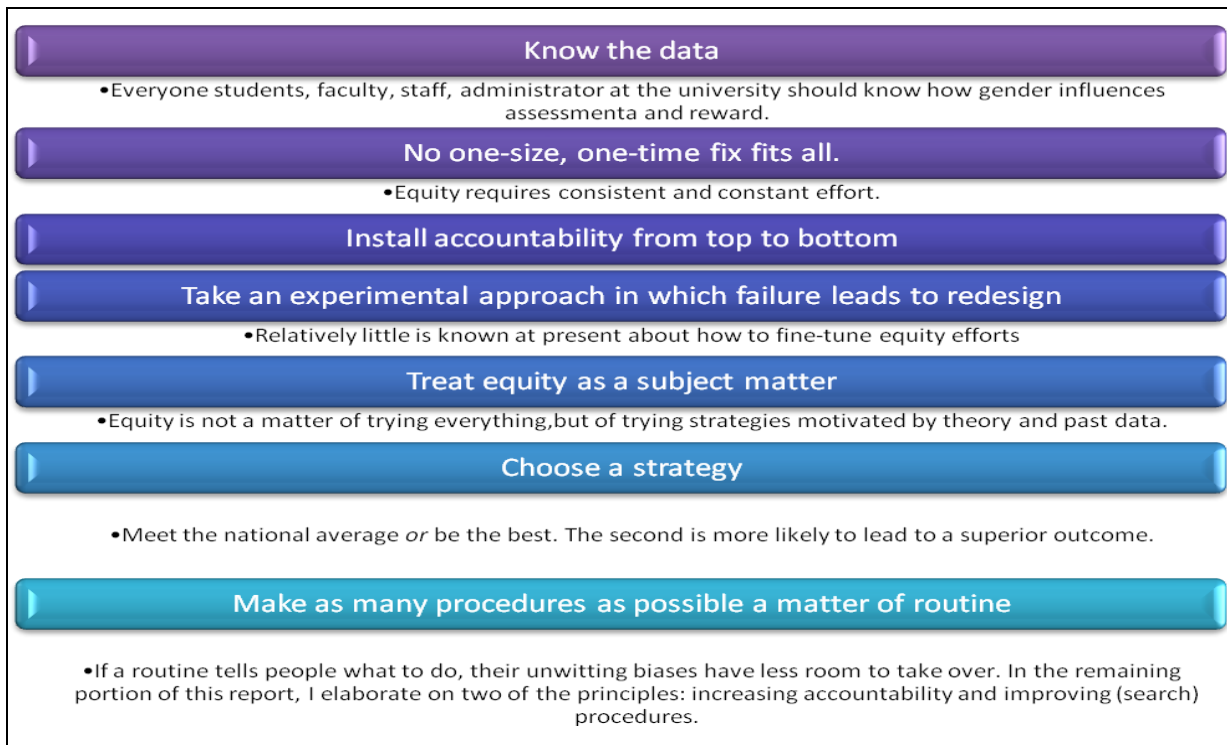


Figure 2-4: What intuitions can do to increase gender equity

Source: Adopted from Vilian (2005). *Beyond gender schemas: Improving the advancement of women in academia. Hypatia Vol. 20, No. 3, p. 209.*

Ackers and Gill (2005) stated that the UK Athena project (Athena, 2003) recognised three barriers in the academic profession that female academics may need to overcome:

- Getting in and continuing into a lectureship. There are disparities in the outcomes and in how males and females approach it.
- Getting back after a career break, whilst their colleagues' research and careers are already progressing.
- Getting on, which is a continuous development of their careers to accomplish and sustain a level corresponding with their skills and ambitions.

According to Boshoff and Bosch (2012), the percentage of women in academia in South Africa grew from 39.1% in 2001 to 44.1% in 2010. This indicates that there has been a 5% improvement over the last ten years. Consequently, we can expect that it would take another ten years before this figure achieves the desired 50% gender equity rate.

As can be seen from Table 2-1, the majority of female academics occupy only two ranks, namely lecturer and senior lecturer. Men are well represented in the senior ranks of associate professor and professor. As the seniority of the rank increases, the number of women decreases. This clearly indicates that some factors prohibit women's promotion into more senior ranks (Boshoff, & Bosch, 2012).

Table 2-1: Headcount of South Africa's Academics by Gender and Rank

Rank	2002			2006			2010		
	Women	Men	Total	Women	Men	Total	Women	Men	Total
Professor	292 (5%)	1,670 (20%)	1,962	383 (6%)	1,658 (19%)	2,041	480 (7%)	1,601 (18%)	2,081
Associate professor	313 (6%)	917 (11%)	1,230	517 (8%)	1,137 (13%)	1,654	594 (9%)	1,186 (13%)	1,780
Senior lecturer	1,422 (26%)	2,404 (29%)	3,826	1,680 (27%)	2,458 (28%)	4,138	1,867 (27%)	2,437 (27%)	4,304
Lecturer	3,070 (55%)	3,032 (36%)	6,102	3,134 (51%)	3,020 (35%)	6,154	3,547 (51%)	3,333 (37%)	6,880
Junior lecturer	444 (8%)	377 (4%)	821	491 (8%)	412 (5%)	903	482 (7%)	366 (4%)	848
Total	5,541	8,400	13,998	6,205	8,685	14,974	6,970	8,923	15,893

Source: Adapted from Boshoff & Bosch (2012) The SABPP Women's Report 2012, p. 14.

According to Boshoff and Bosch (2012), women reach a glass ceiling at senior lecturer level, and are therefore at a disadvantage in terms of headcount and the possibility of being awarded a professorship if they have a doctorate and are of the same age as the men. According to Budworth and Mann (2010), the promotion of women into leadership roles is restricted by barriers and obstacles, which has caused the gender ratio of top management teams to be skewed, although the amount of women in managerial positions has been rising. Female leaders are more prone to using a transformational leadership style. Northouse (2010) stated that transformational leadership style is seen as more effective than others as it entails an extraordinary form of influence that moves followers to achieve more than what is generally expected of them. It is a method that often includes charismatic and visionary leadership. With this said, female leaders are still assessed less positively than males (Eagly, & Karau, 2002, as cited by Budworth, & Mann 2010), particularly in environments that are male-dominated and strongly hierarchical (Eagly et al., as cited by Budworth, & Mann, 2010).

According to Geldenhuys (2011), women in leadership positions usually have the following characteristics ascribed to them: the ability to react optimistically and with sympathy, a readiness to speak their minds, sincerity, supportive, believing in the influence of groups and teams, and the capability to stay in charge and maintain confidence. Having women in leadership positions will therefore benefit organisations.

2.6 Conclusion

The literature review discussed the theoretical framework for this study. It presented an overview of the career development of women, as well as the associated gender issues. The factors that facilitate female career advancement were briefly introduced. The glass ceiling, sexual harassment, work–family conflict, and demographic trends were identified as major barriers that constrain women’s advancement in academia.

CHAPTER 3: RESEARCH DESIGN AND METHODOLOGY

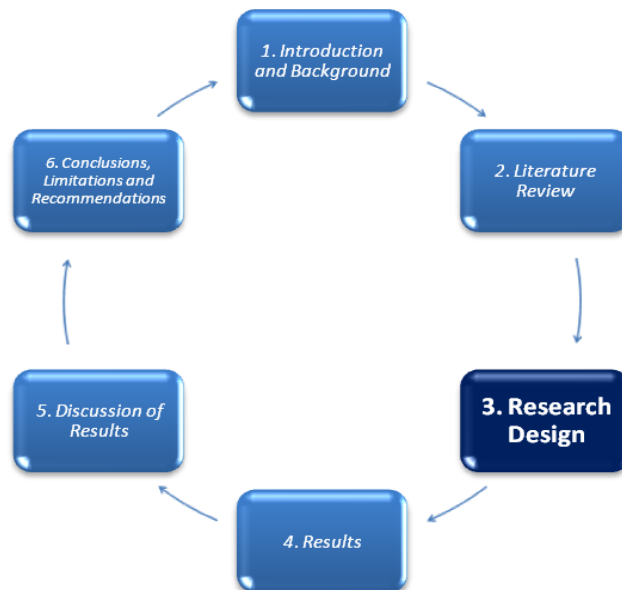


Figure 3-1: Chapter 3 in Context

3.1 Introduction

The aim of this research was to determine what the gender perceptions are of factors affecting the career advancement of female academics. This chapter discusses the research paradigm, the strategy of enquiry, sampling, data collection procedures and data analysis. The chapter in addition also discusses the research ethics that needed to be taken into consideration.

3.2 Research Paradigm

The post-positivist assumptions and worldview constitute the more traditional form of research and is, at times, called the scientific method. The philosophy that directs the post-positivist approach is that causes determine the effects or outcomes of a situation (Creswell, 2009). That is why researchers feel the need to identify and assess the causes of specific phenomena. Maree (2010, p. 65) stated that “Post-positivist approaches assume that reality is multiple, subjected and mentally constructed by individuals.” According to the post-positivist paradigm, there are laws and theories that direct the world. In order for us to understand the world better, those theories need to be tested and

verified. In the post-positivist worldview, it is of extreme importance to study and observe the behaviour of individuals by using numeric measurements (Creswell, 2009).

The post-positivist approach to research can be divided into the following steps:

- Identification of the theory;
- Collection of data that supports or refutes the theory; and
- Necessary revisions before additional tests are performed.

Post-positivism is based on empirical observation and measurement, theory verification, determination, and reductionism (Creswell, 2009). The post-positivist paradigm was applied during the present study, as it attempts to find a relationship between constructs, using questionnaires to gather data.

3.3 Description of inquiry strategy and broad research design

A strategy of inquiry involves models that determine the exact course to follow when conducting a research, i.e. quantitative strategies of inquiry developed during the past two centuries. These days, there are several complex and extremely precise inquiry strategies that integrate elaborate equations and structural designs (Creswell, 2009). Creswell (2009) kept the strategies uncomplicated, only focusing on two important inquiry methods, namely survey and experimental research.

