OCCUPATIONAL CHOICES OF WOMEN

IN SOUTH AFRICA

ZAIBOONNISHA NAIDOO

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Promoter: Professor Jonathan Jansen

Joint Promoter: Professor Anand Ramphal

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ABSTRACT

The purpose of this study is to determine women's perceptions and choices of different categories of occupations and the reasons for such choices. Since the installation of the first democratic post apartheid government in South Africa, national policy has advanced women's rights. Affirmative action has opened up opportunities previously closed to women, but there is little research documenting changes in career trends. The influence of race, gender, social and political changes on perceptions and choices of occupations of women in the country is not known. This study has focused on African and Indian females in the 15 to 60 age range in the greater Durban area. Women born between 1940 and 1985 have experience of the pre- and post apartheid era, and therefore changes in perceptions and choices could be investigated. A survey questionnaire was administered to 390 female learners in seven former Indian schools. Semi-structured interviews were conducted with 12 African and Indian women; six daughters in non – traditional occupations and six mothers in traditional occupations. The results from the survey and interviews suggest that women have a strong sense of empowerment and do not regard gender as a barrier to occupational choices. A limited number of occupations were categorized as suitable for men only, while the majority were deemed suitable for both men and women. Survey data indicated that African learners were more conservative in their choices than Indian learners. Interviews with the older women however, revealed that African women were more positive about opportunities open to them in the new South Africa. Detailed family profiles suggest that socio - economic factors rather than parental influence, impacted on decision-making patterns. The unique experiences of women in this country, who have been subject to political and social pressures of the apartheid policy and the rapid change of the post apartheid era, must be documented before any theoretical positions can be articulated about the career development of South African women. This study has contributed to research on the career development of women by providing some insight into how a sector of African and Indian women perceive and categorize occupations.

KEY TERMS: Women; occupational perceptions; choices; determinants.

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INTRODUCTION

" The merit of work lies not so much in its results…but in the opportunity it affords the seeker to manifest, prove, demonstrate, fulfill, and express the…attributes of (her) being."

Tata Mata (a Hindu Nun)

Astin (1984, p. 117)

Historically, women have been regarded as homemakers and men as providers. Men expect to be educated and enter occupations, it is their right. Throughout the ages, and in all communities, women could not take for granted that they would be able to engage in the world of work and realize their full potential. For many women, entering an occupation has been a privilege conferred on them by men. In the last few decades however, there have been dramatic changes with increasing numbers of women entering the labour force. Women worldwide enjoy far more rights and opportunities for self-actualization today (Zunker, 1994). Despite these gains there are many women, for whom the pursuit of an education and the opportunity to work in an occupation of their choice, continues to be a struggle. This pursuit for self-actualization through the world of work has resulted in many stories of personal triumph for women of my generation.

1.1   Personal Choices

My interest in occupations and choices was aroused by my own personal dilemma when I completed my matriculation examination. More especially, it was triggered by my sister's eventual choice of occupation three decades ago. I became a teacher and my sister, a nurse. We were born in a middle-class Indian family, two older sisters with five younger brothers. My father was a shopkeeper and my mother, a housewife. We belonged to a traditional Muslim family and as females, were expected to leave high school as soon as there was a proposal of marriage from a suitable suitor. Fortunately, our parents allowed us to complete our matriculation examinations in

spite of suitors and expectations of marriage. An older cousin paved the way; she was allowed to travel to India and study medicine and was among the first female Indian doctors in Pietermaritzburg.

My sister, who was older, was always interested in the field of medicine. As a young girl, she found a copy of "The Family Doctor" which became her bible. She diagnosed all our childhood ailments! Our family owned a farm store with the only telephone in the area. We were accustomed to requests to telephone for the ambulance by our neighbours who often had clashes, gang wars and weekend fights. My sister was always the first to run to aid the injured despite my mother's serious misgivings. I generally ran in the opposite direction! She wanted to become a doctor, but for financial and other reasons was not able pursue this career. Her second option was to become a nurse. She was not allowed to, because nursing was regarded as an unsuitable occupation for Muslim females. I, on the other hand, wanted to be a teacher, and was notorious for coercing all the children in the neighbourhood to sit in rows while I played teacher with a slate and a stick. When I completed my matriculation examinations, my sister appealed to me to decide on nursing as a career so that the both of us could apply pressure on our parents to change their minds about nursing. She had refused to marry or become a teacher as our parents wanted and was stagnating at home. The thought of blood and gore was enough for me to refuse any such request. I trotted off to university, with family approval, to take a Bachelor of Arts Degree. She remained behind. A few months later I had a call from her, she was on her way to train as a nurse at the King Edward V111 Hospital. She had applied to the hospital without our parent's knowledge, announced to them that she was taking a taxi to Durban to be interviewed, was accepted and left home.

I admired her courage and determination. Thirty years ago Muslim girls did not defy their parents, make their own decisions, or travel by taxis without chaperones. Fortunately, my parents were philosophical and let her go. She has not looked back. My sister has acquired many further qualifications in her field and is currently the principal of a nursing college. Her interest and passion for nursing has not abated. Her daughter has inherited her mother's determination, overcome serious health problems and become a highly successful hydrologist. I became a teacher, a school counsellor and a psychologist. Most of our peers married and remained housewives.

It was this clear, unwavering commitment of my sister to her choice of profession, and my own gut response to the same profession that intrigued me. I have also been fascinated by the how the work and life roles of women are defined by society, and how these either change or remain static over a period of time. Nursing is regarded as a traditional occupation for women in most societies but is still unacceptable in many Islamic communities. Thirty years later a similar scenario, was reported in a British study. Basit (1996) in a study of career aspirations of British Muslim girls quoted the example of two Muslim families to illustrate the reservation parents have about some occupations like nursing.

" When I decided that I wanted to do nursing, my dad didn't like it at all. He said, 'you know, you'll have to be really patient.' But he is really happy now that I want to be a teacher." (Khalida)

(p. 231)

Apparently, this family perceived nursing as an occupation of low status, in which one had to work hard in predominantly male company. Conversely though, another parent readily acquiesced to her daughter's choice of the same career.

"I would like her to be a teacher, but she wants to be a nurse. So I have left it to her to decide what she likes and what she wants to do." (Parveen's mother.)

(p. 231)

The masculine mandate was not confined to conservative eastern cultures only, but prevailed in western societies as well. An article by Lichtenberg (1985), a professor at the University of Kansas, where I was also a student, illustrates this very well. He had unearthed a book belonging to his grandfather entitled "The Adolescent Girl" written in 1925 by Winifred Richmond, a psychologist in Washington, D. C. Lichtenberg (1985) quoted the following excerpt from the book, which portrayed the social attitude towards women in the United States of America seventy-five years ago. It could easily be the traditional view of women in some cultures today.

" Throughout all history, with practically no exceptions, woman had been a slave and a chattel, the property first of her father and then of her husband, even as in China, under the control of her mother-in-law. The lands where she could rise to positions of dignity and power were few and few the women who did so rise. To satisfy the desires of man, to tend to his comfort and minister to his needs, to delight his senses with her beauty and grace, to bear and rear him a family that his name may be perpetuated – such has been the conception of women's place in the scheme of things from the dawn of history. This does not necessarily mean that she was mistreated; there were many instances where she was held in affection and esteem, and where her lot was by no means hard, but these privileges were never hers by right – only through the sufferance of her masculine relatives; in nearly all countries, law and custom made her subject to will of the man."

<div align="right">(p. 341)</div>

This article aroused my interest sufficiently to develop a proposal for a research project. I was taking a module on vocational development with Professor Joan Cesari at that time, and had to identify an area of research that was original and submit a proposal. Her encouragement to pursue this topic was another motivating factor to research career choices of women. A further example of the universal sex-role stereotyping that has prevailed worldwide is the experience of one of the foremost researchers in the field of career development. Astin (1984), in her treatise on the career development of women, recounted her own experience of wanting to become an architect.

"But my dream of becoming an architect never materialized because the social norms of the day dictated otherwise. My father saw architecture as a subfield of his own field of engineering (an exclusively male field) and strongly discouraged me from pursuing it because there were no opportunities for women in it."

<div align="right">(p.117)</div>

This has been the experience of women worldwide. For those women who see their work as a process of self-determination and self-actualization, the mental barriers and

constraints are broken and the choices become limitless. Women who believe that their roles are merely to support the men in their lives and accept the masculine mandate, are restricted and live secondary lives.

1.2   Purpose of Study

Black women in this country have had to contend with various restrictions in their lives during the apartheid era. Has a new dispensation, with a clear agenda to enhance the lives of women in the country changed this mindset? What are some of the untold stories of women who have broken barriers? What are the perceptions of young women today about occupational choices and barriers? How do they categorize occupations? Have perceptions of traditional and non-traditional occupations changed over a period of time?

These were some of the questions that prompted my research. There is no substantial database in the country on the career development of women that can provide any of the answers to the questions posed. It is my firm belief that researchers in the country have to develop a database, which documents the career development of women of all races before theoretical models can be tested or developed. The counter argument, that testing theories developed in other countries for relevance in this country can also generate data, is true. However, ascribing to a particular theory from the outset limits the collection and interpretation of data. Theory testing is premature; while a researcher may select a theoretical framework to guide the investigation, an eclectic approach becomes inevitable. There is a paucity of research in South Africa on the career development of Black people, and Black women in particular, and needs to be addressed. Research findings thus far, remain fragmented and interpreted without the perspective of the larger picture. Baseline data is necessary to provide a framework and a context for discussion, policy planning, implementation and evaluation. Research of necessity has to be both descriptive and analytical. It is for this reason that a survey was initially conducted with learners so that a context for further discussion and analysis could be generated. More in-depth analysis and discussion was generated from data obtained from interviews and open-ended questions in the survey. The statement of purpose and the critical questions that follow provided the

guidelines for this research on the occupational choices of women in the country and the major determinants for such choices.

1.2.1   Statement of Purpose

The purpose of this study was to determine the reasons for women's perceptions and choices of different categories of occupations.

The critical questions were framed to provide the necessary data and insights into how women categorize occupations across generations; what perceptions determine the categories and what factors impact on these processes. This study is not about mere choices and stated reasons for such choices; it is an attempt to investigate what women in the country think about occupational choices and what informs these thought processes. In order to achieve this objective the data was obtained from a survey questionnaire administered to female learners and from interviews with older women in employment.

I.2.2   Critical Questions:

- What are women's perceptions of the different occupational categories (traditional and non-traditional)?
- Why do women choose particular occupational categories and not others?
- To what extent do women's occupational choices correspond with their racial class or cultural status?
- What are the social, educational and personal barriers that affect women in their choice of occupations?

The rationale for this research is articulated in the section that follows.

1.3   Rationale

The tremendous change since 1994 in South Africa, which heralded a new order, with a democratically elected government, has been particularly dramatic for South African women. Within a short space of time increased opportunities for higher education and

in the workplace, has resulted in more women studying for, and working in jobs previously closed to them. This has not occurred as a result of change and development over a period of time as happens in many other countries. Intervention at a political level, by a government committed to a policy of women's rights and affirmative action, has opened up opportunities rapidly.

There is a paucity of research, documenting the career trends and patterns of women in the country, across all the major race and cultural groups. As a result, there is no indication to what extent change has filtered down, and how it has affected perceptions of career opportunities and choices. Labour statistics can provide numerical evidence of shifts in occupations but will not provide information on perceptions and reasons for choice of particular categories of occupations. There is a serious gap in information and research relevant to all women in this country, particularly Black women. This information is necessary for policy planning and evaluation, but is also important for effective career counselling and guidance programmes at secondary and tertiary level. Research in South Africa is beginning to examine issues related to career development, but more has to be done. To the best of my knowledge this study is the first of its kind in the country and will provide valuable information for future research.

1.4 Structure and Organization of the Report

1.4 1. Methodology in Brief

The research methodology included a survey questionnaire and semi-structured interviews. Considerable thought was given to the selecting a method of research, that allowed the researcher to go beyond the prescriptive, positivistic demands of "good scientific research", and conveyed the spirit and voices of women in the country. The narrative research methodology was considered but rejected because the research had to be descriptive and analytical as well. Descriptive research according to Gay (1987), involves collecting data in order to answer questions concerning the current status of the subject of the study; it is concerned with the assessment of attitudes, opinions, demographic information, conditions and procedures. Descriptive data is usually collected through questionnaire surveys,

interviews, or observation. The analysis of data is quantitative and the reporting of that data is mainly descriptive but can consider relationships between variables as well.

"A descriptive study determines and reports the way things are."

(Gay, 1987)

The survey questionnaire administered to Grade 11 female learners in former Indian schools is an attempt to assess "the way things are." The current research is descriptive, but goes further as it looks at not only "the way things are" but also considers "the way things were". Sections of the questionnaire that had open-ended questions were analyzed qualitatively. Semi-structured interviews were conducted with older women in employment and analyzed qualitatively. Results have been integrated and discussed in response to the critical questions that are posed in this research.

The data from the survey provided the context to study in more depth, the perceptions and choices of older African and Indian women, who represent two different generations. Interviews were planned with mothers in traditional occupations and daughters in non -traditional occupations. The semi-structured interviews allowed for a more open discussion about perceptions and choices and have been analyzed qualitatively.

The career development of women has been documented extensively over the last two decades (Fouad, 1994; Swanson, 1992; Borgen, Layton, Veenhuisen, & Johnson, 1984). International research has provided data on many of the issues under investigation, and will be reviewed together with national trends in Chapter Two. Chapter Three provides the theoretical framework that underpins the investigation into occupational choices. It explores the major theories and discusses in detail the theoretical framework that guided this research. Chapter Four indicates the specifics of the methodology, which is both qualitative and quantitative. The pilot study, conducted to validate the research instruments and provide data that could be used for further planning of data collection and analysis, is discussed in the same chapter. Chapter Five documents the data collection and the analysis of results of the survey and is reported in a scientific reporting style. The qualitative analysis of the interviews, conducted with mothers and daughters, is discussed in Chapter Six. The

final chapter, Chapter Seven, concludes the report with a summary of results and recommendations. Tables have been included in text only where necessary; the rest will be found in the Appendix C. The descriptive data, which includes family profiles of 390 female learners, is not included in the main text but is referred to where necessary.