- **Survey research:** This method provides a quantitative or numeric description of the variables measured in a population. This can be accomplished by selecting a sample from that population and collecting data by means of questionnaires or structured interviews (Creswell, 2009).
- **Experimental research:** This method tries to verify whether a specific treatment influences an outcome. A specific treatment would be given to one group, while it is withheld from the other. The impact of the treatment is then assessed by the scores of each group's outcome (Creswell, 2009).

A survey research was followed in the present research design. The reason for choosing this strategy of inquiry was directed by the research question, the philosophical point of view, and the purpose statement. The preferred outcomes can only be accomplished by performing a survey in a sample group.

The following descriptions reflect the characteristics of this study:

- *Empirical study*: Saunders, Lewis, and Thornhill (2009) stated that empirical studies refer to research where the researcher collects new data. For the purpose of this study, new data were collected from male and female academics in South Africa.
- *Basic research*: Basic research is carried out in order to understand processes and their outcomes (Saunders et al., 2009). According to Zikmund (2003), it is undertaken in order to increase the body of scientific knowledge. The present study can be classified as basic research, since the researcher wanted to understand the factors influencing the career advancement of female academics.
- *Descriptive study*: The objective of a descriptive study is to reveal a precise profile of a person, event, or situation (Robinson, 2002, as cited by Saunders et al., 2009). The present study describes the factors that affect the career advancement of female academics in South African HEIs.
- *Cross-sectional*: This refers to a study that is conducted only once (Cooper, & Schindler, 2006). For the purpose of the present study, the respondents only needed to complete the questionnaire once. It was not necessary to collect data at different points in time.
- *Primary data*: This is data that are collected for a specific study (Zikmund, 2003). For the purpose of the present study, data were collected specifically for the study.
- *Non-experimental*: For the purpose of the present study, no variables were measured. Therefore it was a non-experimental study.

3.4 Sampling

3.4.1 Target population, context, and units of analysis

The target population for the study consisted of male and female academics from different South African HEIs. The sampling units were the individual male and female academics working at public South African HEIs.

3.4.2 Sampling method

Convenience sampling was used for this study. According to Leedy and Omrad (2010), convenience sampling identifies a representative population that is easily available. In the present study, male and female academics in South African HEIs were asked to complete the questionnaire.

3.4.3 Sample size

According to Maree (2009), greater samples are superior in terms of representativeness, statistical analysis, and accuracy. In order to ensure that the results obtained are not so specific to the sample that they cannot be generalised back to the wider population, the highest sample size possible should be attained, to avoid over-fitting the data (Hertzog, & Boomsma, 2009). In the present study, the sample was large enough to help answer the research question accurately, but not so large that the process of sampling became inefficient and uneconomical.

3.5 Data collection procedure

This study forms part of the South African Netherland Project for Alternatives in Development (SANPAD) research project, in collaboration with the Vrije University of the Netherlands. Permission for the project was first obtained from the head of Skills Development of Higher Education South Africa. The questionnaires for the research project were distributed in hard copy via the skills development facilitators to a stratified random sample of academics in the identified HEIs. Permission to use the questionnaires was obtained from the relevant developers, and subjected to an ethical clearance process. Questionnaires were treated anonymously, to protect the identity of the respondents.

3.5.1 Specific attributes and characteristics of the units of analysis

Male and female academics in South African HEIs were identified as the units of analysis for this study. It was essential to gain insight into the sample population, in order to understand the results obtained from the study. To recognise the gender perceptions of factors affecting the career advancement of female academics, the population was first divided by gender. Another characteristic that was identified from the sample population was job title. By establishing these, the researcher was able to determine the gender groups' perceptions of factors affecting the career advancement of female academics.

Other attributes and characteristics that were also measured in the study were ethnicity, marital status, home language, age, highest level of qualification, work experience, number of years in current job, promotions, employment basis, hours worked per week, academic discipline, department and professional registration. These were furthermore used to determine if there were any significant trends in factors that affect female academics' career advancement.

3.5.2 Measurement instrument

The researchers used the Career Advancement Questionnaire for Women developed by Zhong (2006) to measure the factors that facilitate women's career advancement. The questionnaire consists of 37 items, and measures three career-related constructs. The first part of the questionnaire focuses on factors that facilitate the career advancement of female academics. Fifteen items measure the facilitating factors. Respondents were asked to answer on a six-point Likert scale, with 1 being *Strongly Disagree* and 6 being *Strongly Agree* on the factors that facilitate women's career advancement. The questionnaire showed an acceptable Cronbach alpha of 0.839 for this construct in a previous South African study (Barkhuizen, Stanz, & Hajee-Ozman, 2012).

The second part of the questionnaire focuses on factors that constrain the career advancement of female academics. Fifteen items measure the constraining factors. Respondents were requested to respond on a six-point Likert scale, with 1 being *Strongly disagree* and 6 being *Strongly agree*. The questionnaire showed an acceptable Cronbach

alpha of 0.862 for this construct in a previous South African study (Barkhuizen, Stanz, & Hajee-Ozman, 2012).

The third part of the questionnaire focuses on the gender issues that constrain the career advancement of female academics. Nine items measure gender issues such as : “*The factors that contribute to career advancement are different for men and women*” and “*Women face significant obstacles to career advancement in the organisation.*” Respondents were requested to respond on a six-point Likert scale, with 1 being *Strongly disagree* and 6 being *Strongly agree*. The questionnaire showed an acceptable Cronbach alpha of .829 in the study conducted by Zhong (2006).

Biographical information that was gathered included: Ethnicity, Age, Marital status, Educational qualification, Job title, Job category, Years at current institution, and Work hours.

3.6 Data analysis

The data was stored on two different computers, as well as on an external hard drive, to guarantee that the data did not get lost. There was little need to secure the data, as the data-gathering process was completely anonymous; nevertheless, the consent forms signed by the participants were stored in a password-protected folder (for five years), and the questionnaire booklet in a locked cabinet, to ensure that the participants remain anonymous.

The researcher transferred all the raw data that was captured to an Excel spreadsheet. The researcher made use of a statistical analysis program, SPSS, to perform simple regression and factor analysis. It was important to ensure that all the data were entered correctly into SPSS, to avoid errors. According to Saunders et al. (2009), an exploratory data analysis approach is also useful for analysing data.

The data analyses were done with the aid of SPSS (Field, 2009). Descriptive statistics (i.e. means, standard deviations, skewness, kurtosis, frequencies, and cross-tabulations were calculated). Exploratory factor analysis was used to determine the underlying factor structure of the Career Measurement. This was followed by a reliability analysis. A cut-off point of $\alpha > 0.70$ was used as a guideline (Field, 2009). Analyses of variance (ANOVAs) were used to test for the significance of differences in the perceptions of career factors of the two gender groups. A cut-off point of $p \leq 0.05$ was used for the significance of the results (Field, 2009). For purposes of the present research, Cohen's (1988) guidelines were used to interpret the effect sizes: 0.0099 constituted a small effect, 0.0588 a medium effect, and 0.1379 a large effect.

3.7 Assessing and demonstrating the quality and rigour OF the research design

3.7.1 Sources of bias or error

According to Kevin (as cited by Saunders et al., 2009), bias can occur for two reasons. The first is deliberate distortion. This take place when data are recorded inaccurately on purpose. In other cases, distortions may be deliberate but not with the aim of gaining advantages. Respondents completing a questionnaire might adjust their answers to please the interviewer (Saunders et al., 2009). Respondents not answering some of the questions in the questionnaire might also affect the findings.

The second cause of bias is when changes are made in the way data are collected. Changing the original process, by implementing new procedures or changing the form of data collection, can introduce bias (Saunders *et al.*, 2009).

3.7.2 Reliability and validity

3.7.2.1 Content validity

According to Maree (2010), this refers to the degree to which the instrument covers the complete content of the particular construct that it sets out to measure. Since the

questionnaire that was used makes use of the five-point Likert scale, content validity was guaranteed through the implementation of a multi-stage approach of item validation.

3.7.2.2 Reliability

Whilst a number of items may be created to measure a certain construct, there should be a high degree of similarity among them, since they are assumed to measure a common construct (Maree, 2010). The coefficient that is used to measure the reliability of an instrument is called Cronbach's alpha coefficient.

3.8 Research ethics

- The questionnaire was not plagiarised, and had the specific intent of measuring the scales for this research. Permission to use this questionnaire was obtained from the holder.
- The purpose of the study was described to the participants.
- The participants in this study took part voluntarily, and could withdraw at any time. The identity of the respondents will also remain anonymous.
- All questionnaires were anonymous. All participants' identities were confidential.
- No financial or non-financial incentives were used to encourage participation.
- The data and findings will be safely stored for five years, in case of an inquiry.
- An informed consent form was given to participants to sign before they engaged in the research. An example of the consent form is included in Annexure B (p. 30).
- No information given was held against any participant.
- The limits and methodological constraints that determine the validity of the findings were indicated.
- Data or observations were not changed.

3.9 Conclusion

This chapter discussed the methodology used in this study. It described the research design, and provided details of the population and the sample. It explained the collection of data and the data analysis procedures used. Consideration was given to the validity, reliability, and ethics applicable to this study.

CHAPTER 4: RESULTS



Figure 4-1: Chapter 4 in Context

4.1 Introduction

This chapter presents the results obtained from the data analysis done per the research design and methodology discussed in Chapter 3. This chapter includes all results obtained from the empirical statistical tests relating to the objectives set for the study

This chapter is structured into three distinct phases:

- **Phase 1:** Sample description;
- **Phase 2:** Results pertaining to the measurement;
- **Phase 3:** General differences; and
- **Phase 4:** Testing of research hypotheses.

Following is the presentation on the demographics of the sample used in this research study, presented as Phase 1 of the data analysis.

4.2 Phase 1: Sample Demographics

This section explains the demographics of the sample group used in this study. Male and female academics in South Africa were identified as the units of analysis for this study. The biographical characteristics and attributes collected from the academics from the various participating HEI's include the following: gender, ethnicity, language, age, marital status, qualifications, job level, job category, the number of years employed at the institution, the number of years in their current position, as well as the number of hours they work per week. A total of 360 questionnaires were sent out to the identified sample of which 158 completed questionnaires were received and only 130 usable for data analyses. This represents a response rate of 36%. The demographic characteristics of the sample are discussed next.

4.2.1 Gender

Table 4-1 represents the gender distribution of the sample group. From this table it is evident that most of the respondents were female (56%) followed by males (44%).

Table 4-1: Frequency Distribution for Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	55	42.3	44.0	44.0
	Female	70	53.8	56.0	100.0
	Total	125	96.2	100.0	
Missing Total	System	5	3.8		
		130	100.0		

4.2.2 Marital status

Table 4-2 shows that more than half of the respondents were married (64.5%) and 21% of respondents single. In addition eleven respondents were divorced (8.9%) and 4.8% of respondents being in a relationship, or engaged.

Table 4-2: Frequency Distribution for Marital Status

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Single/ widow/ widower	26	20.0	21.0	21.0
	Engaged/ in a relationship	6	4.6	4.8	25.8
	Married	80	61.5	64.5	90.3
	Divorced	11	8.5	8.9	99.2
	Separate	1	.8	.8	100.0
	Total	124	95.4	100.0	
Missing	System	6	4.6		
Total		130	100.0		

4.2.3 Ethnicity

Table 4-3 shows that the largest proportions of respondents were of White (44.7%) and African (39.8%) descent. Other respondents included Asians (9.8%) and Coloureds (5.7%).

Table 4-3: Frequency Distribution for Ethnicity

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Black	49	37.7	39.8	39.8
	Coloured	7	5.4	5.7	45.5
	Asian	12	9.2	9.8	55.3
	White	55	42.3	44.7	100.0
	Total	123	94.6	100.0	
Missing	System	7	5.4		
Total		130	100.0		

4.2.4 Language

As can be seen from Table 4-4 most of the respondents' home languages were English speaking (37.9%) followed by Indigenous speaking individuals (36.2%). The minority of the respondents was Afrikaans speaking (27.7%).

Table 4-4: Frequency Distribution of Home Language

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Afrikaans	36	27.7	29.0	29.0
	English	47	36.2	37.9	66.9
	Indigenous	41	31.5	33.1	100.0
	Total	124	95.4	100.0	
Missing	System	6	4.6		
Total		130	100.0		

4.2.5 Age

Table 4-5 indicates that most of the respondents were aged between 40 to 49 (33.1%) years. In addition 25.8% of the respondents were aged between 30 to 39 years and 25% respondents between 50 to 59 years old

Table 4-5: Frequency distribution of Age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	20-29	13	10.0	10.5	10.5
	30-39	32	24.6	25.8	36.3
	40-49	41	31.5	33.1	69.4
	50-59	31	23.8	25.0	94.4
	60 plus	7	5.4	5.6	100.0
	Total	124	95.4	100.0	
Missing	System	6	4.6		
Total		130	100.0		

4.2.6 Education

From Table 4-6 it is evident that the minority of respondents were in possession of a Bachelor degree (3.1%) followed by the 18 respondent (14.2%) who had 4 year Degree or Honours. The majority of the respondent possessed Masters (43.3%) and Doctoral (39.4%) degrees.

Table 4-6: Frequency Distribution of Highest Qualifications

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Bachelor's Degree	4	3.1	3.1	3.1
	4 year Degree or Honours	18	13.8	14.2	17.3
	Masters Degree	55	42.3	43.3	60.6
	Doctoral Degree	50	38.5	39.4	100.0
	Total	127	97.7	100.0	
Missing	System	3	2.3		
Total		130	100.0		

4.2.7 Job title

As indicated by Table 4-7 most of the respondents were Lecturers (40.2%) followed by Senior lecturers (26.8%) and Professors (14.2%). Ten Junior lecturers (7.9%) and 14 Associate professors (11%) took part in this study.

Table 4-7: Frequency Distribution of Job Levels

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Junior lecturer	10	7.7	7.9	7.9
	Lecturer	51	39.2	40.2	48.0
	Senior lecturer	34	26.2	26.8	74.8
	Associate professor	14	10.8	11.0	85.8
	Professor	18	13.8	14.2	100.0
	Total	127	97.7	100.0	
Missing	System	3	2.3		
Total		130	100.0		

4.2.8 Years' work experience

According to Table 4-8 the majority of the respondents were employed between 0 to ten years in their current job (88.7%). Only 13 respondents (10.5%) were employed between 11 to 20 years in the same job followed by 1 respondent that reported to be 21 to 30 years in the same vacancy.

Table 4-8: Frequency Distribution of the Number of Years of Work Experience

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0-10 years	110	84.6	88.7	88.7
	11 - 20 years	13	10.0	10.5	99.2
	21 - 30 years	1	.8	.8	100.0
	Total	124	95.4	100.0	
Missing	System	6	4.6		
Total		130	100.0		

4.2.9 Work hours

From Table 4-9 it is evident that 39.8% of the respondents work between 41 to 50 hours per week followed by 25% of the respondents that indicated that they work between 31 to 40 hours and more than 51 hours per week. The minority of the respondents work between 11 to 20 hours (3.9%) per week.

Table 4-9: Frequency Distribution of the Hours Worked Per Week

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Up to 10	3	2.3	2.3	2.3
	11.- 20	5	3.8	3.9	6.3
	21 - 30	5	3.8	3.9	10.2
	31 - 40	32	24.6	25.0	35.2
	41 - 50	51	39.2	39.8	75.0
	51 or more	32	24.6	25.0	100.0
	Total	128	98.5	100.0	
Missing	System	2	1.5		
Total		130	100.0		

4.2.10 Cross tabulations

Cross-tabulations were performed to see how the different gender groups compared in terms of their respective demographic characteristics.

Table 4-10: Cross-tabulations of Gender according to Ethnicity

	Ethnicity			
	Male		Female	
	Frequency	Percent	Frequency	Percent
Black	29	52.7	19	27.1
Coloured	4	7.3	3	4.3
Asian	2	3.6	10	14.3
White	18	32.7	36	51.4
Total	53	96.4	68	97.1

From Table 4-10 it is evident that the male academics in this sample are predominantly black (52.7%) followed by the White ethnic group (32.7%). Females academics were mostly representative of the white ethnic group (51.4%) followed by Blacks (27.1%).

Table 4-11: Cross-tabulations of Gender according to Age

	Age			
	Male		Female	
	Frequency	Percent	Frequency	Percent
20-29	2	3.6	11	15.7
30-39	14	25.5	18	25.7
40-49	17	30.9	23	32.9
50-59	15	27.3	15	21.4
60 plus	5	9.1	2	2.9
Total	53	96.4	69	98.6
System	2	3.6	1	1.4
	55	100.0	70	100.0

Table 4-11 shows that most of the male (30.9%) and female academics (32.9%) were 40-49 years of age. Fifteen (27.3%) of the male respondents were between 50-59 years of age and 25.7% of females were between 30-39 years. In addition 25.5% male academics were aged between 30-39 years and fifteen (21.4%) female respondents reported to be between 50-59 years of age.

Table 4-12: Cross-tabulations of Gender according to Educational Qualifications

	Male		Female	
	Frequency	Percent	Frequency	Percent
Bachelor's degree			4	5.7
4-year or honours degree	5	9.1	13	18.6
Master's degree	26	47.3	27	38.6
Doctoral degree	24	43.6	26	37.1
Total	55	100.0	70	100.0

Table 4-12 shows most of the male (43.6%) and female (38.6%) respondents in this study were in possession of a Masters Degree followed by Doctoral degree.

Table 4-13: Cross-tabulations of Gender according to Job Title

	Male		Female	
	Frequency	Percent	Frequency	Percent
Junior lecturer	3	5.5	7	10.0
Lecturer	22	40.0	28	40.0
Senior lecturer	12	21.8	20	28.6
Associate professor	7	12.7	5	7.1
Professor	11	20.0	7	10.0
Total	55	100.0	67	95.7

From Table 4-13 it is clear that most of the male (40%) and female (40%) respondents were lecturers. The sample further consisted of 20% male professors compared to the 10% female professors. Senior lecturers in this group consist of 21.8% males and 28.6% females.

Table 4-14: Cross-tabulations of Gender according to Number of Hours Worked per Week

	Male		Female	
	Frequency	Percent	Frequency	Percent
Up to 10	2	3.6	1	1.4
11 - 20	3	5.5	1	1.4
21 - 30	3	5.5	2	2.9
31 - 40	10	18.2	22	31.4
41 - 50	21	38.2	28	40.0
51 or more	15	27.3	15	21.4
Total	54	98.2	69	98.6
System	1	1.8	1	1.4
	55	100.0	70	100.0

According to Table 4-14, 21 male respondents reported to work 41 to 50 hours per week followed by 27.3% working more than 51 hours. Female academics reported to work mostly between 41-50 hours followed by 21.4% working more than 21 hours per week.

4.3 Phase 2: Results pertaining to the instruments

This section reports the psychometric properties of the measuring instruments. These included the sample adequacy and sphericity of the item-correlation matrix, exploratory factor analysis and reliability analyses. The KMO indicated a value of 0.817 which according to Hair, Black, Babin, Anderson, and Tatham (2005) is acceptable for factor analysis. The Factor and Reliability Analyses of the different sub-scales as identified by Zhong (2006) are reported in next.

4.3.1 Results: Facilitating Factor Scale

An exploratory factor analyses using Principle Axis Factoring was first conducted on the 15 items measuring the facilitating factors. The principal axis factor analysis initially resulted in four factors. However closer inspection of the pattern matrix indicated the items primarily loaded on one factor. One of the items measuring “Luck” had low factor loadings and was omitted from further analysis. An exploratory factor analysis was conducted again on the remaining 14 items of the Facilitating Factor Scale. The factor loadings of the remainder of the items showed acceptable factor loadings of 0.421 and 0.812. The factor was labelled “Facilitators” and explained 38.856 % of the variance. The Factor matrix for the Facilitating Scare is presented in Table 4-15 below.

Table 4-15: Factor Matrix for the Facilitating Scale

Factor Matrix ^a	
	Factor
	1
Hard work	.665
Attitude towards work	.729
Effective communication skills	.750
Problem-solving skills	.812
Personal sacrifice	.557
Personality	.636
Job knowledge	.758
Support & guidance from mentor	.536
Educational qualifications	.582
Opportunities	.496
Career goals	.636
Mobility	.501
Networking opportunities	.421
Family support	.501

Extraction method: Principal axis factoring.