1.4.2 Limitations of Study

The limitations of the study are alluded to throughout the report and discussed in more detail in the concluding chapter. A limitation of the study is the lack of representation of women from all racial, socio-economic, and geographic areas. The voice of rural women is not heard as loudly as it should be. Research of this magnitude, that allows for all women to be represented, is difficult for one individual and should be undertaken in a group project. The under representation of African female learners in the sample is also of major concern. A further limitation is the small sample of older women interviewed and the lack of a survey questionnaire similar to the one administered to the learners. A survey of how males categorize occupations in the country will provide significant data as well. The race, gender and culture of the researcher dictates interpretation of results through a narrow lens. African women, who are in the majority in the country, should be targeted for more extensive research and preferably by researchers who have a better understanding of their culture. The results of this study cannot be generalized as representative of the way South African women perceive and choose occupations. There is need for more research in all aspects of the career development of women.

1.4.3 Research and Policy Significance of Study

The results of this research indicate that there is a strong sense of empowerment among women of all age groups. Government policy affirming women appears to have impacted on attitudes towards career decision making. There is no baseline data however, against which this change can be measured and therefore definite conclusions cannot be drawn. In the absence of large scale research which can provide baseline data, government policy cannot be effectively evaluated. There may be post apartheid euphoria, which accounts for this sense of empowerment, and there

is no guarantee that self-efficacy beliefs can be sustained in the future. If the commitment to the advancement of women in the country is serious, then research that is more in-depth and extensive becomes necessary. Current research studies of women in all other aspects of life, does indicate an emerging database that will assist researchers in the future to understand the development and behaviour of women in general. Specific studies however, should be conducted for target groups around specific policy initiatives.

Chapter Two reviews the literature on the career development of women and provides an international and national perspective.

CHAPTER TWO

RESEARCH ON WOMEN'S OCCUPATIONAL CHOICES: A REVIEW OF INTERNATIONAL AND NATIONAL TRENDS

The research on the occupational choices of women, and the major determinants for such choices internationally and nationally, is explored in the literature review which follows. A critical evaluation of studies, that have researched the career development and career paths of women, and the trends that have emerged will focus on providing insight into the critical questions posed in the first chapter. The theoretical framework is discussed in the next chapter. The analysis of the literature will start with a broad international perspective and attempt to establish trends that have relevance for this country. Research studies have been grouped together under sub-headings which were regarded as key areas. Specific studies that have greater relevance are discussed separately. Through out the review attention is drawn to factors that impact this study.

The most advanced and extensive research in the field of career education, career choice and development has been conducted in the United States of America (USA). The data base explored has included other countries, but the terms used tend to be mainly North American. Clarification of commonly used terms is necessary because terms are used interchangeably and vary from study to study.

2.1 Clarification of Terms

Vocational:
The term "vocational" is a broad umbrella term, which covers issues, related to career choice, career decision making and employment. Vocational psychology, vocational guidance and vocational education are the most commonly used terms to describe broad fields. In the review the term "vocational" was found to be used interchangeably with the terms "occupational" and "career".

Occupational:

The term "occupational" will be used specifically as a job description in this study, i.e. the work that one is occupied with. In the literature review it is used interchangeably with the terms "vocational" and "career".

Career:

Stead and Watson (1999) consider the term "career" to be an elusive concept that is constantly re-defined in order to reflect changing times. They include the concept of work-related experiences in relation to an individual's life roles across lifespan as an important component of the definition. For the purposes of this research the term "career" will encompass the field of choice and decision - making. It will include values, goals and issues related to entering and pursuing an occupation. In the literature review it is used interchangeably with the terms "vocational" and "occupational".

Career Development:

Burck and Reardon (1984) equate career development with human development and regard it as a combination of factors i.e. psychological, sociological, educational, physical, economic and chance, which shape the career of any given individual. They include the importance of values, prejudices, feelings, attitudes as well as measured interests, aptitudes, achievements, intelligence and personality. This is a wide and all encompassing definition, as they further include "events" which impact on career progression.

Gender:

The term "gender " replaces the term "sex" and denotes male/female as relational terms.

Traditional:

The term is used in the literature surveyed, to describe occupations based on the percentage of the same-gender incumbents in that occupation. Davey and Stoppard (1993), however, point out that there is no clear consensus on what constitutes a traditional occupation. Various researchers have selected thresholds ranging from 25 % to 50% of same-gender incumbents to denote traditionality. Occupations in which a particular gender has been dominant are seen as traditional occupations for that group, e.g. nursing for women. This criteria was applied when selecting women to be interviewed. However, in this study the term "traditional" has been equated with the term

"suitable" to describe how an occupation is categorized. Perceptions of suitability of occupations for a particular gender are reported as percentages and the highest percentage regarded as the preferred choice. The purpose of this study is to go beyond numerical representation of same gender incumbents and consider perceptions of categories.

Non-traditional:

The term describes occupations in which there is a higher percentage of opposite-gender incumbents in that particular occupation. The preceding discussion on the term "traditional" has relevance. Non-traditional occupations in this study are those occupations perceived as not suitable for a particular gender.

Androgyny:

Bem (1974) defined androgyny as a balance of masculine and feminine characteristics in individuals that allowed them the flexibility to exhibit male or female-typed attributes in a given situation. Scandura and Ragins (1993) point out that a more recent view of androgyny involves high levels of both masculine (instrumental / assertive) and feminine (expressive / empathetic) behavioral attributes. The term "androgynous" occupations will describe occupations that are regarded as equally suitable for men and women.

Black Women:

The term "Black women" in South Africa includes African, Indian and Coloured women.

Learners:

Children at school are referred to as pupils, scholars and students. The term "learners" has been recently adopted in the country to describe children who are still at school.

Stead and Watson (1999) have aptly pointed out that this century has seen rapid and persistent change, and definitions and concepts of career development and career psychology have to keep pace if they are to remain relevant. The changes for woman has been even more profound as the review suggests, and therefore definitions and concepts applicable in the past have to be probed and challenged.

2.2 Research on Occupational Choices

In order to place this research in context, it is necessary to examine international and national trends. The unique political dispensation in this country, which placed political barriers of race and gender on Black women, meant that all women have not had an equal opportunity to develop their career aspirations. The career development of white women can be more easily compared to international trends as they had to deal with the barriers related to gender and socialization only, whereas Black women had to deal with the politics of a country which legislated against their advancement at every level. In addition to this, cultural and ethnic constraints in a male-dominated society militated against them and channeled many African women into domestic service. Indian and Coloured women experienced similar barriers but had relatively more room for advancement.

The dramatic political changes in the country, which heralded in a new democratically elected government had a significant impact on the lives of Black women, and African women in particular. An African National Congress (ANC) led government immediately prioritized the advancement of the previously disadvantaged; the Black population, the disabled and women. Opportunities for advancement and employment have increased significantly as a result of government policies related to affirmative action and women's rights. This is especially evident in parliament, where a number of members of parliament are now women in a once male-dominated environment. The government has adopted the 12 principles of the 1995 Beijing Women's Conference and instituted a national state-appointed Gender Directorate. The Employment Equity Bill of 1998 set quotas for employment with African females at the top of the list. How have these changes impacted on the career decision-making patterns of Black women in this country? These is very little documented evidence to answer this question.

Stead and Watson (1999) in the preface of their much needed book, Career Psychology in the South African Context, point out that there is limited research in career psychology and career education in the country in general. The career development of

Blacks in the country has been ignored to a large extent. Over the last two or three years, while some efforts have been made to study the career paths of different race groups, data is still very limited. The research on the career development and decision-making of women in the country is even more limited, and what little there is, is based on studies carried out with white women. Even in the most recent book published, the authors, Stead and Watson (1999) have not included a chapter on women nor have the other contributors made any serious reference to women's issues. The paucity of literature related to the career decision-making and career paths of Black women in South Africa should be addressed. Researchers in South Africa, of necessity, have to rely on research conducted in other countries and apply concepts and findings that they believe are relevant to the South African context.

2.3   International Trends

The review of the literature has focused on research findings that have been grouped under broad headings with some overlapping of information. An attempt has been made to chart the trends and emerging issues so that a general understanding of the career development of women is achieved, but issues that are relevant to this study are also emphasized. Specific studies that are significant are discussed in more detail. The theoretical framework is discussed in the next chapter.

Research on vocational development internationally, has typically examined factors that affect adolescents or young adults occupational choices. Fouad (1994) in an annual review (1991-1993) cites researchers who have investigated the influence of gender, race, ethnicity, sexual orientation, work values, interests, or family, on choice of a career or speciality. A closer scrutiny of the literature has indicated that a significant body of research has focused on males, and it is only over the last two decades that issues related to women have gained attention. This is a result of the movement of women into the labour force; a social trend of major significance worldwide. The shifts in women's values and priorities, newer economic realities, and government policy changes have had a significant impact in the workplace in countries, industrialized and third world.

Accompanying this change has been a dramatic increase in research focusing on women's career choice and adjustment behavior (Brown, Eisenberg & Sawilowsky, 1997).

Traditionally, men and women in most societies have been distributed differentially across occupations. This has created and perpetuated a sex-segregated and economically unequal labour market. However, throughout the last two decades, not only were more women entering the labour market but an increasing number also entered male-dominated professions (Betz & Fritzgerald, 1987; Fritzgerald & Crites,1980; Zunker, 1994). The presence of women in male strongholds spurred considerable research, especially on personality and background factors that influence the gender traditionality of women's career choices. With the focus on women there was an emerging view, that there were significant differences between men and women in their career development, and research and theory had not taken sufficient cognizance of this difference.

Hackett and Betz (1981) in their seminal paper on the career development of women proposed a model of conceptualizing women's career development based on Bandura's (1977) social learning theory. The self-efficacy approach emphasized that the socialization experiences of women resulted in their lack of conviction about their efficacy to undertake certain career-related behaviours. Women, therefore, fail to realize their full potential in career pursuits. This approach has proved to be one of the most popular approaches and one of the most researched in literature. A more detailed discussion will follow in Chapter Three.

Betz and Fritzgerald (1987) in their exploration of the career psychology of women found that major determinants influencing women's choices were home and family, social class, attitudes generated by marriage, financial resources, educational level and cultural values. Furthermore, women's occupational choices were not made independently of other variables in society. They stressed the need for career-development theories free of gender stereotyping. The realization that there is a difference between men and women's career development is discussed by Zunker (1994). The different developmental patterns that women manifest are:

- women experience intense role confusion early in their development,

- women are more inhibited in their self-expression,

- women tend to delay their career aspirations in lieu of family responsibilities, and

- women's developmental patterns are more individualized.

The need for a separate and distinct theory of career development for women resulted in debate and a number of papers for and against this position. The bulk of research on the vocational behavior of women occurred during the eighties. Borgen, Layton, Veenhuizen, and Johnson (1984) in their annual review point out that the most popular research topic during 1984 was the vocational behavior of women and they cite 66 articles on this topic and on gender roles. A significant effort to provide a theoretical model to explain decision-making and career development of women was Astin's (1984) treatise, entitled " The Meaning of Work in Women's Lives". The metastructure of her model was meant to explain both the work behaviour of men and of women. This attempt stimulated a great deal of discussion and was followed by eight commentaries by experts and a concluding comment by Astin. This model and the criticisms it generated are discussed in more detail in the next chapter.

Farmer (1985) proposed a multidimensional model for both men and women that focuses on background, personal and environmental variables, with respect to motivational dimensions involving aspirations, mastery, and career commitment. Her research with 2000 students led her to conclude that environmental change occurring in society had a powerful effect on career and achievement motivation. Career models, in her view, had not taken this variable sufficiently into account.

A further perusal of the literature has indicated that research related to career decision-making of women tends to be broadly grouped around the issues of gender and socialization, traditionality of choice, factors that influence choice, personal characteristics of women in different careers, barriers to progress, self-efficacy and development and theoretical models explaining decision-making. There is considerable

overlap between different areas and hence some repetition becomes inevitable when reporting research.

2.3.1. Research on Gender

Research on the influence of gender on vocational choice has focused on:

- differences between women wanting a career and those who remain homemakers,
- differences between men and women,
- choices to move into occupations dominated by women, and
- choices to move into careers dominated by men.

Occupations dominated by women are regarded as "traditional" careers for women and those dominated by men as "non-traditional" for women. The present study focuses on such choices and will consider gender orientation as an integral part of the research.

Cook (1993) in a discussion on the "gendered context of life" asserts that men and women differ in their career choices and in the ways they work. Occupational achievement and interpersonal relationships are viewed differently and this worldview interacts with the environment and broader societal norms to produce different outcomes and demands for women and men. Betz and Fitzgerald (1987) found three important and consistent findings in their research and which they believe are still applicable: women select from a narrow range of occupations; occupations chosen by women are traditionally occupied by women; occupations are chiefly in the service sector and are low paying and low in prestige.

As employment patterns in the USA have moved increasingly from traditional to non-traditional occupations, the trend has been to break away from gender-role stereotyping. However, women who are looking beyond the traditional feminine working roles experience resistance from men and women at all levels of the workforce (Zunker, 1994).

The effect of shifting gender ratios within an occupation, notably the impact of "feminization" on an occupation's prestige or desirability has been researched fairly well. Swanson (1992) reports on several studies that have attempted to replicate Touhey's (1974) findings that an occupation was devalued when it was portrayed as becoming more female dominated. The "feminization" of the field of psychology is due to both the influx of women and the departure of men. The status of teaching, especially in the primary school, has probably been equally affected by " feminization" in South Africa but no studies were identified to make valid comparisons. In a cross-cultural replication in India , Kanekar, Kolsawalla, and Nazareth (1989) reported that both women and men gave higher "respectability" ratings to male than female incumbents in the same occupations.

Scozzaro and Subich (1990) examined perceptions of 216 college students regarding the availability of intrinsic and extrinsic job rewards in 9 sex-typed occupations: ratings differed by subject gender and by sex type of occupation. Female-dominated occupations were perceived as providing pleasant working conditions, male-dominated occupations were perceived as providing pay and promotion opportunities, and neutral occupations were perceived as offering autonomy.

2.3.2 Research on Traditional and Non-traditional Career Choices

Swanson (1992) in an annual review of literature for the period 1989-1991, considers that research related to traditional and non-traditional careers has three foci: selection of non-traditional careers, characteristics of individuals in non-traditional careers, and perceptions of non-traditional careers and gender-typed occupations.

(i)   Selection of non-traditional careers

A long line of research has focused upon documenting and examining differences among women who express interest in, choice of and participation in fields of work that vary in traditionality, more recently Mazen and Lemkau, (1990); Whiston, (1993); and Read,

(1994). Investigations in this field reveal significant social, personality, and psychological differences between women. In order to understand these differences, one has to focus on the factors that influence decision-making, both external and internal. Zunker (1994), suggests that women experience internal and external restrictions when considering full-time careers and/or non-traditional careers. He sees these restrictions as follows:

Internal restrictions:

It is a difficult task for women to project themselves into an occupational environment dominated by men if they have grown up under the influence of traditional gender stereotyping of occupations. Women who have only considered traditional jobs such as teaching, nursing, or clerical work may find the contemplation of other jobs foreign to them. On the one hand, he contends that early socialization has instilled identification with certain society-sanctioned gender roles; on the other hand women are encouraged to break away from traditional gender roles.