The descriptive statistics and Cronbach alpha of the facilitating factors are reported in Table 4-16 below.

Table 4-16: Descriptive Statistics and Cronbach Alpha of the Facilitating Factors

	Mean	SD	Skewness	Kurtosis	Cronbach alpha
Facilitating factors	3.9754	.52720	-.809	1.625	.839

Table 4-16 shows a good reliability for the Facilitating Factor scale. Closer inspection of the mean scores shows that the respondents are in agreement that facilitating factors are available to assist woman academics in their career advancement.

4.3.2 Results: Constraining Factor Scale

Exploratory factor analyses using Principle Axis Factoring was first conducted on the 15 items measuring the constraining factors. The principal axis factor analysis initially resulted in three factors. However closer inspection of the pattern matrix indicated the items primarily loaded on one factor. The factor loadings of the items showed acceptable loadings of between 0.374 and 0.778. The factor was labelled *Constraining Factors* and explained 37.337 % of the variance. The results of the Factor Matrix are reported in Table 4-17 below.

Table 4-17: Factor Matrix of the Constraining Factor Scale

Factor matrix	
	Factor
	1
Difficulty in establishing credibility	.640
Conflicts with family responsibilities	.524
Job characteristics	.455
Lack of equity in pay	.628
Lack of equity in training	.688
Lack of equity in promotional decisions	.724
Old boy network	.679
Sexual harassment	.579
Inadequate job knowledge	.376
Lack of mentoring/coaching	.711
Lack of role models	.668
Being married	.507
Being a single parent	.485
Childcare responsibilities	.575
Lack of support systems at work	.778
Extraction method: Principal axis factoring	

The descriptive statistics and Cronbach alpha of the constraining factor are reported in Table 4-18 below.

Table 4-18: Descriptive Statistics and Cronbach alpha of the Constraining Factor

	Mean	Std. deviation	Skewness	Kurtosis	Cronbach's alpha
ConstrainingA	3.5635	.94024	-.133	-.186	.893
Valid N (listwise)					

Table 4-18 shows good reliability for the Constraining Factor scale. The results further shows that the respondents are in agreement that there is a high level of constraining factors that can have a negative impact on female academics career advancement.

4.3.3 Results: Gender Issues Scale

A factor analysis was conducted using the Principle Axis Factoring extraction method on the nine items measuring gender issues. The Principle Axis Factor Analysis initially resulted in five factors. However a closer inspection of the pattern matrix indicated the items primarily loaded onto two factors. Two items were excluded due to low and problematic factor loadings. The factor explained 52.002% of the variance. The Factor Matrix of the Gender Issues Scale is reported in Table 4-19 below.

Table 4-19: Factor Matrix for the Gender Issues Scale

Factor matrix ^a	
	Factor
	1
GI3	.513
GI4	.748
GI5	.827
GI6	.821
GI7	.850
GI8	.716
GI9	.474

Extraction method: Principal axis factoring

The descriptive statistics and Cronbach alpha of the Gender issues factor are reported in Table 4-20 below.

Table 4-20: Descriptive Statistics and Cronbach Apha of the Gender Issues Scale

	Mean	Std. deviation	Skewness	Kurtosis	Cronbach's alpha
GenderIssuesA	3.5022	1.14965	.041	-.567	.872
Valid N (listwise)					

The Cronbach Alpha in Table 4-20 shows good reliability. In addition, the results in Table 4.20 shows that on average the respondents were in agreement that there is a high level of gender issues that can have a negative impact on female academics career advancement.

4.4 Phase 3: General Differences

The results of the gender differences on the three identified factors are reported in the ensuing section.

4.4.1 General differences between the three scales

Table 4-21 reports the descriptive statistics of the Male and Female academics in terms of the Facilitating, Constraining and Gender Issues Factor.

Table 4-21: Descriptive Statistics for Male and Female Respondents

	Male		Female	
	Mean	SD	Mean	SD
Facilitating	4.6772	.67418	5.1102	.57048
Constraining	3.2885	.94586	3.7794	.90146
Gender issues	3.3766	1.05566	3.6082	1.20181

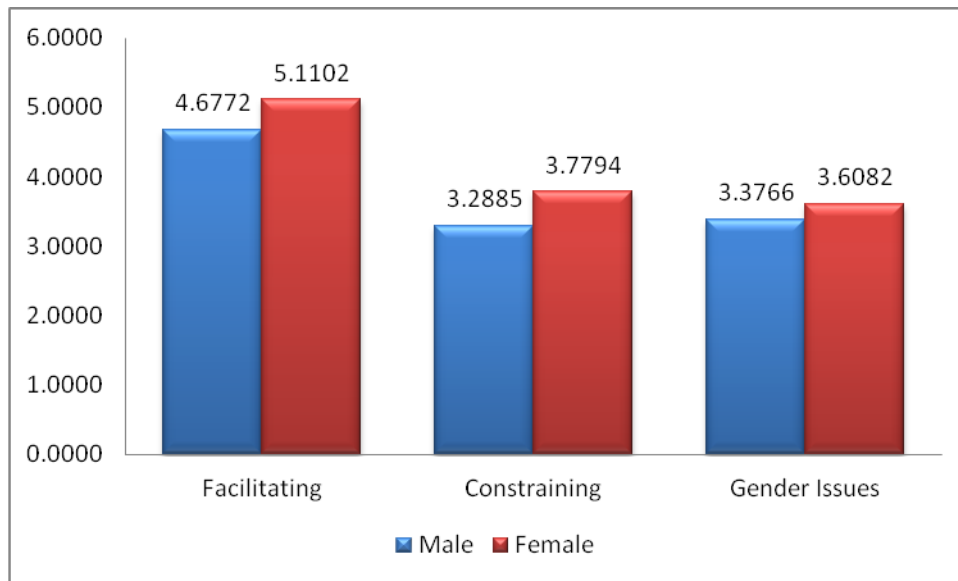


Figure 4-2: Bar chart illustrating the general differences of the three scales

As can be seen from Figure 4-2 there is little difference in male and female respondent's perceptions of the three factors. It is evident that the female academics' mean scores on all three factors are higher compared to those of the males. Next the results per factor are reported.

4.4.2 Facilitating factors

The means of male and female respondents regarding facilitating factors affecting the career advancement of female academics are reported in Table 4-22 below.

Table 4-22: Comparison of Facilitating Factors

Facilitating factors	Males			Females		
	Mean	SD	Rank	Mean	SD	Rank
Hard work	4.85	.989	5	5.37	.745	1
Attitude towards work	4.91	.996	4	5.46	.582	2
Effective communication skills	4.91	.908	3	5.39	.597	3
Problem-solving skills	4.73	1.044	8	5.29	.783	5
Personal sacrifice	4.35	1.220	13	4.86	1.407	11
Personality	4.58	1.013	11	4.86	1.053	12
Job knowledge	4.96	.816	1	5.37	.802	4
Support & guidance from mentor	4.62	1.097	10	5.04	.955	9
Educational qualifications	4.95	1.079	2	5.29	.919	6
Opportunities	4.84	.996	6	5.00	1.077	10
Career goals	4.71	1.012	9	5.06	.883	8
Mobility	4.15	1.283	14	4.57	1.124	14
Networking opportunities	4.44	1.118	12	4.80	1.098	13
Family support	4.75	1.040	7	5.20	.987	7

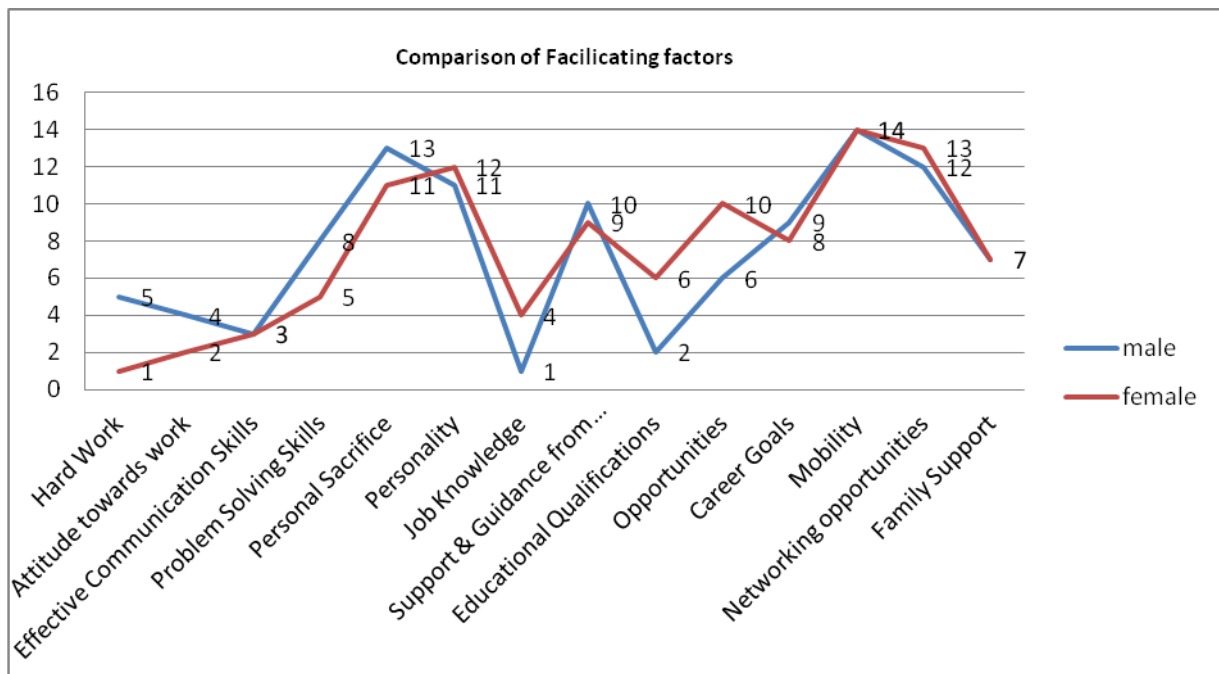


Figure 4-3: Line chart illustrating the comparison of facilitating factors

Table 4-22 and Figure 4-3 show that male academics ranked *job knowledge*, *educational qualification*, *effective communication skills*, and *attitude toward work* as the most important facilitating factors in female academics' career advancement. Female academics ranked *hard work*, *effective communication skills*, *attitude toward work*, and *job knowledge* as the most essential facilitating factors. The above results reveal that male and female respondents academics are mostly in agreement with most of the facilitating factors. However, female respondents did not agree with the males that *educational qualification* is an important facilitating factor. Furthermore, male respondents did not agree with female respondents' perception that hard work facilitates career advancement.