External Restrictions:

Subtle attitudes and prejudices block women from selecting careers from a broad range in a society dominated by men. A lack of role models, support systems, mentors and responsibilities of home and family are among some that have been identified in literature.

Rubenfeld and Gilroy (1991) found that attending a single- or mixed-sexed high school interacted with sex of siblings in relation to college women's traditionality and occupational interests. Least traditional were women who had attended single-sex high schools and had mixed sex siblings. Betz, Heesacker, and Shuttleworth (1990) indicated that masculine and androgynous subjects had the best match between their abilities and choices, whereas feminine subjects and those in female-dominated occupations had the poorest match. Lips (1992) investigated variables related to mathematics and science as a factor in selecting a career and found women rated people related values and intrinsic values higher. Chipman, Krantz, and Silver (1992) found maths anxiety inhibited interest in a science career. Foaud (1994) cites studies that suggest women in single sex

schools have more opportunities for leadership and are hence more likely to select non-traditional careers.

In a longitudinal study that began in 1970, Gustafson, Stattin, and Magnusson (1992) studied career vs home-making orientation among Swedish adolescent females, and followed up when they were 26. They found educational motivation was related to educational achievement as young adults. Fouad (1994) reviewed three studies using path analysis to test models of career choice of women. Poole, Langan-Fox, Ciavarella, and Omodei (1991) indicated modest differences in environmental constraints between women raised in rural vs urban setting. Poole et al., (1991) included the unique variable of political orientation in their analysis, but it had only slight relation with career exploration or constraints. In a second path analysis investigating professional attainment of women, Poole, Langan-Fox, Ciavarella, and Omodei (1991) incorporated contextual factors that included background variables and external constraints (financial, parental, and marital). Socialization and parental expectations (perceived by students) were strong predictors of attainment.

O'Brien and Fassinger (1993) discovered in their study that incorporating maternal influence as an additional variable to ability, gender role attitudes, and agentic characteristics better predicted career choice and career orientation. Adolescent women with liberal gender-role attitudes, high math self-efficacy, and moderate attachment and separation from their mothers placed a relatively high value on work-related pursuits. Career orientation is highly related to non-traditional career choice. Schulenberg, Goldstein, and Vondracek (1991) results indicate that adolescent females score highest on traditionally stereotypic occupations when they are certain about career decision and have low aspirations.

(ii) *Characteristics of women in traditional and non-traditional occupations*

Chusmir (1983) identified characteristics and background traits of women in non-traditional vocations (construction work, skilled crafts, technical fields, science, law engineering, and medicine). He suggested that women who choose non-traditional

careers have personality characteristics usually attributed to men. For example, they tend to be more autonomous, active, dominant, individualistic, intellectual, and psychologically male-identified than women who choose traditional careers (social work, nursing, teaching, and office work). Motivational characteristics of women who choose non-traditional occupations are similar to those attributed to men: achievement orientation, status seeking, strong need for self-regard and recognition. Examples of background traits of women in non-traditional occupations are better education, better mental health, fewer or no children, eldest or only child, postponed marriages, fathers who were younger and in management roles, well educated fathers, and enrollment in women's - studies courses. Chusmir (1983) suggested that personality and motivational traits of women who choose non-traditional careers are formed by the time they are teenagers.

Fitzpatrick and Silverman (1989) reported fewer differences between women in traditional and non-traditional college majors than indicated in the 1970s, often the differences were within the non-traditional group (engineering vs science) suggesting that non-traditional women should not be considered as a homogenous group. Murrell, Frieze and Frost (1991) reported that college women who chose male-dominated careers had higher occupational aspirations and gave more economic reasons for their choices. They found that Black and White women did not differ in non-traditional plans, although Black women and women who tended to choose non-traditional careers tended to plan for more education than was necessary to achieve their career goals.

Chatterjee and McCarrey (1991) reported that women in a traditional group were more altruistic and socially oriented, less egalitarian and higher on expressive traits, whereas women in a non-traditional group placed higher values on creativity and autonomy and were higher in egalitarianism and instrumental traits.

(iii)   *Perceptions of non-traditional careers*

Swanson (1992) reviewed several studies that demonstrated that women and men in non-traditional occupations are perceived poorly. She contends that this suggests a negative consequence of violating gender norms in occupational choice. Ward (1991) examined job suitability ratings for men and women in sex-typed blue-collar jobs; subjects rated the job as more suitable for the incumbent if it was sex congruent. Pfost and Fiore (1990) reported that females portrayed as pursuing traditionally male occupations were viewed negatively by both men and women as potential romantic partners!

2.3.3   Family Influence

Fouad (1994) in her review pointed out that family influences were a relatively new area of research during the 1991-1993 period. This research focused on the role of the father and mother and the interaction between parents and children in vocational choice.

(i)   *Role of mother*

Davey and Stoppard (1993) found maternal employment, gender self-concept, life role orientation and perception of discrimination in the workplace did not affect traditionality of career choice but that support of significant others and cost of expected education did affect choice. Desired occupations were significantly less traditional than expected occupations for a third of the students. Barak, Feldman, and Noy (1991) in their study suggested that traditionality of maternal occupation was related to traditionality of children's occupational interests for both girls and boys.

(ii)   *Role of Father*

Positive influence on women's consideration of non-traditional careers was found to be related to emotional closeness to fathers (Hoffman, Hofacker, & Goldsmith, 1992). In a follow up of 32 families in which fathers played a large role in childrearing when children were pre-schoolers. Eleven years later it was found that fathers played a significant role in children's non-traditional views of occupational choice.

2.3.4   Race, Ethnicity, and Culture

In the USA there are few published studies that have investigated the career self-efficacy of men and women of different races, ethnicity and racial backgrounds (Hackett, Betz, Casas, & Rocha-Singh, 1992). Their study examined the variables of gender, ethnicity and social cognitive factors in predicting academic achievement of students in engineering. Ethnicity was found to be a significant predictor of both occupational and academic self-efficacy, with Mexican-American students reporting lower self-efficacy expectations than Euro-American students. The interaction between gender and ethnicity revealed that Euro-American and Mexican-American men reported significantly more faculty encouragement than their female counterparts. This points to the "institutional climate" being less favourable to women in male-dominated occupations. Matsui, Ikeda and Ohnishi (1989) found that Japanese women had lower self-efficacy for male-dominated occupations which was related to fewer role models, lower math self-confidence and higher self-rated femininity. Siann, Lightbody, Nicholson, Tait and Walsh (1998) in a study of British students of Chinese background took note that during interview sessions ethnicity and cultural traditions were not regarded as important factors in choice of school subjects and future occupations.

There is a serious neglect of cultural factors in career development literature in general (Hackett, Lent, & Greenhaus, 1991). In South Africa one study in progress was identified that researched Black women managers. Women and men of colour are severely underrepresented in scientific/technical careers both in the USA and in South Africa. Hackett and Byars (1996) suggest that despite the paucity of literature, studies that have considered career self-efficacy of different racial and ethnic groups have found that basic social cognitive mechanisms are applicable across ethnically diverse populations.

Over the last two decades career decision-making patterns of women are well documented in terms of traditional and non-traditional career choices. The influence of socialization, the perception of barriers to success, environmental and academic

constraints, influence of the family, characteristics of women in traditional careers and women in non-traditional careers have been established. A more detailed discussion of studies regarded as significant to the current study follows in the next section.

2.3.5 Significant Studies

Mau, Domnick and Ellsworth (1995) studied the characteristics of female students who aspired to science and engineering or homemaking occupations. Their stratified sample comprised 930 eight grade students of diverse races and cultures. Results indicated a significant difference among racial-ethnic groups in the distribution of science or engineering or home-making aspirations. Asian American and African American females had a higher percentage of science/engineering aspirations than White, Hispanic and Native American females. Overall more females aspired to home-making occupations. An important finding for this study, is that regardless of a student's racial background, students with science/engineering aspirations scored significantly higher on all variables except the number of siblings. They had higher scores on socio-economic status, internal locus of control, self-esteem, educational aspirations, perceived parents' educational expectations, and mathematics, reading and science proficiency test scores. They also had higher grade point average scores. Educational aspirations, parental expectations, GPA and science proficiency were the best discriminators between the groups. The researchers caution that while science and engineering are regarded as non - traditional occupations, generalizations cannot be made to other non-traditional occupations. The two studies that follow researched the important variable of mathematics as a discriminating variable in the selection of non-traditional occupations:

Lent, Lopez and Bieschke (1991) in a study on mathematics self-efficacy explored the relation of the four hypothesized sources of efficacy information (personal performance accomplishments, vicarious learning, social persuasion, and emotional arousal) to mathematics self-efficacy 'precepts. They also considered the relations among self-efficacy, outcome expectations, interest in mathematics-related college courses and choice of science-based careers. The research was conducted with 138 psychology

students, at a mid western university. The sample was predominantly White (94%) and the rest Black, Hispanic and Asian.

The results confirmed Bandura's (1986) hypothesis that personal performance accomplishments constitute the most influential source of efficacy information, although their results do not support the utility of vicarious learning, social persuasion, and emotional arousal experiences. A significant finding for the current research was that males had higher self-efficacy and mathematics ACT (American College Test) scores. They attribute this to the fact that men tend to enroll in more mathematics courses than women prior to college and argue that gender differences diminish when men and women have comparable prior course work experiences.

Brown, Eisenberg, and Sawilowsky (1997) researched traditionality and the discriminating effect of expectations of occupational success and occupational values for math-orientated fields. Their study in effect looked at why some women with a math orientation selected a traditional occupational career path over a non-traditional one. The sample comprised students in engineering and math education courses. The results of this study raised more questions than it answered. The data showed that expectations of success played a role in career pursuits. It is not very clear on why success expectations distinguished between women in non-traditional occupations like engineering, and more traditional occupations like math education, but not as much as self-efficacy for traditional occupations. They admit that the use of invalid measures may have resulted in the current findings. The value of this study, however, lies in some of the other findings. Women in engineering majors expressed a greater desire for prestige and flexible hours, and a greater desire to avoid the disapproval of the other sex, whereas the math education majors placed more value on having an occupation consistent with their self-concept.

A study on the occupational expectations of female adolescents by Davey and Stoppard (1993) provided important information for this study. Several factors proposed in the literature to be related to women's occupational choices were investigated: maternal

employment; gender self-concept, life role orientation; perception of gender discrimination in the workplace; influence of significant others; and cost of education. The researchers focused their attention on why female adolescents expected to enter more traditional occupations for their own sex than they desired. The sample comprised 180 female students from grade 10 to 12 in a Canadian high school. A number of measures were used, among others the Personal Attributes Questionnaire; Life Role Inventory; and Turner Perceived Occupational Discrimination Against Women Scale. An important finding was that students' desired occupations were less traditional than the occupations they expected to enter. Results indicate that influence of significant others and cost of education were the only factors that discriminated between students who expected to enter their desired occupations and those who expected to enter more traditional occupations. The present study is investigating perceptions of traditionality and non-traditionality of occupations and looks at the variables of maternal employment, influence of significant others and gender discrimination.

A study by Basit (1996) that examined the career aspirations of Muslim girls in Britian reflects very closely the situation of Indian and African women in this country. The traditional view of the man as the bread winner and the woman as the housewife, whose first responsibility is to home and family, means that for women having a career is a privilege. In her qualitative study, Basit (1996) interviewed 24 British Asian Muslim girls, their parents and 18 teachers. Her analysis indicated, that the desire of the families for upward social mobility through education and careers resulted in negotiation and persuasion, and this ethnic- minority could therefore not be stereotyped. The similarity to the South African experience is evident in the differing views expressed by family members, some of whom wanted daughters in traditional occupations that were also socially acceptable to the community, while others were more liberal in their views. An example that Basit (1996) quoted of a daughter wanting to be a nurse and the father objecting is similar to the personal experiences of the researcher discussed in the introduction.

" When I decided that I wanted to do nursing, my dad didn't like it at all. But he is really happy that I want to be a teacher." (p. 231)

The family of this girl regarded nursing as an occupation of low status and working in an male-dominated environment unacceptable. She also quotes the example of a more liberal mother who stated:

> " I would like her to be a teacher but she wants to be a nurse. So, I have left it to
> her to decide what she likes and what she wants to do." (p. 231)

The majority of adolescent girls in her study did not want to follow the career paths of their parents. The occupations they selected included medicine, law, accountancy, pharmacy, teaching, nursing, and secretarial work, with only one girl wanting to be a pilot. Significantly, all the girls in her study were sensitive to parental constraints and cultural pressures, but were able to negotiate their choices. Anecdotal evidence in this country indicates a similar scenario in most Indian homes.

Tan (1998) in a review of research in Singapore on the vocational development of adolescents in the country quoted her earlier studies which pointed to inconsistent patterns in sex-stereotyping. Girls in her sample outnumbered boys in preferring occupations traditionally dominated by men. She lists these occupations as: doctors, lawyers, bankers, accountants, executives, and police officers. The examples of sex-stereotyping of jobs was restricted to occupations of pilot and engineer for boys and secretarial work for girls. Choong (1990) conducted a study similar to the present study, except that 82 primary school children, aged nine, were presented with a list of 22 occupations and requested to indicate whether they were suitable for male, female of both genders. The results showed that both genders perceived the occupations of carpenter, fire-fighter, pilot, engineer, judge and gardener as male-orientated occupations and nursing and typist as female-orientated occupations. Occupations regarded as suitable for both males and females were: cleaner, salesperson, teacher, cashier, choreographer, veterinarian, architect, optician, photographer, and police officer. Another significant is by Chong (1994) who surveyed occupational choices of 267 teenage girls. Survey results indicate that 60.8% chose occupations that are traditionally dominated by men, and 39.8% chose occupations dominated by women. The majority considered their interests and special talents as more important than gender stereotypes. These findings appear to contradict Gottfredson's (1981) observations that sex-typing views influence

occupational choices more than interests. Tan (1998) concludes that in Singapore, where boys and girls are given equal opportunities for advancement, the conventional attitude toward sex typing of occupations is changing and more women are likely to enter traditional male-dominated occupations. This is likely to be the trend in South Africa as well, as the advancement of women is a priority of the new government and opportunities for females in the country have opened up tremendously since 1994.

2.4   Research in South Africa

The present study does not intend replicating international studies or theory testing, the focus is on examining shifts in perceptions of career suitability and actual choices of young women within a particular context. This context is one of rapid political change and sudden opening up of opportunities for women, in particular Black women. The focus of this study is on women across three generations. Racial and cultural factors are important variables, as indicated in the literature reviewed. The ideal would have been to investigate the occupational choices of women from all the race groups. The decision was made to concentrate on women from two race groups only, who have been previously disadvantaged in terms of race and gender, as this would provide a more focused and in-depth investigation. African and Indian learners from former Indian schools, and African and Indian women, who are in the majority in the region would comprise the sample to be researched. Research relevant to the target population in the country is minimal, hence one of the aims of this study was to describe this population and gather information that could inform future studies. Stead and Watson (1999) in their review of career research in the country point to the lack of published research and the predominance of research with White samples.

Watson and Stead (1996) have reported on research undertaken on career constructs and behaviour, career measures, career programmes/community needs and career theory. Their research has examined the developmental constructs of Donald Super, and the impact of environmental and contextual factors. Constructs such as career maturity and career decidedness have been researched with Coloured and Black high school pupils. Of

importance to this study are their findings related to socio-economic status and career maturity of high school pupils. Research conducted on the concept of life roles with tertiary students focused on the impact of culture, gender and socio-economic status. Watson and Smith (1994) found that culture accounted for significant differences in the participation, commitment and value expectations of most of the life roles of Asian, Black, and White students.

Research on occupational aspirations of Black adolescents (Watson, Foxcroft, Horn, & Stead, 1995; Watson & Stead, 1993) revealed that 75% of the sample aspired to occupations of a high status level, and had lower levels of self-knowledge and occupational knowledge for their age group. These findings will be important in providing insight on perceptions and choices made by adolescent females in this study. An unpublished master's thesis (Maesela, 1994) researched the differences between Std. 10 (Grade 12) Black male and female learners who select traditional and non-traditional occupations, on personality traits, vocational needs, and family background. Results indicated that socio-economic background, and parental occupations did not influence choices, more boys than girls chose non-traditional occupations and "traditionals" regarded factors of safety as more important than "non-traditionals". This study was conducted before 1994 and reflects the policies of that period of time, dramatic changes have taken place in the country since then. It also compares males and females and results with only a female sample could differ. Studies conducted in South Africa that inform theoretical constructs will be discussed in more detail in the next chapter.

The issue of gender has surfaced frequently in the media. The debate around issues of gender equality at home and in the workplace, progress of women in positions of management and profiles of women in non-traditional occupations provide more information than formal research. An excellent article by Meintjies (1999), explored the problem of gender equity "interfering with our culture" (p.28). His comments on male superiority and how it has been embedded in institutions, organizations and accepted practice, "undergirded by schools, religion, law and convention" (p.28) puts in perspective the problems women face on a daily basis. Meintjies (1999) pays tribute to

the efforts of government and the public sector who have fast - tracked the advancement of women managers and leaders. In government, there are a number of women ministers, deputy-ministers and top executives in key departments. The Employment Equity Bill will further advance the progress of women. Women have formed their own organizations to further their cause; stokvels, consumer-cooperatives, and professional bodies provide support and sustenance for women.

An unfortunate spin-off of the progress of women in all communities, but more especially in the Black community has been an increase in tension between men and women. Sono (1999) in an article suggests that the "rising tide of the abuse of black women by black men"(p.16) can be attributed to jealousy, and envy of men of successful career women exacerbated by their "bloated" arrogance. Professional African women were now totally independent of the men in their lives; living in flats, running cars and their own bank accounts, which was contrary to the patriarchal culture, which recognized men as bread winners and heads of families and women as dependents. In a similar vein an article with the title "Successful and single - and very fulfilled" (Ismail, 2000, p. 15) reported on a group of Indian women who were successful professional women, who had rejected traditional values and lifestyles; who chose professions over husbands, and enjoyed their independence. This is a trend that is gaining momentum in both African and Indian societies.

Women of colour, who have successfully entered traditional male-dominated occupations are often profiled in the media. Recent coverage included pioneer woman judges, the first African woman working in a newspaper printing press, pioneer female African and White train drivers, an Indian woman firefighter, an African woman builder and an Indian woman pilot (Mhlanga,1999; Naidu, 2000; Khan, 1999). Ord, (2000) in an article profiled a female director of a printing press, and a woman in construction. Both woman recognized the challenges of their jobs but felt quite capable of working in a male-dominated environment. Pretorius (1999) used the case of an African female mechanical engineer to demonstrate the difficulties and shortcomings in the South African educational system, which denied relevant training opportunities for all. The strides

made by the female engineer despite the difficulties were highly commendable. Gangaram (1999), interviewed the first woman chief justice in India, Leila Seth, who was on a visit to the country. She claimed that it was tough to rise through the ranks and attributed her success to her supportive family. Gomer (1999) in her article suggested that women were likely to change the stressful workplace environment and improve conditions for men as well.

The focus of the media on women has kept the issue of the status of women in the labour market alive, the various lobby groups, women's organizations and government policy have also contributed to the progress of women in the country. While there is very little documented research available that has direct relevance to this study, anecdotal evidence points to a far more progressive approach to the way occupations are categorized for women.

Researchers are confronted with the task of providing a theoretical framework that will underpin their investigation. When a researcher realizes that this cannot be done because there is no theory that is entirely relevant for the particular context which he or she is researching, a decision has to be made. One either adopts a theory developed elsewhere and justify its use or articulate this problem and confront it. The former is easier especially when one is expected to develop one's own theory in the absence of a substantial database. The chapter that follows considers this dilemma. Chapter Three explores a theoretical framework for a South African context and articulates the position of a Black, female researcher in this country.

CHAPTER THREE

A THEORETICAL FRAMEWORK FOR A SOUTH AFRICAN CONTEXT

A perusal of the literature internationally, indicated that there was no single theory that fully explained why women selected certain occupations and not others. The expectation that a researcher in this country, in the absence of a substantial body of research in career psychology in general, and more specifically with Black and female samples, can adopt a theory or generate one, is unrealistic. Stead and Watson (1999) point out that prior to 1990, researchers simply accepted theories formulated in the USA, but the relevance of these is now seriously questioned. At best, one can draw from what exists and identify a theory that provides some guidelines to frame the research undertaken.

The focus of this research is on " perceptions" and "categorization" which influence choices and an examination of the reasons for these choices. It is essentially about how woman think about career possibilities and make their choices, hence the theoretical framework has to consider cognitive and social factors in the interpretation and discussion of results. This chapter clarifies the theoretical position taken, that it is premature to adopt any theory of career development in the absence of a real understanding of the occupational choices of women in the country. A brief overview of the theories that have shaped the career psychology landscape are necessary to provide a context for discussion. The major theories will be alluded to, with a more detailed discussion of social cognitive theory as it relates to explaining women's occupational choices.

Osipow (1983) considered that the career development of women had received only cursory attention by career-development theorists. A survey of literature indicated that research in career development and career decision-making was undertaken mainly by men for men. Models of career decision-making were adapted for women as the need arose. The major theories that have developed over the last sixty years include the trait and factor theories, in particular Holland (1973); the developmental

theories of Super (1953) and his associates, the social learning theories and the social cognitive theories based on the work of Bandura (1977). Researchers and theorists who have focused specifically on the career development of women include Astin (1984), Betz and Fritzgerald (1987), Hackett and Betz (1981) and Gottfredson (1981). Other theories and career decision-making models have emerged as well, but these have been identified as significant.

The theories will be reviewed with consideration to their applicability to the South African context. South African researchers (Naicker, 1994; Watson & Stead, 1999) have cautioned against using theories that have originated in the West to explain career development of individuals in South Africa. Stead and Watson (1999) call for the indigenisation of career psychology in South Africa. This can only happen if there is a substantial database with research studies undertaken with all the racial and cultural groups and across all age and gender groups. The very limited research in the country is problematic and makes it difficult to generate a theoretical framework that is entirely relevant to this country, and particularly relevant to woman. Theoretical triangulation, which allows for the drawing from more than one theory, with the major focus on the social cognitive theories will be used to explain the results of this study.

3.1   Trait and Factor Theories

The philosophical research tradition of differential psychology resulted in the trait and factor theories of researchers like Holland (1973). The premise that underlies this approach, is that successful career choices depend on matching characteristics (or traits) of individuals to the requirements of the work environment (or factors). Holland's theory is one of the most researched theories and has been revised and updated six times, the latest version being published in 1997. Holland (1973) believed that people could be categorized into six personality types: realistic, investigative, artistic, social, enterprising and conventional. He also believed that there were six model environments, which existed parallel to the personality types. People searched for work environments that allowed them to express their attitudes, values, competencies and personality traits with individuals who were similar. The six personality and environment types were arranged in a hexagonal model, with adjacent types having more in common than opposite types. Individuals develop

dispositions that are a result of the interaction between the environment and the person. Two psychometric measures constructed by Holland, the Self-Directed Search (SDS) and the Vocational Preference Inventory (VIP), are used fairly extensively in South Africa. Career guidance in the past at the secondary school level has tended to adopt Holland's model. Paper and pencil tests, interest inventories and guidance sessions focus on matching individuals to work environments.

Nel (1999) in his evaluation of the theory raised the issue of culture and gender bias. He pointed out that the Self-Directed Search (SDS) has been criticized as being gender biased. Women tended to score higher on social, conventional and artistic orientations in contrast to men who scored higher on realistic, enterprising and investigative orientations. Holland's earlier response to the same criticism was that it was a true reflection of women's career choices (Holland, 1982). A study of the applicability of Holland's hexagonal structure of interest for a group of 529 Black South African teenagers conducted by Watson, Stead, and Schonegevel (1998) found that Holland's model did not provide an acceptable level of fit across gender and socio-economic status groups. In an earlier study however, Brand, Van Noordwyk, and Hanekom (1994) indicated that the SDS was effective in assessing the interests of a group of 983 Black South African teenagers. Despite certain concerns expressed about Holland's model, it is regarded as an important theory and used by career psychologists and counsellors internationally and nationally.

3.2 Developmental theories

The developmental approach considers a career as a lifelong process, which comprises of specific stages during which an individual makes choices and is dependent on factors like career maturity, adaptability, values and self-concept. Donald Super (1980) is regarded as one of the major career development theorists, and like Holland, has had his theories researched internationally. Langley (1999) who worked with Super when he visited South Africa in 1988 considered that his constructs were acceptable to the South African context. Super's theory has been revised over a period of 60 years as a result of research, reflection and practice and is now regarded as a lifespan, life-space theory of career development. The developmental approach looks at an individual's lifespan, and conceptualizes a career

as a life-long process, comprising specific stages during which career choices are made. An individual requires special skills, level of career maturity and adaptability to environmental changes to maximize his career development. His theory also comprises a life-space approach, which considers intrapersonal aspects such as values, self-concept, life themes, interests and personality. Super also emphasizes the importance of integrating concepts like life-roles and culture. According to Super (1953), career development was a process of individuals mastering challenges posed by psychosocial maturation and cultural adaptation, prompted by either predictable developmental tasks associated with age, or adaptive tasks that were unpredictable and not associated with age.

Super (1990) has more recently addressed the career development patterns of women by classifying them into seven categories and established a double-track career with housework as a second career. The seven categories classified by Super were: stable homemaking, conventional, stable working, double-track, interrupted, unstable, and multiple trial. Super's establishment of home-making, as a second career is significant, as conflicts between the demands of home and career influence career success and choices. The general developmental pattern of women suggested that women's life cycle did not follow life-stage models developed from the study of men. Compared with men, self-identity was slower to develop, primarily as a result of gender-role stereotyping (Zunker, 1994).

Fouad and Arbona (1994) considered the incorporation of cultural variables in Super's theory as a major strength. In South Africa, Super's theory has been one of the most widely researched and accepted (Stead & Watson, 1999). Stead & Watson, (1999) point out that there are limitations, as constructs such as ethnic identity, discrimination, widespread unemployment, and worldview have not been taken into account.

Gottfredson's (1981) theory of circumscription and compromise is a developmental approach focusing on childhood and adolescent processes. According to her theory, as individuals' perceptions of themselves and the world of work developed, the range of occupational alternatives was successively circumscribed. This process was reversed when actual occupational choices were made. As individuals faced barriers

to their aspirations they inevitably compromised, thus leading to an expansion of the range of occupational choices. Both processes of circumscription and compromise were hypothesized to follow a prioritized order: in circumscription, occupational sex-type was the first to develop and thus the most central, followed by prestige and then interests. In compromise, the reverse order occurred in sacrificing interests first, followed by prestige, and finally sex-type. Studies addressing Gottfredson's theory have generally not confirmed theoretical propositions (Swanson, 1992).

Studies that are significant for this research included those of Leung and Plake (1990), which indicated that sex type was sacrificed more often than prestige, particularly by women. Hesketh, Durant, and Pryor (1990) found that interests were more important than prestige, which was more important than sex-type. Hannah and Khan (1989) combined Gottfredson's theory and self-efficacy research to examine gender and socio-economic status (SES) differences in the occupational choices of 334 high school seniors. Males chose predominantly male-dominated occupations, and high SES females chose more male -dominated occupations than low SES females, suggesting an interaction of gender, sex-type and prestige. Swanson (1992) suggests that Gottfredson's theory may need to be modified as the process of circumscription and compromise may vary by gender, sex -role attitudes, and interest area and are far more complex than anticipated. Despite the limitations of the theory, Gottfredson focused on some important variables that other theories ignored, in particular, the influence of sex-roles.

3.3   Socio-psychological theory

Astin (1984) is regarded as a pioneer, who has made a substantial contribution to the research and debate on the career development of women. She proposed a needs-based sociopsychological model to explain women's career decision-making, which incorporated four constructs; motivation, expectations, and sex-role socialization. The model proposed that personal characteristics and social forces were the two major forces, that shaped behaviour in general, and work behaviour in particular. The theory described in considerable detail the sex role socialization process that occurred in a variety of contexts and variables that affected opportunity structures for women. Astin (1984) described work behaviour as motivated largely to satisfy the three basic

needs of survival, pleasure, and contribution. She assumed that career choices thus reflected expectations of both access to work opportunities, and the perception of the relative need satisfaction capacity of work of various kinds. Expectations that led to these career choices were seen to be shaped through early socialization but could be modified by changes in opportunity structure. When this happened, changes in career choice and behaviour at work also changed.