4.4.3 Constraining factors

The following section compares the means of male and female respondents regarding constraining factors affecting the career advancement of female academics. The results are reported in Table 4-23 below.

Table 4-23: Comparison of Constraining Factors

	Males			Females		
	Mean	SD	Rank	Mean	SD	Rank
Difficulty in establishing credibility	3.65	1.250	4	3.97	1.296	6
Conflicts with family responsibilities	4.15	1.193	1	4.70	1.172	1
Job characteristics	3.76	1.247	2	3.46	1.212	11
Lack of equity in pay	2.96	1.598	12	3.74	1.510	8
Lack of equity in training	2.64	1.379	15	3.24	1.479	14
Lack of equity in promotion decisions	2.76	1.490	14	3.67	1.585	9
Old boy network	3.05	1.353	11	4.03	1.569	4
Sexual harassment	2.80	1.445	13	3.07	1.563	15
Inadequate job knowledge	3.13	1.711	9	3.40	1.628	12
Lack of mentoring/coaching	3.38	1.434	6	4.01	1.489	5
Lack of role models	3.22	1.449	8	3.67	1.548	10
Being married	3.11	1.462	10	3.30	1.621	13
Being a single parent	3.33	1.552	7	3.77	1.704	7
Childcare responsibilities	3.75	1.322	3	4.36	1.514	2

Lack of support systems at work	3.64	1.419	5	4.34	1.503	3
Difficulty in establishing credibility	3.65	1.250	4	3.97	1.296	6

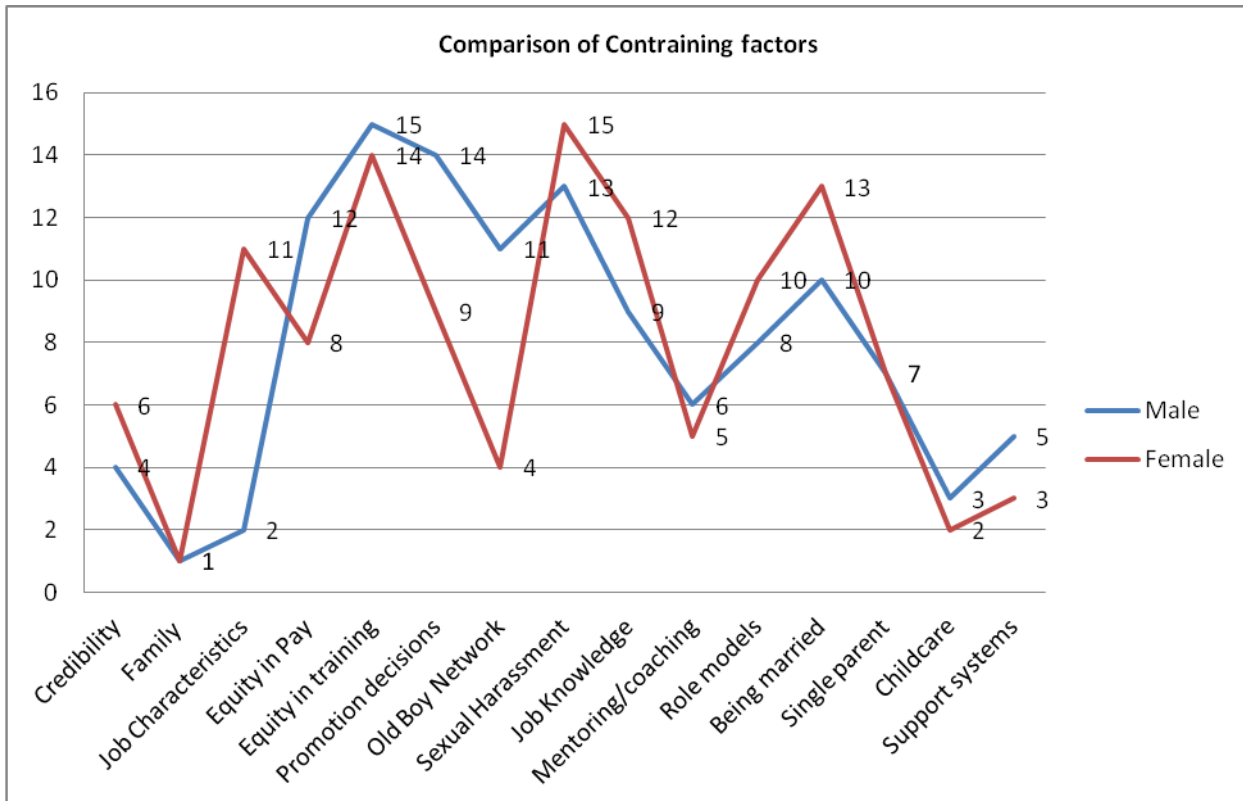


Figure 4-4: Line chart illustrating the comparison of constraining factors.

Table 4-23 and Figure 4-4 indicated that male academics ranked *conflict with family responsibility, job characteristics, childcare responsibilities, and difficulty in establishing credibility* as the main constraining factors that have a negative impact on female academics' career advancement. Female academics ranked *conflict with family responsibilities, childcare responsibilities, lack of support systems at work, and old boy network* as the most constraining factors. Male and Female academics rated *conflict with family responsibilities* as the main constraining factor, followed by *child care responsibilities, lack of support systems at work, and difficulty in establishing credibility*. The two gender groups were in disagreement regarding *old boy network, job characteristics, and lack of equity in pay*.

4.4.4 Gender issues

This section will compare the means of male and female respondent's perceptions regarding gender issues in HEI's. The results are reported in Table 4-24.

Table 4-24: Comparison of Gender Issues

	Males			Females		
	Mean	SD	Rank	Mean	SD	Rank
Women face significant obstacles in career advancement in the organisation.	2.82	1.307	7	3.81	1.627	2
Female managers/supervisors treat female employees differently to male employees.	3.42	1.307	4	3.01	1.460	7
Male managers/supervisors treat female employees differently to male employees.	3.42	1.307	5	3.40	1.469	6
Female employees in the organisation respond differently to female managers than to male managers.	3.78	1.307	1	3.50	1.530	5
Male employees in the organisation respond differently to female managers than to male managers.	3.49	1.307	3	3.63	1.599	4
The factors that contribute to career advancement are different for men and women.	3.18	1.307	6	3.69	1.638	3
The factors that constrain career advancement are different for men and women.	3.53	1.307	2	4.21	1.587	1

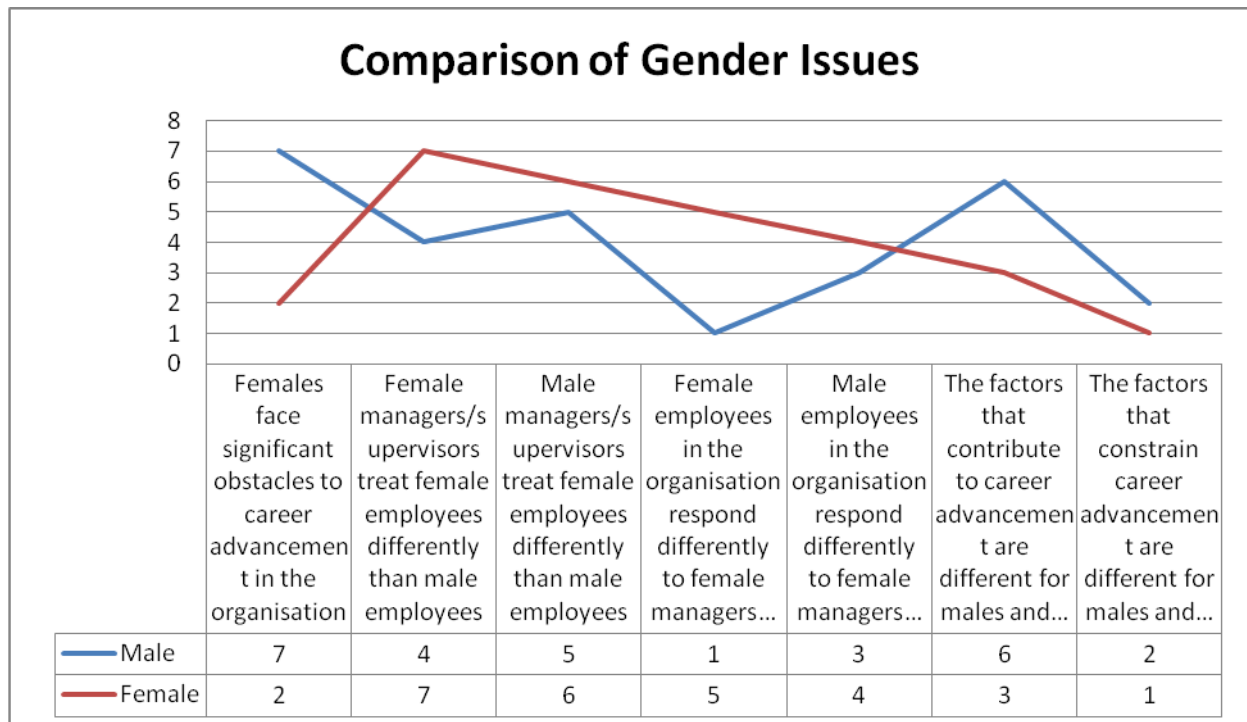


Figure 4-5: Line chart illustrating the comparison of gender issues.