This model has relevance for South Africa because of the rapid social and political changes in the country, as it attends to psychosocial variables (personal characteristics) and contextual-sociological variables (social forces) as determinants of career choice. However, only elements of the theory can be used as Osipow (1987), and other critics of this theory (Harmon, 1989; Fritzgerald & Betz, 1983) considered that the model did not lead directly to empirical tests since it was very descriptive in nature.

3.4   Social Cognitive theory

De Bruin (1999) considers the tendency in South Africa for researchers to use the theories of Super (1990) and Holland (1973) as problematic, because these theories have been based on the experiences of White middle-class men. The assumption of normal development on which these theories are based, does not take into account the inadequate social, economic and educational resources of the Black majority. The high unemployment rate, unstable and unsafe environment is also not conducive to personal development. He suggests that the social learning theories and social cognitive theories take into account the role and influence of the social environment on career development and are better suited to the South African context. The social cognitive theory lends itself to a better understanding of the career development of women as well, and will provide the framework for this research.

Hackett and Betz (1981), and Betz and Fritzgerald, (1987) are amongst the foremost researchers who have pioneered research in this field. Hackett and Betz (1981) explored a self-efficacy approach based on Bandura's concept of self-efficacy. The effect of socialization on the career development of women, and its impact on personal self-efficacy in relation to work related behaviours, is well documented. This

theory has resulted in a significant volume of research over the years and remains one of the most tested and popular theories. Any discussion on the career choices of women should consider the career self-efficacy construct within the general framework of social cognitive theory.

Bandura (1977) referred to self-efficacy expectations as estimates of a person's confidence in her/his ability to successfully master behaviorally specific tasks. According to Bandura, expectations of personal efficacy were critical to the initiation and persistence of behavioral performance in all aspects of human development. The link between self-efficacy expectations and actual performance is considered one of the core components of Bandura's theory. Low self-efficacy expectations regarding a specific behavioral domain, were hypothesized to lead to avoidance of those behaviours and therefore to low levels of performance within that domain. High self-efficacy expectations were likely to increase the frequency of behaviour within a specific domain, and therefore to indicate more successful behavioral performance. Bandura (1986) suggested that beliefs were acquired and modified through four major sources of information: personal performance accomplishments, vicarious learning, verbal persuasion, and emotional arousal. Successful performance accomplishments were usually the most powerful source of information for self-efficacy judgments. Vicarious learning experiences, especially culturally similar coping role models and verbal encouragement could promote stronger self-efficacy. Inhibiting anxiety, negative emotional arousal, and verbal discouragement could erode self-efficacy. Bandura's self-efficacy theory (1977, 1982, and 1986) has been applied to career decision-making and supported by many career psychologists (Luzzo, 1993).

Hackett and Betz (1981) were among the first to suggest that self-efficacy expectations may have an important cognitive influence on career decision-making and vocational achievement. Their contribution to theory and research is substantial and will be discussed in greater detail, followed by discussion of some of the studies that have resulted from this model. Hackett and Betz (1981) claimed that personal self-efficacy expectations influenced exploration of the range of career options and persistence in career exploration. Their model postulated that the socialization experiences of women resulted in a lack of strong expectations of personal efficacy in relation to many career-related behaviors, and thus led to a failure by them to realize

their potential in career pursuits. They have used Bandura's (1977; 1986) theory of social learning, which proposed that there were four major sources of efficacy information: performance accomplishments, vicarious learning, emotional arousal, and verbal persuasion. Sex differences in the access to, and availability of these sources of information affected the career decisions and achievements of women. The specific mechanisms by which societal beliefs and expectations became manifested in women's vocational behavior, and the relationship to subsequent choices, involved focusing on cognitive processes mediating these behaviors (Hackett & Betz, 1981).

The theoretical conceptualization of Hackett and Betz (1981) provides a useful framework to explain how women in this country respond to the process of socialization, which constricts their options to traditional roles based on gender. The present study is not about theory testing, but the critical questions posed will be answered with reference to this model. The discussion that follows will examine these constructs as espoused by the self-efficacy approach and with reference to the South African context.

3.4.1 Performance Accomplishments

Self-efficacy theory suggests that successful performance of a task or behavior provides information that has a tendency to increase expectations regarding efficacy in relationship to that task or behavior. Research on sex-role socialization (Hackett & Betz, 1981) indicates that characteristics constituting the stereotypic masculine role are primarily instrumental qualities, like assertiveness, activity, competitiveness, and dominance. Such qualities facilitate behavior and increase the probability of success. The stereotypic feminine role reflects a combination of emotionally expressive characteristics such as nurturance, sensitivity, and passive-submissive qualities, and does not lead as readily to successful task accomplishments or the development of competence. According to Bandura (1977) sex differences in attributions may be important to the development of efficacy expectations. The utility of successful task performance in increasing efficacy expectations depends in part on the degree to which success is attributed to internal factors (ability or effort) or external factors (task difficulty or luck). Studies have indicated that women are more likely than men to rely on luck as an explanation for both failures and successes; women also tend to

take less responsibility for their successes in traditionally masculine performance domains (Hackett & Betz, 1981).

Hackett and Byars (1996) drew attention to the fact that there was minimal focus on the interaction between gender and ethnic influences on career self-efficacy. They used the experiences of African-American women and girls to illustrate that the performance accomplishments of ethnic minorities have to be viewed differently from their White counterparts. The inability of African American women to predict how the environment will respond to their performance or behavior can be attributed to some extent on barriers, real or perceived (racism, sexism, job discrimination) that operate on both a societal and personal level. Negative outcome expectations result from African-American girls believing that their academic achievements are undervalued, termed the "low -effort syndrome" by Ogbu (1991). Social class also seemed to exert a strong effect on this syndrome. Mickelson (1990) found that middle-class African - American girls' academic performance and beliefs about the value of education was higher than all other race groups. A significant finding for this study was that African American women had slightly higher aspirations than White women for male-dominated occupations but the level of aspiration was similar for female-dominated occupations. One of the reasons suggested is that their early - gender role socialization is usually less sex-typed than White women (Hackett & Byars, 1996). Economics and family make-up means that traditional gender roles and chores in the household may not be as ingrained and fixed in African-American households, because every member of the household has to do whatever it takes to survive. Betz and Fitzgerald (1987) noted that an androgynous upbringing is a major facilitator of career achievement for all women, but African-American women face other barriers which may affect their benefit. This is true of African women in the country as many single women take care of families. Poverty is a major factor affecting this community as well, with the result that all members of the family have to do whatever it takes to survive. However, strong cultural views which cast women in subservient roles and the legacies of apartheid, may influence career aspirations and self-efficacy. De Bruin (1999) points out that in many South African schools, especially in the rural areas, the lack of trained science teachers, books, and laboratories may lead to low self-efficacy expectations for personal performance in

science and mathematics and other related activities. For women the problem is compounded, as gender bias has to be taken into account as well.

3.4.2 Vicarious Learning

Self-efficacy theory regards vicarious learning as an important source of information pertinent to increasing efficacy expectations. It derives from the vicarious experience of observing other people succeed. Hackett and Betz (1981) believe that in general males, more than females, are exposed to vicarious learning experiences relevant to career-related efficacy expectations. They allude to research which points to sex-role and occupational stereotyping in children's literature, portrayal of women as homemakers and in mother roles, and under- and stereotypical representation in occupational information. They further contend that, because there are fewer women in non- traditional occupations, there are fewer competent role models and therefore vicarious learning experiences, as a source of self-efficacy information is less available to them.

Hackett and Byars (1996) suggest that, while the number of visible successful African - American women is increasing, there is still a scarcity of competent female models, from which African-American girls can learn and formulate realistic educational and occupational goals. African-American mothers expose their daughters to more non - traditional gender roles and behaviors and foster self-reliance and strength. The extended family system increases opportunities for vicarious learning from other females in the family. However, career self-efficacy may be enhanced only for some African-American women. Racism and prejudice related to experiences of family members often result in skepticism and distrust about societal and educational opportunities, and could result in lowered academic efficacy for others. Dawkins (1989) found that African-American girls' persistence in pursuing academic and career goals is facilitated by their parent's aspirations, especially the mother's. The mother's educational level influences achievement, self-esteem and likely self-efficacy as she is identified as a model sharing gender, culture, and class with her daughter (Hackett & Byars, 1996). Greene (1990) points out that African-American women learn vicariously that they will have to work, as have their women folk throughout the ages, and cannot depend on marriage to exempt them from the labour

force. Their mothers not only model work behaviour but also communicate information about work in general, employer-employee relationships and coping skills necessary to deal with racism and discrimination.

There are many similarities between Black women in South Africa and African - American women in the USA, but there are also significant differences. Both are faced with racism, discrimination and poverty, which force them to work practically all their lives. The difference between them is that Black women in South Africa have enjoyed few opportunities in the past and restrictions have been deliberately legislated, whereas in USA there has been an affirmative action policy in place for some time. African women in this country are in the majority, and with a new ANC government in place, have had priority for advancement at every level only since 1994. The benefits may be too soon to measure. Unfortunately, the legacy of apartheid has resulted in many African students of both sexes avoiding mathematics, and as a result Africans have a very low representation in science and engineering fields. The irony is that a great deal of money is allocated for the advancement of Africans, especially in the fields of engineering, health sciences and science education because of the scarcity of professionals in these fields. Unless positive self-efficacy expectations are developed for African disadvantaged youth, many opportunities will be lost. Nel (1999) contends that even though exiles, who have returned with high level scientific qualifications and hold prestigious positions in the country could be regarded as role models, they are too distant from African disadvantaged youths, who require role models from their own backgrounds. Hackett and Byars (1996) point out that vicarious learning is most effective if models come from the same background. This is not the case with South African Indian males, who have many role models in practically all fields of endeavour, but is a problem with females who have had cultural and religious restrictions to contend with.

3.4.3 Physiological and Emotional Arousal

A third source of data, influencing efficacy expectations, is from states of physiological arousal from which people judge their level of anxiety and vulnerability to stress (Hackett & Betz, 1981). High levels of anxiety are debilitating in terms of performance and efficacy expectations. Hackett and Betz (1981) cite research to

support their contention that females have higher levels of stress and anxiety than males, and suggest further that traditional socialization of females reduces perceptions of self-efficacy. Hackett and Byars (1996) consider the cumulative effect of dealing with racism on a daily basis by African American women a chronic stressor that may weaken efficacy judgments. A study of junior high school African-American girls indicated lower impulse control and moral scales than their White counterparts, suggesting problems in delaying gratification and regulating behaviour (Gibbs, 1985). Bandura (1986) believes that goal setting behaviour enhances academic motivation and that strong efficacy expectations are required for effective goal setting. Hackett and Byars (1996) attribute emotional arousal interacting with already weak academic efficacy and resulting in ineffective goal setting as contributing to the poor impulse control observed in some African American girls. They suggest that a strong, positive ethnic identity could serve to increase self esteem, facilitate management of racism and prejudice, and enhance efficacy beliefs that may result from inaccurate performance feedback from others. Hackett and Byars (1996) have drawn up a model (refer to Model 3.1) in which they set out hypothesized influences of cultural socialization on career self-efficacy of African American women.

Black women, African women in particular, have had to deal with legislated racism in the past, whereas White women now find that affirmative action policies legislate against them in the market place. The shift of power to Black hands does not mean that Black women are no longer recipients of racism and do not experience discrimination. At grassroots level the lives of African women have not changed. Many are still in domestic employment, and face racism and social discrimination on a daily basis. Black women in positions of power are generally assertive and confident, and may suffer lower levels of discrimination. Anecdotal evidence indicates that White women feel frustrated because they know that no matter how highly qualified or competent they are, Black women will be given preference in the market place. The complex nature of South African society does not allow for generalizations based on models developed elsewhere. These hypothesized influences should be tested with South African women to provide a clearer picture of how women of all race groups are currently responding to transformation in the country.

Model 3.1 Hypothesized Influences of Cultural Socialization on Career Self-Efficacy of African American Women (Hackett & Byars, 1996 p. 328)

Sources of Efficacy Information	Examples of Typical Socialization Experiences of African American	Possible Effects on Career – related Self-Efficacy
Performance Accomplishments	More androgynous upbringing; increased opportunities for involvement in nontraditional activities	Higher self-efficacy regarding a range of traditional and nontraditional work activities
	Inconsistencies in environmental responses to similar performance	Success experiences may not directly enhance efficacy
	More reinforcement for success for middle-class African American women	Positive effects on efficacy for this group
	Negative outcome expectancies as a result of racism	May result in decisions not to act, even when efficacy is strong
Vicarious Learning	Strong female work role models in traditional, especially domestic, service jobs	Enhances traditional career self-efficacy
	Few professional-level female role models	Lower self-efficacy with regard to higher-level professional jobs
	Inconsistencies between verbal messages about value of education and hard work and observed behavior of parents and family	May undermine academic efficacy
	Observation of influences of racial and sex discrimination on parents, family, and peers	Possible undermining of efficacy via negative outcome expectations
Physiological arousal	Higher levels of anxiety and depression as a result of awareness of racism and discrimination	Decrements in career self-efficacy with higher levels of negative emotionality
	Chronic stress produced by continuing experience of racism	Possible decrements in efficacy
	Higher levels of distrust due to feelings of difference, alienation	Negative effects on outcome expectations, efficacy
Verbal Persuasion	Early encouragement to face necessity of work	Enhanced career self-efficacy
	Ongoing discouragement about outcomes of competent performances as a result of racism	Undermining of career self-efficacy; negation of predictive influences of self-efficacy due to lowered outcome expectations
	Encouragement to succeed despite or because of parents' experiences with the system	Possible enhancement of career self-efficacy, particularly if verbal encouragement is coupled with observation of success experiences of parents, family, or both

South Africans of Indian origin are relatively more comfortable with studying in tertiary institutions as many of their parents and relatives are professionals. Many African students are first generation students. They are likely to experience high levels of anxiety associated with adjustment to academic life, language problems, and coping with poor academic backgrounds. Anecdotal evidence from counselling many students at the University of Durban-Westville supports this view. Attempts to transform tertiary institutions and open up access to previously disadvantaged students, has resulted in many under-prepared students being admitted on lower admission criteria, especially from rural areas. They experience prejudice from students of other race groups who expect lower standards from them, and even fellow African students who are critical of their accents, dress and ability to communicate in the English language. Problems for African students are compounded because most of them are recipients of bursaries, and could lose this form of financial support if they do not perform well. A heavy emotional burden is the expectation by other family members, that they will qualify and support the rest of the family. Females, in particular, have to contend with the added problem of sexual harassment and violence from males in the dormitories and often on campus. The lack of a culture of learning in many township schools also results in academic under preparedness and hence low efficacy expectations. Research in this area is critical if the African community is to obtain maximum benefit from policies and money that is supposed to contribute to their empowerment.

3.4.4 Verbal Persuasion

The fourth source of information concerning personal self-efficacy derives from the verbal suggestion of others (Hackett & Betz, 1981). Encouragement and persuasion towards a given behaviour increases efficacy expectations whereas a lack of encouragement or active discouragement decreases efficacy expectations. Hackett and Betz (1981) consider that traditional societal views concerning appropriate roles for males and females encourage career pursuits for males but not for females. They provide a model, which postulates the effects of traditional female socialization on career - related self-efficacy expectations. The model that follows indicates the four sources of efficacy information, examples of how female socialization may influence

the acquisition of each type of information and the possible effects on the development of efficacy expectations of girls and women. Hackett and Betz (1981) concede that their model may not be applicable to all women but research findings support the view that it does characterize a large majority of women and children. While the model is not recent, it is still a useful framework to conceptualize the career development of women and guide research.

Model 3.2 A model depicting the postulated effects of traditional female socialization career related self-efficacy expectations (Hackett and Betz, 1981 p. 333)

SOURCES OF EFFICACY INFORMATION		EXAMPLES OF SOCIALIZATION EXPERIENCES TYPICAL AMONG FEMALES		EFFECTS ON CAREER RELATED SELF-EFFICACY
Performance Accomplishments	===	Greater involvement in domestic and nurturance activities, but less involvement in sports, mechanical activities, and other traditionally "masculine" domains.	➜	Higher self-efficacy with regard to domestic activities lowers self-efficacy in most other behavioural domains.
Vicarious Learning	===	Lack of exposure to female role models representing the full range of career options. Female models largely represent traditional roles and occupations	➜	Higher self-efficacy with regard to traditionally female roles and occupations, lower self-efficacy in nontraditional occupations
Emotional Arousal	===	Higher levels of anxiety are reported by feminine sex-typed individuals	➜	Further decrease in both generalized and specific self-efficacy
Verbal Persuasion	===	Lack of encouragement toward and/or active discouragement from nontraditional pursuits and activities e.g. math, science	➜	Lowered self-efficacy expectations in relationship to a variety of career options

Hackett and Byars (1996) suggest that African American girls may receive contradictory messages or verbal communication inconsistent with observed parental behaviors and experiences. Ogbu (1991) has also pointed out that parents convey messages about institutional and social systems as they discuss personal issues, experiences and frustrations. The messages that parents communicate to their children about being African American significantly influence ethnic identity development, which may mediate or moderate the effects of learning experiences on academic and career self-efficacy. Parental messages can influence concrete attitudes by means of a feedback effect i.e. diminished occupational rewards for African Americans, but the converse is also true. Verbal persuasion may inculcate a positive ethnic identity and strong efficacy beliefs for coping with racism, and thus assist in the development of adaptive academic, career, and coping self-efficacy (Hackett & Byars, 1996). Research with college students has revealed consistent support for the relationship between career self-efficacy beliefs and various indexes of development (Lent, Lopez, & Bieschke, 1991; Luzzo, 1993).

The situation in South Africa is far more complex. Parallels can be drawn with problems associated with racism and sexism, but legislated repression from the old political order and legislated affirmation from the new government changes the dynamics. African women have priority in the job market; admission to tertiary institutions and a government appointed commission that deals with issues of gender. Previously, they did not have the wide range of opportunities for advancement that they now enjoy. Indian women are much lower in the order for advancement but opportunities have opened up for them as well. Role models are frequently profiled in the media; women in Parliament, in business, holding executive and management positions, at the top of their professions and in previously male-dominated occupations. Some of the female role models may be too far removed from the grassroots and realities to be effective agents of change. Women in the country should have strong self-efficacy expectations but this may not be the outcome for all women. The political gains have to be balanced by the realities of extreme poverty, high levels of unemployment, serious physical and sexual abuse and by male domination that still exists in the country.

The career development profession is currently involved in efforts to understand and facilitate the school-to-work transition process (Lent & Worthington, 1999). In a special issue dedicated to this process, the social cognitive view of school-to-work transition was put forward by Lent, Hackett and Brown (1999). Based on their social, cognitive career theory presented in 1994, they proposed six inter-related processes that are manifested at various developmental points.

- These processes include the following:
- acquisition of positive yet realistic self-efficacy and outcome expectations
- development of academic and career interests
- the formation of linkages between interests and career-related goals
- translation of goals into actions
- development of academic and work skills and remediation of performance-related problems
- negotiation of social supports and barriers that affect the development of
- self
- occupational beliefs and the pursuits of preferred academic/career options.

The first three processes are tasks of elementary and middle school years but are refined in high school and beyond high school. As children gain experience with a variety of performance tasks, they begin to develop differentiated notions of self-efficacy at different activities and outcomes of various life courses. Their interests become more defined and stable. These emerging interests, in combination with self-efficacy and outcome beliefs, guide the formation of career-related goals (Lent, Hackett & Brown, 1999). Children make inferences about their efficacy and likely outcomes by heeding the verbal support or discouragement they receive, observing the academic and career behaviour of others and their own physical reactions in different performance situations. Lent et al., (1999) contend that the career possibilities of students can be constricted at an early age because of limitations in environmental exposure or because of inaccurate self-efficacy or occupational outcome expectations. They further caution that attention must be paid to the cognitive processes that act as filters through which students interpret the quality of their performance. The relevance of this to females is illustrated by the example quoted of girls who perform well in mathematics but claim that they were just lucky

or the test was easy. Research findings, according to Hackett (1985), suggest that girls often attribute their achievements in mathematics, science and non-traditional activities to factors other than their own capabilities. Anecdotal evidence of this is common among female scholars and students in this country who have low self-efficacy expectations about their performance in science and mathematics-related courses. The other three sources of personal efficacy can be used as intervention strategies augmenting the effects of direct performance experiences. Lent, et al., (1999) suggest modelling strategies, verbal persuasion and attending to physiological and emotional states can foster personal self-efficacy.

Nel (1999) in his review of social cognitive career theory believes that it is a useful model for the South African context because it considers the socio-cultural context in which learning occurs, and does not assume that everyone has only one developmental route to follow. A problem with the theory, he maintains, is that the influence of gender, ethnicity and socio-economic status is not too clear. Further research is necessary with all population groups before any real judgement can be passed on the applicability and suitability of this model for our country. There is no evidence of any theory that has been tested and found entirely applicable to the South African context.

The purpose of this study was to determine the reasons for women's perceptions and choices of different categories of occupations. The questions that follow will be answered with reference to the literature reviewed internationally and nationally, and within the theoretical framework discussed in this chapter:

- What are women's perceptions of the different occupational categories (traditional and non-traditional)?
- Why do women choose particular occupational categories and not others?
- To what extent do women's occupational choices correspond with their racial class or cultural status?
- What are the social, educational and personal barriers that affect women in their choice of occupations?

Chapter Four discusses the methodology that attempted to obtain valid and reliable information to answer the critical questions posed by this research. The analysis of quantitative and qualitative data has been integrated to provide insight into the perceptions and choices of occupations with three different samples of South African females, across two race groups. This research by no means purports to provide a clear picture of occupational choices and perceptions of woman in the country but does provide data that can be used for further research.

CHAPTER FOUR

METHODOLOGY

The purpose of this study was to determine the reasons for women's perceptions and choices of different categories of occupations. In other words, to ascertain how women in the country perceived, categorized and selected occupations within the context of gender. Occupations were categorized as suitable for males, for females, and for both genders. In order to determine how such choices were made, survey questionnaires were administered to female Grade 11 learners in former Indian schools. In addition, six older women, who were working in non-traditional occupations, and their mothers, who had traditional occupations, were interviewed to establish career decision making patterns and trends over time. The decision, to survey young female learners and then conduct interviews with older women, was taken to provide a context for discussion in the absence of a relevant database. As already discussed in the introduction, the choice of methodology was a considered decision to blend a descriptive, analysis with a narrative in parts which allowed the voices of women of different generations to be heard.

Research instruments i.e. the survey questionnaire and the semi-structured interview, were pilot tested and validated before use. Chapter One has outlined the methodology very briefly. A more detailed discussion of procedures used to obtain the sample, validate instruments and collect data, follows in this chapter. Chapter Five reports on the survey; the problems encountered in the process of data collection, the statement of results and a brief analysis of results.

4.1 Procedure to Obtain Sample

The sample of Indian and African Grade 11 pupils was drawn from former Indian (ex House of Delegates) schools in the greater Durban area. These schools were selected because learners in the school are predominantly African and Indian. The method of cluster sampling, a form of sampling in which groups and not individuals are randomly selected, was used. This method of sampling was regarded as the most

feasible for this survey. Permission was more likely to be granted by principals, who were concerned about disruption in schools, if intact classes of Grade 11 girls were surveyed.

The following steps were taken to ensure random selection of clusters:

- A list of all former Indian secondary schools in the greater Durban region, was drawn up. The three areas in the region were as follows:

Area	*No of Schools*
North Central:	22
Inner West:	23
South Central:	22
Total:	67

- The desired sample size of 10% of the target population (67 schools) meant that 6.7 or 7 schools constituted the sample.

- An estimate of the average population of members per cluster (school) was established. The average number of grade 11 female learners per school was estimated at 80.

- The number of clusters needed was obtained by dividing the sample size by the estimated size of a cluster. The total sample was estimated at 5360 female learners, 10% comprised 530 learners. As the nearest whole number was taken (7 instead of 6.7 schools) the sample size was estimated at 560 female learners.

- The clusters (schools) were randomly selected and every member of the cluster (Grade 11 female learners at the school) was included in the sample. The volatile and uncertain state of the schools, which were in the process of strike action, necessitated that a larger number of schools be included on the list. This was done to ensure that the desired number of seven schools was eventually obtained.

4.2 Research Instruments

A survey questionnaire and semi-structured interviews were used in the study to obtain data that would enable the researcher to answer the critical questions posed in Chapter One.

Critical questions:

- What are women's perceptions of the different occupational categories (traditional and non-traditional) ?

- Why do women choose particular occupational categories and not others?

- To what extent do women's occupational choices correspond with their racial class or cultural status?

- What are the social, educational and personal barriers that affect women in their choice of occupations?

A survey questionnaire was developed in stages to obtain data from learners that would provide answers to the above questions. The decision was taken to construct and validate instruments rather than use existing instruments which were not suitable. The data from the pilot study provided baseline information, and was used to construct the final questionnaire and frame further questions for the interviews. The data from the survey questionnaire was analyzed both qualitatively and quantitatively.

Structured interviews were planned with mothers and daughters from three Indian families, and three African families.

The procedure was as follows:

- From the sample surveyed, triads would be established if possible i.e. daughters
- in Grade 11 who had filled in the survey questionnaire, sisters employed in non - traditional occupations and mothers in traditional occupations.
- Semi-structured interviews would be conducted with sisters and mothers.
- In the event of a sample of 6 sisters and 6 mothers not being identified from the sample surveyed, women outside the sample would be identified and interviewed.

The research instruments were planned so that data could be obtained from more than one source.

4.2.1   Reliability and Validity of Instruments

The survey questionnaire and semi-structured interviews were pilot-tested. The results, as well as the procedure to establish reliability and validity, will be discussed in the section that follows.

4.2.2   Pilot Study : Survey Questionnaire

In the absence of a validated instrument that could be used for the purposes of this research, an initial pilot test was planned with 30 students drawn from the population to be sampled.

The pilot test was planned with the following outcomes in mind:

- baseline data on the variables to be researched would be obtained and used in the construction of the final questionnaire

- aspects of the questionnaire to be included in the final questionnaire would be validated

- a list of occupations to be used in the questionnaire would be established

- data obtained would be used to construct a Likert scale that would provide scores for statistical analysis

- use of the terminology "suitable for" would be tested to assess traditionality of choice

- a profile of pupils and parents would be obtained

4.2.2.1   Methodology used in the pilot study

(i)   Questionnaire

Refer to Appendix A

A questionnaire was constructed, and face validity established by requesting an educational psychologist, a teacher counsellor, and a pupil to comment on the questionnaire.   Questionnaires were given in advance and respondents were

interviewed and their responses noted. There was consensus that the questionnaire would provide valid information on perceptions and choices of traditional and non-traditional careers and reasons for such choices. The teacher counsellor indicated concern about African pupils' problems with language, and sometimes unsettled family situations that could affect their responses. The pupil found the questionnaire interesting and relevant and indicated that she had to consider her own career choices very seriously. She expressed some reservation about providing reasons for the choice of each occupation. The educational psychologist advised that an attitude scale should be constructed as it would be a more useful measure of categorization, and suggested that occupations be clearly defined to avoid any ambiguity.

The questionnaire comprised two parts. The first part required pupils to fill in personal details and the second part surveyed their occupational choices. Pupils were presented with 20 occupations that were familiar to them and ranged from butcher to medical doctor. They were requested to indicate whether they considered each occupation suitable for women; suitable for men; or suitable for both. The list of occupations included those regarded as traditional for women e.g. nursing, and traditional for men e.g. butcher. Occupations such as medical doctor, lawyer and clerk, which are generally regarded as suitable for both sexes, were also on the list. The occupation of politician, previously dominated by men in this country, was included to ascertain how females were reacting to the larger number of women in parliament. The pupils were required to list three occupations they would like to follow and to indicate problems they were likely to experience in pursuing their occupational choices. Ten such problems were listed. Students could tick off those that applied to them, as well as any other problems not mentioned

(ii)   Sample

The questionnaire on occupational choices was administered to 30 girls (15 African and 15 Indian) in Grade 11 in a secondary school in Shallcross. The school is situated in a middle class suburb with a predominant Indian population. African learners either live in the area or travel in from the adjoining townships. The school counsellor at the school helped identify a sample and administered the questionnaire. Most learners were able to follow instructions but some African learners needed assistance in understanding what was required.

4.2.2.2 **Results of the Survey**

(i) *Part 1*

(a)   Personal details

Two African students did not fill in Part 1, all Indian students filled in this part.

(b)   Biographical details

The age range of African pupils was from 17 years to 21 years with a mean of 20 years, and the age range of Indian pupils was 16 to 17 years with a mean of 17 years. Anecdotal evidence suggests that African learners in most schools are older than the other race groups, probably because of disruptions in their education.   African learners indicated Zulu, and Indian learners indicated English as their home language.