Table 4-24 and Figure 4-5 shows that male and female academics are in disagreement regarding the perception that women face significant obstacles in career advancement in the organisation. However, they were in agreement that the factors that constrain career advancement differ for men and women, and that male employees in the organisation respond differently to female managers than to male managers.

Following on this discussion, the next section will deal with the last phase of data analysis: the testing of hypotheses that link to the objectives of the study at hand.

4.5 Phase 4: Testing of Research Hypotheses (ANOVAs)

For the purposes of this research study, three integrated hypotheses were formulated. The statistical tests of these hypotheses are briefly discussed below, together with an indication of whether or not the hypotheses were accepted or rejected.

4.5.1 Testing of Hypotheses 1

H₀1: There are no significant differences between the gender groups in terms of the facilitating factors affecting the career advancement of female academics.

H_a1: There are significant differences between the gender groups in terms of the facilitating factors affecting the career advancement of female academics.

4.5.2 ANOVA:

The overall ANOVAs of the three subscales will now be discussed.

4.5.2.1 ANOVAs: Facilitating factors

Table 4-25: ANOVA for Facilitating Factors

		Sum of squares	df	Mean square	F	Sig.	Effect size
Hard work	Between groups	8.229	1	8.229	11.101	.001	.083
	Within groups	91.179	123	.741			
	Total	99.408	124				
Attitude towards work	Between groups	9.213	1	9.213	14.806	.000	.108
	Within groups	75.908	122	.622			
	Total	85.121	123				
Effective communication skills	Between groups	6.997	1	6.997	12.449	.001	.092
	Within groups	69.131	123	.562			
	Total	76.128	124				
Problem-solving skills	Between groups	9.605	1	9.605	11.675	.001	.087
	Within groups	101.195	123	.823			
	Total	110.800	124				
Personal sacrifice	Between groups	8.064	1	8.064	4.571	.034	.036
	Within groups	217.008	123	1.764			
	Total	225.072	124				
Personality	Between groups	2.335	1	2.335	2.176	.143	.017
	Within groups	131.953	123	1.073			
	Total	134.288	124				
Job knowledge	Between groups	5.122	1	5.122	7.848	.006	.060
	Within groups	80.270	123	.653			
	Total	85.392	124				
Support & guidance from mentor	Between groups	5.555	1	5.555	5.344	.022	.042
	Within groups	127.853	123	1.039			
	Total	133.408	124				

Educational qualifications	Between groups	3.566	1	3.566	3.621	.059	.029
	Within groups	121.122	123	.985			
	Total	124.688	124				
Opportunities	Between groups	.825	1	.825	.760	.385	.006
	Within groups	133.527	123	1.086			
	Total	134.352	124				
Career goals	Between groups	3.731	1	3.731	4.206	.042	.033
	Within groups	109.117	123	.887			
	Total	112.848	124				
Mobility	Between groups	5.589	1	5.589	3.906	.050	.031
	Within groups	175.979	123	1.431			
	Total	181.568	124				
Networking opportunities	Between groups	4.073	1	4.073	3.324	.071	.026
	Within groups	150.727	123	1.225			
	Total	154.800	124				
Family support	Between groups	6.364	1	6.364	6.230	.014	.048
	Within groups	125.636	123	1.021			
	Total	132.000	124				

From Table 4-25 it is evident that male and female academics differed significantly in terms of their perception of *hard work, attitude toward work, personal sacrifice, problem-solving skills, job knowledge, effective communication skills, career goals, support and guidance from mentor, mobility, and family support* as facilitating factors for female academics' career advancement. Female academics perceived that effective communication skills, hard work, and attitude towards work contribute to their career advancement, while men differed from this view. However, the effect was small. Therefore, it can be concluded that there are significant differences between the gender groups in terms of perceptions regarding the facilitating factors affecting the career advancement of female academics.

4.5.2.2 ANOVAs: Constraining factors

H₀₂: There are no significant differences between the gender groups in terms of the constraining factors affecting the career advancement of female academics.

H_{a2}: There are significant differences between the gender groups in terms of the constraining factors affecting the career advancement of female academics.

Table 4-26: ANOVA for Constraining Factors

		Sum of squares	df	Mean square	F	Sig.	Effect Sizes
Difficulty in establishing credibility	Between groups	3.093	1	3.093	1.898	.171	.015
	Within groups	200.379	123	1.629			
	Total	203.472	124				
Conflicts with family responsibilities	Between groups	9.472	1	9.472	6.792	.010	.052
	Within groups	171.536	123	1.395			
	Total	181.008	124				
Job characteristics	Between groups	2.893	1	2.893	1.921	.168	.015
	Within groups	185.299	123	1.506			
	Total	188.192	124				
Lack of equity in pay	Between groups	18.701	1	18.701	7.790	.006	.060
	Within groups	295.299	123	2.401			
	Total	314.000	124				
Lack of equity in training	Between groups	11.329	1	11.329	5.495	.021	.043
	Within groups	253.599	123	2.062			
	Total	264.928	124				
Lack of equity in promotional decisions	Between groups	25.382	1	25.382	10.642	.001	.080
	Within groups	293.370	123	2.385			
	Total	318.752	124				
Old boy network	Between groups	29.221	1	29.221	13.372	.000	.098
	Within groups	268.779	123	2.185			
	Total	298.000	124				
Sexual harassment	Between groups	2.269	1	2.269	.992	.321	.008
	Within groups	281.443	123	2.288			
	Total	283.712	124				
Inadequate job knowledge	Between groups	2.291	1	2.291	.827	.365	.007
	Within groups	340.909	123	2.772			
	Total	343.200	124				
Lack of mentoring/coaching	Between groups	12.320	1	12.320	5.741	.018	.045
	Within groups	263.968	123	2.146			
	Total	276.288	124				
Lack of role models	Between groups	6.327	1	6.327	2.791	.097	.022
	Within groups	278.825	123	2.267			
	Total	285.152	124				
Being married	Between groups	1.167	1	1.167	.484	.488	.004
	Within groups	293.954	122	2.409			
	Total	295.121	123				
Being a single parent	Between groups	6.076	1	6.076	2.262	.135	.018
	Within groups	330.452	123	2.687			
	Total	336.528	124				
Childcare responsibilities	Between groups	11.646	1	11.646	5.675	.019	.044
	Within groups	250.378	122	2.052			
	Total	262.024	123				
Lack of support	Between groups	15.373	1	15.373	7.149	.009	.055

systems at work	Within groups	264.499	123	2.150
	Total	279.872	124	

From Table 4-26 it is apparent that male and female respondents differed significantly in terms of their perception of *lack of support systems at work, childcare responsibilities, lack of mentoring, old boy network, lack of equity in promotional decisions, lack of equity in training, and lack of equity in pay*, as well as *conflict with family responsibilities* as constraining factors affecting the career advancement of female academics. Because female respondents' mean scores were higher, they felt that the lack of support systems at work, childcare responsibilities, lack of mentoring, old boy networks, a lack of training, and the absence of equity in pay and promotion constrained their career advancement. The effect was small for each constraining factor. As a result, it can be concluded that there are significant differences between the gender groups in terms of the constraining factors affecting the career advancement of female academics.

4.5.2.3 ANOVAs: Gender issues

H₀₃: There are no significant differences between the gender groups in terms of the gender issues affecting the career advancement of female academics.

H_{a3}: There are significant differences between the gender groups in terms of the gender issues affecting the career advancement of female academics

Table 4-27: ANOVA for Constraining Factors

	Sum of squares	df	Mean square	F	Sig.	Effect Sizes
Females face significant obstacles in career advancement in the organisation.	3.674	5	.735	3.223	.009	.100
Within groups	27.126	119	.228			
Total	30.800	124				
Female managers/supervisors treat female employees differently than male employees.	1.171	5	.234	.940	.458	.019
Within groups	29.629	119	.249			
Total	30.800	124				
Male managers/supervisors treat female employees differently than male employees.	.631	5	.126	.498	.778	.000
Within groups	30.169	119	.254			
Total	30.800	124				
Female employees in the organisation respond differently to female managers than to male managers.	1.329	5	.266	1.073	.379	.009
Within groups	29.471	119	.248			

Total	30.800	124				
Male employees in the organisation respond differently to female managers than to male managers.	1.963	5	.393	1.621	.160	.002
Within groups	28.837	119	.242			
Total	30.800	124				
The factors that contribute to career advancement are different for male and female academics.	1.986	5	.397	1.641	.155	.025
Within groups	28.814	119	.242			
Total	30.800	124				
The factors that constrain career advancement are different for male and female academics.	1.948	5	.390	1.607	.163	.045
Within groups	28.852	119	.242			
Total	30.800	124				

From Table 4-27 it is evident that male and female respondents differed significantly in terms of their perceptions regarding women facing significant obstacles in their career advancement in the organisation. Female academics indicated that they do face more obstacles than male academics. The effect was medium. Therefore, it can be concluded that there are no significant differences between the gender groups in terms of the gender issues affecting the career advancement of female academics.

4.6 Conclusion

This section presented the results of the statistical analysis obtained from the data analysis done by means of SPSS. The first phase explained the demographics of the sample group used in this study with regards to the biographical information supplied by the respondents. Cross-tabulations were also presented to distinguish how the different gender groups compared in terms of their respective demographic characteristics. During Phase 2, the psychometric properties of the Career Questionnaire for women were observed, and the results of the factor- and reliability analyses were reported. The general differences regarding the scales for facilitating and constraining factors, as well as the Gender Issues Scale, were discussed during Phase 3. Phase 4 consisted of the testing and discussion of the three integrated hypotheses. Chapter 5 will give an overview, as well as an interpretation and discussion of the results presented in this chapter.

CHAPTER 5: DISCUSSION OF RESULTS



Figure 5-1: Chapter 5 in Context

5.1 Introduction

This chapter will present an overview of the results that emerged from the statistical analysis of the data. Furthermore, it will provide an interpretation and discussion of the results presented in Chapter 4.

This chapter will provide insights into the following research objectives, as stated in Chapter 1.

- Objective 1: To determine the current gender perceptions of factors that facilitate the career advancement of female academics.
- Objective 2: To determine the current gender perceptions of factors that constrain the career advancement of female academics.
- Objective 3: To determine the current gender perceptions of gender issues that influence the career advancement of female academics.