(c)   Academic details

All the pupils were pursuing a general course of study and took a range of subjects which included Mathematics, Biology, Accountancy, Home Economics, Computer Science, Economics and Typing. This is a good representation of subjects offered at schools.

(d)   Family details

African pupils experienced difficulty with providing information in this section. Three African students did not know the employment of their parents and two did not know the occupations of their siblings. It was obvious that some African pupils had problems with contact with family members. It should not be taken for granted that family influences are the same for both groups. The concept of "Guardian" would need clarification as those pupils not living with their parents did not fill in details about their guardians.

(e)   Occupations of family members

Only those occupations mentioned by learners were accounted for.

Details of African pupils

Occupation of fathers:

Builder, plumber, cemetery worker, unemployed (3).

The rest left this blank or indicated "unknown".

Occupation of mothers:

Domestic worker (3), Factory worker (2), garage attendant, cashier, baker, unemployed (2).

As with fathers the rest were left blank or indicated "unknown".

More occupations of mothers were indicated than fathers (6:10). This was a likely trend as there are probably more single mothers in the African community. The range of jobs was from the blue collar sector. Parents who were unemployed or whose occupations were unknown, were unlikely to be supporting their children. The sample of students was therefore from an economically depressed community.

Occupation of siblings:

Brothers:

> Butcher, artist, taxi owner. A number were pupils at school.

Sisters:

> Waitress, unemployed (7). The rest were pupils at schools or unknown.

The work profile of the siblings indicated a significant number unemployed or in lower level occupations. In the families as a whole, there was not a single member who was a professional.

Details of Indian pupils

Occupation of fathers:

> Printer, clerk (2), manager (2), factory worker, toe blaster, salesman, self-employed (4). Three were left blank.

Occupation of mothers:

> Housewife (7), florist, machinist, field-coordinator, lawyer, tablehand, teacher, self-employed. One left blank.

The range of occupations for parents included two professionals and a number who were self-employed. This differed from the profile of African parents. A larger number of Indian parents were employed which indicated higher socio-economic status. Fathers in this sample appeared to be the breadwinners unlike the African families where the mother appeared to be the breadwinner.

Occupation of siblings:

Brothers:

> Manager, computer operator, printing assistant, unemployed (2)
>
> The rest were pupils at schools.

Sisters:

      Housewife, cashier, unemployed. The rest were pupils at school.

The work profile of the siblings indicated lower middle income earners. Families of Indian pupils appeared to be more economically stable, with fewer single mothers and a number of housewives supported by their husbands. The families of African pupils reflected the problems of previous disadvantage, with more single mothers, socio-economic problems and more unemployed siblings and parents.

(ii)   *Part 2*

(a)   *Section A*

Pupils were presented with 20 careers and were instructed to indicate whether they thought that the occupation was suitable for men; for women; or for both and to provide reasons for their choice. Occupations were identified as being suitable for the group by taking the highest tally as an indicator. Missing scores were excluded but percentages were calculated on the total number of responses i.e. 15 for the separate groups and 30 for the combined groups.

The following occupations were identified as suitable for men:

		Percentage of responses
1	Security Guard	87%
2	Builder	80%
3	Mechanic	77%
4	Priest	60%
5	Fire-fighter	86%
6	Bus Driver	57%
7	Electrician	57%

The following occupation was identified as suitable for women:

		Percentage of responses
1	Nurse	53%

The following occupations were identified as suitable for both men and women:

Percentage of responses

1	Dentist	93%
2	Butcher	63%
3	Engineer	47%
4	Social Worker	53%
5	Airline Pilot	50%
6	Secretary	63%
7	Lawyer	77%
8	Police officer	87%
9	Medical Doctor	80%
10	Clerk	83%
11	Politician	73%
12	Architect	50%

The majority of occupations listed were regarded as suitable for both men and women (12), however occupations traditionally regarded as suitable for men e.g. engineer, pilot, and architect were only marginally accepted as suitable for both genders. More occupations were regarded as suitable for men (7) than for women (1). The only occupation regarded as suitable for women was nursing and by only 53% of respondents. While there seems to be a clear trend towards androgynous occupations, 35% of the occupations were still regarded as suitable for men.

Pupils were required to indicate reasons for their choices. The reasons mentioned most frequently were that the work was "hard" or physically demanding for women and therefore more suited to men. One student indicated that all occupations were suitable for both males and females and therefore saw no point in filling in the questionnaire and supplying reasons. Pupils found this section cumbersome and answers were repetitive. This section needed be re-phrased. A suggestion made by the pupils was that three general questions should solicit reasons for choices rather than specific reasons requested for each occupation.

A problem with the questionnaire was the wording "suitable for" which appeared to confuse some students, the word "only" was included to clarify for learners that they had to make a choice. A further problem identified was whether asking students to identify occupations as suitable for men or women, could be interpreted as an indicator of "traditionality". The word "suitable" was selected as there were concerns that students may have problems understanding the term "traditional". In effect occupations that were regarded as suitable for a particular group were deemed "traditional" for that group. Instructions to pupils had be rephrased to clarify that choices that had to be made.

Group differences emerged, African students as a group, indicated stronger categorization of some occupations as more traditional for men than did Indian students e.g. security guard , pilot, bus driver, architect. Indian students regarded butcher, builder, mechanic, priest, and fire-fighter as more suitable for men in comparison to African students. An interesting finding was that while only 53% of the sample of African pupils regarded the occupation of politician as a suitable career for both men and women as against 93% of Indian pupils, 20% of African pupils and none of the Indian pupils regarded the occupation of politician as suitable for women. More African pupils see the occupation of politician as suitable for women than do Indian pupils who see it as an androgynous occupation. Cultural differences, socio-economic status and political imperatives may have influenced the way the two groups see occupations and the questionnaire would need to investigate this aspect in more depth. The range of occupations selected allowed for group differences to emerge and is indicative of choices of traditional and non-traditional careers. In its present form this section did not provide a score that could be used as a measure of traditional thinking. Z tests would provide significant differences for each occupation but a total score was necessary to make group comparisons. A Likert scale would be constructed to provide this score.

(b) Section B

Personal Selection

Pupils were given the following instruction:

"List any three occupations you would like to follow, in order of importance. These do not have to be on the list".

Occupations Selected:

Indian Pupils	African Pupils
Computer Programmer (2)	Nurse (3)
Chartered Accountant (2)	Clerk
Accountant (2)	Actress
Graphic Designer	Caterer
Psychologist	Social Worker (2)
Lawyer	Lawyer
Financial Advisor	
Police Officer	Police Officer (3)
Secretary	Secretary (2)
Teacher	
Ground Hostess	
Missing (1)	

The range of occupations selected by African pupils was more limited (8) in comparison to Indian students (11) and reflected lower aspirations e.g. only four selected occupations that required university entrance whereas eight Indian students selected occupations that required university study. Second and third choices were fairly consistent with first choices in terms of levels. This section of the questionnaire should include a more direct question about how they view their own choices in terms of traditionality. None of the students selected occupations that they rated traditional for men.

(c)   Section C

This section posed the following question:

"What problems will you experience in pursuing the occupation of your choice? Put a tick next to those that apply to you".

Frequency of Responses	I	A
1 My father does not approve of my choice.	1	0

		I	A
2	My mother does not approve of my choice.	2	1
3	Too few women in this occupation who be can role models.	2	3
4	I am worried about working with men who may not approve of me.	7	3
5	The work is physically demanding or dangerous.	2	3
6	There are few opportunities for women to obtain employment.	2	2
7	Admission requirements are too difficult to meet.	5	6
8	I may not manage the course work, especially science subjects	2	9
9	My home and family life will suffer because work demands.	1	6
10	I have financial problems.	4	7

* I = Indian learners   A = African learners

Indian pupils expressed greatest concern at working with men who may not approve of them, followed by difficulties with admission requirements and then financial constraints. Parental approval was not a serious concern, only two indicated that mothers did not approve and one that the father did not approve. African students expressed greatest concern with problems related to managing course work, especially science subjects, followed by problems with finance (7), difficulties with admission requirements and concerns about home and family life. More barriers were indicated by African students than Indian students. Concerns of African students centered on academic requirements whereas concerns of Indian students were more social. This section is a valid measure of perceived barriers and is able to discriminate between the groups and highlight group differences. The barriers selected were those identified in the literature review.

4.2.2.3   Comments on Structure of Questionnaire

Part 1 was regarded as a valid instrument to provide information on family background and the occupational profile of the families. However, the following problems had to be addressed:

- explanation of term "Guardian"
- identification of single parents
- description of jobs done by self -employed parents
- direct question on income as this is an important variable in the study

The sample did not provide a single triad i.e. mother in a traditional occupation and sister in a non-traditional occupation who could be interviewed to investigate patterns of decision - making over generations. Implication for this study were that the sample i.e. mothers and daughters to be interviewed, may have to be drawn from outside the sample surveyed. Part 2 has been discussed in detail. The analysis provided insight and data that was invaluable in planning the final questionnaire.

This questionnaire required some adjustments which have been mentioned. It was able to provide information that could be used to answer the critical questions posed in this research project. The questionnaire, with adjustments and with the inclusion of a Likert scale, was considered a valid measure for the purposes of this study. The final questionnaire was further pilot tested by administering it to five Grade 11 female pupils and requesting that they comment on clarity of questions; problems experienced in answering any section and suggestions for improvement. The learners did not experience any difficulties. They were interviewed after they had completed the questionnaire.

4.2.3 Pilot Study: Semi-Structured Interview

The interview schedule was pilot tested on one mother/daughter combination. Attempts to obtain an African mother and daughter combination were not successful hence the questionnaire was tested with an Indian mother and daughter who were available. African females studying for non-traditional careers like engineering were identified but mothers could not be easily contacted within the time period allowed for data collection. This is a limitation of the research. However, in order to overcome this problem comments were elicited from African female students on the suitability of the questions. The face validity of the questionnaire was established by two African colleagues and two Indian colleagues. There was consensus that the questions posed were not insensitive to cultural traditions and would elicit the responses required to answer the research question. A problem raised by the African colleagues was the barrier of language and the assumption that families were the stereotypical mother, father and children all living under one roof. In African families there were a number of single mothers, guardians in the form of grandparents and relatives and absentee fathers. These issues were considered when the interviews

were conducted. The questions were posed in the order they appeared on the interview schedule. In order to respect confidentiality, the names of the women interviewed were not revealed, initials were used instead of names. Refer to Appendix B for interview schedules.

4.2.3.1   Report on Pilot Interviews

Refer to Appendix B for transcript of interviews.

NG and her mother were requested to comment on the questions posed to them. They understood the questions quite clearly and found continuity in the interview. NG did indicate some repetition in questions, 5 and 8. These questions were not changed because Question 5 required answers pertaining to problems in general whereas Question 8 required specific problems experienced by women in male-dominated careers.

The interviews were too structured for easy communication, especially the rigid order in which the questions were posed. Questions needed to be probed further and it became too restrictive to follow the order as answers to other questions were given in the course of discussion. A further problem encountered was that biographical details regarding the family, were omitted because of the tendency to adhere to the order of the questions. The recording of the interview verbatim was also problematic, the interviewees felt intimidated with all the note-taking and it restricted communication. Audio taping was not going to be used because some of the interviews had to be telephonic. The wording of the questionnaire was clear except for the term "career" which should have been replaced by the term "occupation", which is the preferred term in the rest of the dissertation.

The following changes were effected to the questionnaire and the procedure to be used to conduct the interviews:

- The term " career " was replaced by the term "occupation. "
- The order of questions was not to be adhered to strictly but to follow the flow of the conversation.
- Questions were asked if they were appropriate in the form they appeared on the interview schedule.

- Biographical and family details were recorded before the questions were posed.

- Note-taking was to be kept to a minimum and interview reports written immediately after each interview.

- Taped interviews are restrictive and were not deemed necessary for this research.

- The main objective of the interviews; to explore some of the trends that emerged in the survey and to compare trends over generations, was to be the basis of the interview reports.

The pilot testing of the instruments and the subsequent analysis of the data have established the reliability and validity of the research instruments. The statement of results, discussed in the next chapter will indicate further details of validity and reliability statistics.

CHAPTER FIVE

STATEMENT OF RESULTS AND ANALYSIS OF DATA

The results will be discussed with reference to the purpose of the study and the critical questions posed in Chapter One. The discussion will include the results of the survey and the semi-structured interviews. The analysis is divided into Part One, which deals with the survey results and is largely descriptive, and Part Two, which is a qualitative analysis of the interviews. Part One is reported on in Chapter Five and Part Two in Chapter Six. The tables and statistics included in the text were regarded as important to the discussion.

5.1   Purpose of Study

The purpose of this study was to determine the reasons for women's perceptions and choices of different categories of occupations. The discussion that follows indicates how this was achieved.

(i)   Determining perceptions of traditional and non-traditional occupations

Perceptions of occupations suitable for particular genders and therefore traditional for that group, were determined by providing a list of 20 occupations and requesting learners to categorize occupations as being suitable for men, for women or for both. Learners were then required to provide reasons for their choices. Their perceptions were further investigated by the Occupational Attitude Scale, which was constructed for the purposes of this study. It comprised of nine statements, which reflected traditional attitudes. A high score indicated a non-traditional attitude to occupational choices and a low score pointed to a more traditional attitude. The semi-structured interviews of mothers in traditional occupations and daughters in non-traditional occupations investigated perceptions and choices of two generations of women. The questions posed to the women required responses to views on traditionality and non-traditionality of occupations.

(ii)   ***Reasons for perceptions and choices of traditional and non-traditional occupations***

The family profiles of 390 Grade 11 learners and twelve women interviewed were analyzed to provide reasons for choices and perceptions that were related to the influence of parents, siblings, and family status. The educational level and occupations of family members were also examined to this end. The projected choices of Grade 11 learners and actual choices of working women and their reasons for such choices were analyzed to consider personal factors, and social and political changes in the country.

(iii)   ***Critical Questions***

The answers to the critical questions that guided the research were used as a framework to discuss the results of the research. The variables of gender, race and class were examined together with the social, educational and personal barriers. The critical questions that follow are repeated through out the study to ensure consistency and focus:

- What are women's perceptions of the different occupational categories (traditional and non-traditional)?

- Why do women choose particular occupational categories and not others?

- To what extent do women's occupational choices correspond with their racial class or cultural status?

- What are the social, educational and personal barriers that affect women in their choice of occupations?