- Objective 4: To determine whether there are significant differences between the gender groups in terms of the facilitating factors affecting the career advancement of female academics.
- Objective 5: To determine whether there are significant differences between the gender groups in terms of the constraining factors affecting the career advancement of female academics.
- Objective 6: To determine whether there are significant differences between the gender groups in terms of the gender issues affecting the career advancement of female academics.

5.1 Objective 1: To determine the current gender perceptions of factors that facilitate the career advancement of female academics

Female respondents rated the items higher than male respondents, indicating that they viewed the items as more important. Male respondents ranked *job knowledge, education and qualification, effective communication skills, and attitude toward work* as the most important facilitating factors to assist females in their career advancement. Female respondents ranked *hard work, attitude toward work, effective communication skills, and job knowledge* as the most essential facilitating factors. Female respondents, however, did not agree with male respondents that educational qualifications constituted an important facilitating factor. Additionally, male respondents did not agree with female respondents' perception that hard work facilitates career advancement.

Some of these findings were similar to those of Zong's (2006) study. Zong conducted a study on the perception of students, educators, and industry recruiters on the factors affecting women's career advancement in the hospitality industry. Male and female respondents ranked the following as the most important facilitators: hard work, attitude toward work, effective communication skills, and problem-solving skills. In the current study, female academics rated three of the facilitating factors the same, namely; *hard work, attitude toward work, effective communication skills*. The only difference was *problem solving skills*, where female and male academics thought that job knowledge is more important for women's career advancement. During Zong's pilot study, the students also rated job knowledge as more important. It was found that female respondents rated items higher than male respondents, which results were similar to those of the present

study. Prozesky (2005) also found that hard work does facilitate female academics' career advancement. Studies by Ismail, Rasdi, and Wahat (2004) and Riordan and Louw-Potgieter (2011) indicated that qualifications contribute to advancement in academia.

5.2 Objective 2: To determine the current gender perceptions of factors that constrain the career advancement of female academics

Male and female respondents were in disagreement on the factors that constrain female academics' career advancement, although both groups agreed that there is a high level of constraining factors that have a negative impact on female academics' career advancement. Female respondents ranked *conflict with family responsibilities*, *childcare responsibilities*, *lack of support systems at work*, and *old boy network* as the most important constraining factors. Male respondents ranked *conflict with family responsibility*, *job characteristics*, *childcare responsibilities*, and *difficulty in establishing credibility* as the main constraining factors in female academics' career advancement.

Both groups were in agreement that *conflict with family responsibilities* is the most important constraining factor, and that *childcare responsibilities* also constrain female career advancement, although they ranked *childcare responsibilities* differently. This result was confirmed by research done by Prozesky (2006), Martin-Cairncross (2003), Mostert (2009), Moorosi (2007), and White (1995). Zong's study produced different results, as the students, educators, and female recruiters perceived family responsibilities as one of the most important constraining factors, although male recruits perceived it as the least important. Female and male academics rated *sexual harassment* as the least important factor. According to the literature, hardly any sexual harassment cases have been reported amongst South African academic staff on higher education campuses (Joubert, Van Wyk, & Rothman, 2011). Looking at this data, it is clear that sexual harassment is not a concern at South African HEIs.

5.3 Objective 3: To determine the current gender perceptions of gender issues that influence the career advancement of female academics

Male and female respondents were in disagreement that certain gender issues prevent women's career advancement, although both groups agreed that there are gender issues

that have a negative impact on female academics' career advancement. Male and female respondents were in disagreement regarding the perception that women face significant obstacles in career advancement in the organisation. Female respondents also disagreed with male respondents about the perception that female employees in the organisation respond differently to female managers than to male managers. However, they were in agreement that the factors that constrain career advancement are different for men and women, and that male employees in the organisation respond differently to female managers than to male managers. This result was also found in Zong's (2006) study, although all three groups rated *women face significant obstacles to career advancement* the lowest.

Male and female respondents were in agreement that female managers/supervisors treat female employees differently to male employees. This finding echoed research done by Bennet (2002), as he stated that women who work closely with female managers are more likely to be promoted into middle and lower management positions than women who work in a more male-dominated organisation. Deemer (2003) found fatherhood does not harm men's academic careers, but that women are disadvantaged by gender and, particularly, motherhood.

5.4 Objective 4: to determine whether There are significant differences between the gender groups in terms of the facilitating factors affecting the career advancement of female academics

Female and male academics indicated significant differences on ten facilitating items: *perception of hard work, attitude toward work, problem-solving skills, effective communication skills, personal sacrifice, job knowledge, support and guidance from mentor, career goal, mobility, and family support*. Female academics' means were higher for each factor, indicating that they felt stronger about these factors negatively affecting to their career advancement. Although male and female respondents were in agreement that certain factors facilitate female academics' career advancement, their perceptions of each factor differed. This was in partial agreement with Zong's study (2006), which found that educators differed significantly more on factors than recruiters, in that educators significant differ on three factors: personal sacrifice, job knowledge, and educational qualification.

Based on the above results, both the null and the alternative hypotheses were partially accepted.

5.5 Objective 5: to determine whether There are significant differences between the gender groups in terms of the constraining factors affecting the career advancement of female academics

Male and female respondents significantly differed in terms of their perceptions regarding the following eight factors: *lack of support systems at work, childcare responsibilities, lack of mentoring, old boy network, lack of equity in promotions, lack of training, lack of equity in pay, and conflict with family responsibilities*. Female respondents' means were higher, indicating that they strongly agreed that these factors are barriers to their career advancement. Consequently, it can be concluded that there are significant differences between the gender groups in terms of perceptions of the constraining factors affecting the career advancement of female academics. Zong's (2006) study also found that the gender groups differed significantly in terms of *lack of equity in promotion, lack of equity in training, lack of equity in pay, and old boy network*, as well as, *conflict with family responsibilities*.

Based on the above results, both the null and the alternative hypotheses were partially accepted.

5.6 Objective 6: to determine whether There are significant differences between the gender groups in terms of the gender issues affecting the career advancement of female academics

Male and female academics differed significantly in terms of their perception regarding female academics facing significant obstacles to career advancement in the organisation. Male respondents did not think that there are obstacles that hinder the career advancement of women. This was the only item on which the two groups differed. It was also concluded during Zong's (2006) study that gender groups differ significantly in terms

of two statements: that women face significant obstacles to career advancement in the hospitality industry, and that the factors that facilitate/constrain career advancement are different for men and women. More research is needed to clarify the above results.

Based on the above results, both the null and alternative hypotheses were partially accepted.

5.8 Conclusion

This chapter discussed and explained the attainment of the six research objectives that were formulated for this study by explaining the results obtained from the statistical analyses. The main finding can be summarised as follows:

Female and male academics were in agreement on factors that facilitate women's career advancement. It was found that three items were rated as the most essential facilitating factors to assist female academics in their career advancement: attitude toward work, job knowledge, and effective communication.

Male and female respondents were in disagreement on the factors that constrain female academics' career advancement, although both groups agreed that there is a high level of constraining factors that have a negative impact on female academics' career advancement. Both groups were in agreement that family responsibility are the most important constraining factor, and that childcare responsibilities also constrain female career advancement.

Male and female respondents were in disagreement that certain gender issues prevent female academics' career advancement. However, both groups agreed that there are gender issues that have a negative impact on female academics' career advancement. It was concluded that the factors that constrain career advancement are different for men and women, and that male employees in the institution respond differently to female managers than to male managers.

There are significant differences between the gender groups in terms of the facilitating factors affecting the career advancement of female academics. Although male and female respondents were in agreement about the statement that certain factors facilitate female academics' career advancement, their perceptions of each factor differed. Therefore, both the null and alternative hypotheses were partially accepted.

There are significant differences between the gender groups in terms of the constraining factors affecting the career advancement of female academics. Female respondents' means were higher, indicating that they strongly agreed that certain factors are barriers to their career advancement. Thus, both the null and alternative hypotheses were partially accepted.

There were no significant differences between the gender groups in terms of the gender issues affecting the career advancement of female academics. Male and female respondents only differed significantly in terms of their perceptions regarding one statement, i.e. that women face significant obstacles to career advancement in the organisation. Therefore, both the null and alternative hypotheses were partially accepted.

The next chapter will give an overview of the whole research study, and discuss the conclusions, limitations, and possible future research areas related to the study

CHAPTER 6: CONCLUSION, LIMITATIONS AND RECOMMENDATIONS



Figure 6-1: Chapter 6 in Context

6.1 Introduction

This chapter offers a summary of the entire study. The most important findings gathered from the literature are presented, as well as a summary of the results. The limitations of the study will be discussed, as well as recommendations for further study on the topic.

6.2 Overview of the Study

The following section highlights the purpose and main research objectives in the study.

6.2.1 Purpose of the study

The main purpose of the study was to explore the gender differences regarding perceptions of factors that affect the career advancement of female academics in South African HEIs. Six objectives were stated, in order to determine gender

perceptions on various factors that impact on female academics' career advancement.

6.2.2 Research objectives

This study was guided by the following specific research objectives:

- **Objective 1:** To determine the current gender perceptions of factors that facilitate the career advancement of female academics.
- **Objective 2:** To determine the current gender perceptions of factors that constrain the career advancement of female academics.
- **Objective 3:** To determine the current gender perceptions of gender issues that influence the career advancement of female academics.
- **Objective 4:** To determine whether there are significant differences between the gender groups in terms of the facilitating factors affecting the career advancement of female academics.
- **Objective 5:** To determine whether there are significant differences between the gender groups in terms of the constraining factors affecting the career advancement of female academics.
- **Objective 6:** To determine whether there are significant differences between the gender groups in terms of the gender issues affecting the career advancement of female academics.

6.2.3 Content of the study

Chapter 1 was an introduction to the study, and gave more background information on female academics in South Africa. The problem statement, the research objectives, the implications and benefits of the research, as well as the applicable delimitations and assumptions made with regards to the study were provided. The last part of the chapter identified the key terms to be used in this study, and provided the applicable abbreviations.

Chapter 2 discussed and identified the main body of knowledge currently available on the career advancement of female academics. The literature review started with

a focus on the career development stages of women, and how women's careers have developed over the centuries. The second part of the literature review identified the main facilitating factors, and it was found that hard work, support and guidance from mentors, family support, networking, and qualifications facilitate women's career success. The main constraining factors were identified as the glass ceiling, sexual harassment, work–family conflict, the old boy network, lack of equity in pay, and demographic trends. The chapter ended with an overview of the gender issues affecting female career advancement.

Chapter 3 discussed the strategy and research design of the study. The strategy of inquiry, sampling, and data collection procedures were discussed in detail. A survey research was followed in this research design, together with convenience sampling. Questionnaires were used as the data collection method. The chapter also focused on the possible bias and errors that might be present, as well as the reliability and validity of the entire study. Finally, the chapter ended with the ethical concerns that needed to be considered.

Chapter 4 presented the results of the statistical analysis gained from the data analysis prepared by means of SPSS software program. The first phase explained the demographics of the sample group used in this study with regards to the biographical information supplied by the respondents. Cross-tabulations were also presented to distinguish how the different gender groups compared in terms of their respective demographic characteristics. During Phase 2, the psychometric properties of the Career Questionnaire for women were observed, and the results of the factor- and reliability analyses were reported. The general differences regarding the scales for facilitating and constraining factors, as well as the Gender Issues Scale, were discussed during Phase 3. Phase 4 consisted of the testing and discussion of the three integrated hypotheses

Chapter 5 presents the analyses and interpretation of the results presented in Chapter 4. For the purpose of this study, five research objectives were formulated, that were either rejected or accepted, based on the data obtained from this study.

This chapter presents an overview of the research findings that emerged from the statistical analysis of the data.

Chapter 6, the last chapter in this study, will offer a summary of the entire study. The most important findings gathered from the literature are presented, as well as a summary of the results. The limitations of the study will be discussed, as well as recommendations for further study on the topic.

6.3 Conclusions Drawn from the Study

6.3.1 Conclusions from the literature

The literature review discussed the theoretical framework of this study. It presented an overview of the career development stages of women, as well as gender issues affecting women's career advancement. Three different career stages (White, 1995; Mainier, 1994; and Bierema, 1994) were discussed, and it was clear that, with each stage, women have increased experience, knowledge, and self-confidence to help them succeed in their careers.

The factors that facilitate female career advancement were briefly introduced as being hard work, support and guidance from mentors, family support, networking, and qualifications. Powell (2010) indicated that women need to be hard-working, independent, aggressive, and have perseverance, in order to be successful in a male-dominated environment. Bennett (2002) indicated that early support from peers and managers contribute to women being promoted to management positions. Ismail et al. (2004) found that family support is one of the main contributors to women's career success.

The glass ceiling, sexual harassment, work–family conflict, the old boy network, lack of equity in pay, and demographic trends were discussed in this study as the main barriers that constrain women's advancement in academia. Maurtin-Cairncross

(2003) and Mostert (2009) found that family responsibilities and motherhood constrain female academics' career success. The glass ceiling was described by Williams (2005) as the dearth of women at the top. According to Weisenfeld and Robinson-Backmon (2007), the glass ceiling also implies higher turnover rates for women, since they are more inclined to be dissatisfied with promotional opportunities and pay increases. According to Budworth and Mann (2010), the promotion of women into leadership roles is restricted by barriers and obstacles; therefore, the gender ratio of top management teams is skewed, although the amount of women in leadership positions has been escalating.

6.3.2 Conclusions from the statistical analysis

The main findings of the present study can be summarised as follows:

- Female and male academics are in agreement on factors that facilitate women's career advancement. Women rated the items higher than the men did, indicating that they viewed the items as more important. Results show *attitude toward work, job knowledge, and effective communication* as the most essential facilitating factors to assist female academics in their career advancement.
- Male and female respondents are in disagreement on the factors that constrain female academics' career advancement, although both groups agree that there is a high level of constraining factors that have a negative impact on female academics' career advancement. Both groups are in agreement that family responsibilities constitute the most important constraining factor, and that childcare responsibilities also constrain female career advancement, although they ranked it differently. An interesting finding was the fact that female and male academics rated *sexual harassment* as one of the least important factors.
- Male and female respondents are in disagreement that certain gender issues prevent female academics' career advancement. However, both groups agree that there are gender issues that have a negative impact on female academics' career advancement. Both groups agree that the factors that constrain career advancement are different for men and women, and that

male employees in the institutions respond differently to female managers than to male managers.

- There are significant differences between the gender groups in terms of the facilitating factors affecting the career advancement of female academics. Even though male and female academics are in agreement that certain factors facilitate female academics' career advancement, their perceptions of each factor differ. Male and female academics only differ significantly in terms of their perceptions of one statement, i.e. that women face significant obstacles to career advancement in the organisation. Therefore, both the null and alternative hypotheses are partially accepted.
- There are significant differences between the gender groups in terms of the constraining factors affecting the career advancement of female academics. Female respondents' means were higher, indicating that they strongly agreed that certain factors are barriers to their career advancement. Female academics feel that a lack of support systems at work, childcare responsibilities, lack of mentoring, old boy networks, lack of training, and a lack of equity and pay and promotion constrained their career advancement. Male and female academics differ significantly only in terms of their perceptions regarding women facing significant obstacles to career advancement in the organisation. Thus, both the null and the alternative hypotheses are partially accepted.
- There are no significant differences between the gender groups in terms of the gender issues affecting the career advancement of female academics. Male and female academics differ significantly only in terms of their perceptions regarding women facing significant obstacles to career advancement in the organisation. Therefore, both the null and alternative hypotheses are partially accepted.

6.4 Limitations

6.4.1 Limitations of the study

The focus in the present study was on male and female academics in HEIs in South Africa. The limitation at this point is the exclusion of participants on two grounds:

- The study was limited to academics residing in South Africa; and
- Academics were the only occupational group included in this study.

Therefore, study is only applicable in a South African HEI context.

6.4.2 Limitations resulting from the sample size

Sample size was an important consideration, due to the use of factor analysis. A total of 360 questionnaires were sent out to academics at HEIs in South Africa. Only 158 completed questionnaires were received, with only 130 proving usable for data analyses. This represented a response rate of 36%. The size of the sample also influenced the findings of this research. By using a bigger sample group, there would have been more data from which to present better conclusions and gain more generalisable assumptions regarding the population.

6.4.3 Limitations as a result of the data collection method

Saunders, Lewis and Thornhill (2009) indicated that questionnaires have advantages and disadvantages; specifically, the quality of the data they collect is often criticised. It is important that questionnaires are created and administered appropriately in order to collect the correct data, obtain accurate results, and meet research objectives. This is achieved in the current study by following a rigorous research design, as laid out in this document. One of the main limitations of questionnaires is that not all respondents return the questionnaires. Closed questions were used, which also limited the results, as compared to the use of open-ended questions.

6.4.4 Limitations as a result of the sampling method

A cross-sectional research design was utilised in the study. This type of study involves the collecting of data at one point in time, and not collected over longer periods, as a longitudinal study should be more effective. A limitation inherent in this

method is that the researcher cannot study change and development over a period of time, with a longitudinal study. Convenience sampling was used for the present study. According to Leedy and Omrad (2010), convenience sampling identifies a representative population that is easily accessible. However, representing and generalising the results to the population is limited (Maree, 2010). In the present study, male and female academics were asked to complete the questionnaire voluntarily. The combination of convenience sampling and the fact that participation in the study was voluntary means that the results of the study cannot be generalised.

6.5 Recommendations for Future Research

After examination of the limitations identified in this study, the following recommendations can be made:

- It is recommended that the study be repeated with a larger sample group. By using a larger sample group, the factors affecting the career advancement of women can be more clearly examined, as there will be more data from which to draw better conclusions.
- This study should be extended to other occupational groups in order to obtain the perception of different occupational groups. This might help to determine the factors that affect the career advancement of women in other occupations, and if there is a significant difference between occupational groups.
- Since the results of the present show that effective communications skills is one of the most important facilitating factors, it is advised that HEIs design and implement a course to improve female academics' communication skills.
- Research can be done to evaluate if there is a relationship between attitude toward work and the job level of female academics.
- It is important for HEIs to take note of the barriers that constrain female academics' career advancement, in order to prevent high turnover rates, as well as to implement solutions to assist female academics' career advancement.

6.6 Closing Remarks

This study contributes insight into the perceptions of male and female academics regarding factors that constrain and facilitate female academics' career advancement by identifying the most common constraining and facilitating factors. These findings can be very useful to HEIs to improve female academics' career advancement.

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APPENDIX A
- Informed consent form -



**Informed consent for participation in an academic
research study**

Dept. of Human Resources Management

**GENDER DIFFERENCES OF FACTORS AFFECTING THE CAREER ADVANCEMENT
OF FEMALE ACADEMICS IN SOUTH AFRICA**

Research conducted by:

Ms S.W Lyons (29000092)

Cell: 082 780 6087

Dear Respondent

You are invited to participate in an academic research study conducted by Sophia Lyons, a Master's student from the Department of Human Resources at the University of Pretoria.

The purpose of the study is to explore the gender differences of factors that affect the career advancement of female academics in South African higher education institutions.

Please note the following: This study involves an anonymous survey. Your name will not appear on the questionnaire, and the answers you give will be treated as strictly confidential. You cannot be identified in person based on the answers you give.

- Your participation in this study is very important to us. You may, however, choose not to participate, and you may also stop participating at any time, without any negative consequences.
- Please answer the questions in the attached questionnaire as completely and honestly as possible. This should not take more than 30 minutes of your time.
- The results of the study will be used for academic purposes only, and may be published in an academic journal. We will provide you with a summary of our findings on request.
- Please contact my supervisor, Dr. Nicolene Barkhuizen, at nbarkhuizen@gmail.com if you have any questions or comments regarding the study.

Please sign the form to indicate that:

- You have read and understood the information provided above; and
- You give your consent to participate in the study on a voluntary basis.

Respondent's signature

Date