5.2   Part One: Survey on Occupational Choices

5.2.1. Data collection

Procedure

A list of 15 schools, randomly selected according to the procedure described in Chapter Four, was used to obtain the sample. Permission was obtained from the Department of Education to conduct the research at former Indian schools. Seven

schools were selected in the order they appeared on the list. A condition of the Department of Education was that permission to administer the questionnaire had to be sought from each school principal. Several problems were encountered and lengthy negotiations had to be conducted with schools; firstly, to obtain permission and secondly, to arrange for the learners to fill in the questionnaires. Long delays were experienced in response to requests to conduct research. Some schools did not respond at all despite numerous calls and had to be omitted from the sample. The list of seven schools, which was compiled from the initial list of 15 schools, was adjusted and other schools substituted as problems were encountered.

The following secondary schools were cooperative, permission was granted and returns received: Bonella, Crossmoor, Nuwest, Marklands and Phoenix Technical. Despite many calls Woodhurst Secondary refused permission and Sastri did not respond at all, Centenary and A. D. Lazarus were problematic in terms of returns. The problems encountered and the impact on the sample are discussed in more detail at a later stage in the study. The questionnaires were handed out to the learners by the researcher or teacher after a brief introduction about the reason for the research. The learners were encouraged to question anything they did not understand. In instances where the researcher was not able to hand out the questionnaires personally, the questionnaire was discussed in advance with the teachers.

Returns

A total of 555 questionnaires were handed out to learners at seven schools from which the sample was drawn. The returns were 390, i.e. a return of 70%. Unfortunately, a number of questionnaires were left blank or not returned by African learners. These were followed up in an effort to encourage the learners to respond and to ensure a proper distribution of the races in the sample. The problems experienced by African female learners in many schools are discussed in more detail in the next section. These problems alone constitute an important area of research.

5.2.2 Analysis of results

The questionnaire was constructed to provide both quantitative and qualitative data. The quantitative data was analyzed using the SPSS (Statistical Package for the Social Sciences) to provide descriptive statistics and establish relationships where necessary.

Tests included z-tests, chi-squares, cross-tabulations in addition to the GLM ANOVA test for significance. The level of confidence was set at 0.05 (95%), which is standard. The qualitative aspects were analyzed by reading every questionnaire, categorizing responses and establishing themes. Some of the responses have been included verbatim.

In order to answer the research questions, the analysis was guided by the following objectives:

- To describe the target population as fully as possible

- To investigate attitudes towards particular occupations

- To establish differences in attitude and factors contributing to these differences

- To ascertain the social and political influences affecting perceptions and choices

- To analyze the cognitive processes involved in selecting occupations

- To determine the extent to which stereotypical thinking influenced choices.

The statement of results and analysis will be divided into five sections and will follow the order in the questionnaire. The decision to state results and include a brief discussion was taken so that an integrated description of the sample emerged.

5.2.2.1 Biographical Details

5.2.2.1.1 Description of Sample

The sample will be described in terms of the schools from which learners were drawn, the racial composition, and the age distribution.

(i) Distribution of learners per school

The number and valid percentage per school is indicated in the Table 5.1. The largest number of questionnaires received was from Nuwest Secondary School, followed by Marklands Secondary School and Crossmoor Secondary School. A hundred percent return was received from Phoenix Technical Secondary even though it accounted for only 3.6% of the sample. The worst return was from Centenary Secondary School, only 25 of 66 questionnaires i.e. 38% were returned.

5.1 Distribution of Sample Per School

School	Number	Valid Percentage
Dr. A. D. Lazarus School	43	11
Nuwest Secondary School	110	28.2
Marklands Secondary School	71	18.2
Centenary Secondary School	25	6.4
Crossmoor Secondary School	66	16.9
Bonella Secondary School	61	15.6
Phoenix Technical Secondary	14	3.6
Total	390	100

(ii) Distribution of Sample by Race

The distribution of Indian and African female learners in Grade 11 is indicated in Table 5.2. The distribution, while not representative of the population, is representative of former Indian schools sampled. A larger percentage of Indian learners were of concern to the researcher, but as the schools were randomly selected, efforts to increase the number of African would have affected the research methodology. The reasons for this difference, and the impact on the study will be reported on.

Table 5.2   Distribution of Sample by Race

Race	Number	Valid Percentage
African	92	23.3
Indian	298	76.6
Total	390	100

(iii) Distribution by Age

The age of the total sample ranged from 15 years to 21years and is indicated in Table 5.3. The 16-year age group accounts for 58.7% of the sample; 86.4% of the sample are in the age range of 16 to 17 years.

Table 5.3   Distribution of Total Sample by Age

Age	Frequency	Valid Percentage
15	2	0.5
16	229	58.7
17	108	27.7
18	28	7.2
19	15	3.8
20	5	1.3
21	1	0.3

The mean age of Indian learners is 16.3 years, with a median of 16 years, a minimum of 16 years and a maximum of 18 years. African learners have a higher mean age of 17.5 years, a median of 17 years, a lower minimum age of 15 years. The age range is greater at six in comparison to Indian learners who have a range of two; the standard deviation also suggests that the Indian sample is a more homogeneous. This result is similar to the pilot study, which had an equal number of African and Indian female learners, but found that African learners were older on average with a larger age range. Results of a z-test for two sample for means, indicate a highly significant difference z (-8.64) $p = 0.00$ in the mean age of African and Indian females in Grade 11. The age by race differences is indicated in Table 5.4.

Table 5.4   Age by Race

	Indian	African	Total
Mean	16.319	17.522	16.598
Median	16.000	17.000	16.000
Mode	16.000	15.000	16.000
Minimum	16.000	15.000	15.000
Maximum	18.000	21.000	21.000
Range	2.000	6.000	6.000
Std Deviation	0.502	1.292	0.914
Valid	298	90	388

Note: $z = -8.64$ $p = 0.00$
* P = < 0. 05

(iv) Discussion of Sample

The sample of 390 learners was drawn from seven schools, with the majority from Nuwest Secondary School; Indian learners constitute 76.6% and African learners 23.3% of the sample. The sample, while not representative of the racial demographics of the country, is representative of the population of learners in the type of schools selected for the purposes of this research. African female learners in former Indian schools in grade 11 are in the minority. Attempts to create a racial balance would have resulted in a sample that was not representative of the schools surveyed. The significant difference in age; African female learners are older, with a mean of 17.5 years and a larger age range, from 15 years to 21 years, indicates a less homogeneous sample. Different levels of maturity and experience are likely to affect attitudes to occupations. An older learner of 21 years, and a younger learner of 15 years in the same class, may have very different attitudes to life and future goals. The more homogeneous sample of Indian female learners is likely to be more similar in their attitudes to life and future goals.

The following problems encountered have impacted on the number and representation of the sample:

- Some of the schools were only prepared to hand questionnaires to learners to fill in at home and returns were particularly poor, especially from African learners. An example is Centenary Secondary, where 66 questionnaires were handed out and only 25 returned them despite frequent requests.

- Teachers had embarked on strike action and schools were in a state of disruption. This created problems of communication and uncertainty of when the research could be conducted.

- Teacher re-deployment and retrenchment had a negative impact on teacher morale and few were interested in research or other activities not directly involved with work.

- Principals of some schools felt they had far more pressing problems to deal with and were not prepared to allow disruptions to their school programmes.

- A school randomly selected, Woodhurst Secondary, which had a higher percentage of African learners, i.e. 80% could not be included in the sample because the Principal refused to grant permission as too many projects were being conducted at the school. The substitute school on the list had a much lower percentage of African learners and this has impacted on the study.

- African female learners in Grade 11 were proportionately fewer in number, even in schools with equal or higher percentage of African learners.

- Attendance of African learners is problematic at most schools, especially on Fridays which was the only day some schools were prepared to allow for the distribution of questionnaires. Teachers indicated that it was a losing battle to get learners to attend school regularly. Reasons advanced were that many of the girls were mothers and had to take care of babies. The long distances many travelled using public transport, often unreliable, was another reason advanced.

The willingness of schools to participate in research and conditions that prevail at the different schools affects the sample a researcher eventually has to work with and are often beyond his/her control. The problems of access, unstable and often chaotic conditions at some schools, are concerns for all researchers who want to work in public schools at present.

5.2.2.2   Academic Details

Subjects choices at school

Learners were required to indicate the subjects they were currently studying. Learners in the sample took the range of subjects offered at most former Indian schools in this province.

The following subjects were listed:
English, Afrikaans, IsiZulu, Mathematics, Biology, Physics, History, Geography, Home Economics, Computer Science, Art, Drama, Typing, Technical Drawing, Economics and Business Economics.

For the purposes of this research only Mathematics, Biology and Physical Science were taken into consideration. The literature reviewed has indicated that occupational choices are influenced by the choice of science subjects.

Table 5.5 indicates the number and valid percentage of learners studying these subjects, Table 5.6 indicates a cross tabulation of subject by race and Table 5.7 examines the relationship between the categories.

Table 5.5   Subject choice of total sample

Subject	Frequency	Valid Percentage
Mathematics	305	78.2
Biology	362	92.8
Physical Science	117	30.0

Table 5.6   Subject choice by Race

Subject	Indian		African	
	Frequency	% of total sample	Frequency	% of total sample
Maths	242	62.2	62	15.9
Biology	273	70.2	88	22.6
Phy Sc	107	27.5	10	2.6
Total	298	76.6	91	23.4

Table 5.7   Relationship between Categories

Subject	Chi-square	Value	d. f.	Significance
Maths	Pearson	6.9803	1	* 0.0082
Biology	Pearson	2.7065	1	0.0999
Phy Sc	Pearson	20.5800	1	* 0.0000

*P = < 0. 05

Discussion

There was a significant difference between the races in the choice of Mathematics X^2 *(6.98)* p = *0.00* and Physical Science X^2 *(20.58)* p = *0.00.* Of a total of 78.2% learners who were studying Mathematics, 62.2 % of Indian learners and only 15.9 % of African learners selected Mathematics as one of their subjects. In the case of Physical Science the difference was even more significant; 30% of the total sample were studying Physical Science, of these 27.5% were Indian learners and 2.6% African learners. There was no significant difference in the number of Indian and African learners taking Biology as a subject. On the whole, proportionately more Indian learners in the sample were studying science subjects than African learners. It is expected that Indian learners are more likely to select occupations in science and technology than their African counterparts. These occupations also tend to be male-dominated. Females, who have taken mathematics and physical science, are more likely to select non-traditional occupations. These results, however, must be viewed in the context of the demographics of the sample and the historical problems faced by African students in taking science subjects at schools.

5.2.2.3 Family Detail

5.2.2.3.1 Family Support

Respondents were required to indicate whom they lived with, as an indicator of the kind of family and the type of support the learner was receiving. Table 5.8 indicates cross tabulation by race. There was a significant difference X^2 *(57.44)* p *=0.00* between the races and types of family support learners receive. The total sample indicated a significantly high percentage living with both parents i.e. 64.8%, followed by 24.2% living with mothers, 8.6% with guardians and only 2.3 % with fathers. A further analysis indicated that of the majority of learners (64.8%), 57% of Indian and 7.8% of African live with both parents. Proportionate to sample size, 75% of Indian learners and only 33% of African learners actually live with both parents. The majority of African learners i.e. 45 % of the sample live with their mothers, and more live with their guardians i.e. 19% than with their fathers i.e. 2%. The family living conditions are significantly different for Indian learners; 75% live with both parents,

only 17% live with mothers, 2% with fathers and 5% with guardians. The results of the pilot test revealed a similar difference in living conditions. African learners came from predominantly single parent families, with the mother being the main source of support. Indian learners have the support of both parents. There is likely to be greater influence of mothers on decision-making of African learners than Indian learners. Indian learners have a more stable background and are likely to be better informed about occupations and more confident about their choices.

Table 5.8   Family Support by Race.

Living with:	Indian	African	Total
Both Parents	219	30	249
Percentage	57.0	7.8	64.8
Mother	52	41	93
Percentage	13.5	10.7	24.2
Father	7	2	9
Percentage	1.8	0.5	2.3
Guardian	15	18	33
Percentage	3.9	4.7	8.6
Total	293	91	384
Percentage	76.3	23.7	100

Note: X^2 (57. 44) p =0.00

* P = < 0. 05

5.2.2.3.2   Profile of Mothers

(i)   Age

There was no significant difference in the mean age of African and Indian mothers in the sample. The mean age of Indian mothers was 40.5 years with a range of 30, and that of African mothers 41 years with a range of 25. The mean age of the total sample was 40.7 years, with a range of 30 i.e. from 29 years to 59 years. Refer to Table 5.9 for further details.

Table 5.9 **Maternal Age**

	Indian	African	Total
Mean	40.574	41.273	40.731
Median	40.000	40.000	40.000
Mode	42.000	32.000	40.000
Minimum	29.000	32.000	29.000
Maximum	59.000	57.000	59.000
Std Dev.	5.047	5.977	5.270
Range	30.000	25.000	30.000
Valid cases	265	77	342

(ii) Educational Level of Mothers

The educational level of mothers in the sample indicated that 52.9% had secondary education and 24% had obtained a matriculation certificate. Only 12.7% of mothers had tertiary education, 1.2% had no formal education, and 9.2% went to primary school. The difference between the educational level of Indian and African mothers was not significant. Refer to Table 5.10.

Table 5.10 **Educational Level of Mothers**

Value	Frequency	Valid Percent
No schooling	4	1.2
Primary	32	9.2
Secondary	183	52.9
Matriculation	83	24.0
College	21	6.1
Technikon	5	1.4
University	18	5.2

(iii)   Occupations of Mothers

The majority of mothers in the sample (54%) were housewives. The next highest category were factory workers at 8.3%, a marked difference in numbers. The rest of the occupations had frequency counts of between 1 to 3, with subsequent percentages of between 0.3 and 0.8, which were considered too low, and too many to enumerate.

The following occupations of mothers are listed in order of their frequencies and indicated as valid percentages: 54% housewives; 8.3% factory workers; 3.6% nurses: 3.1% teachers; 3.1% clerks; 2.8% domestic workers; 2.3% secretarial work; 1.7% sales assistants; 1.7% managers; and 1.4% business women.

The percentage of women in the sample who were unemployed stood at 0.9%, and 0.8% were self-employed. The occupations with low frequency counts were: chef, guard, cashier, baker, dress-maker, day-care worker, cleaner, designer, hairdresser, liaison officer, operator, packer, clinical technician, social worker, pharmacist, computer operator, accountant, creditor, marketing officer, driving school teacher, baker, and quality controller.

There was a very low percentage (7.6%) of professional women in the total sample. African mothers were mainly housewives, factory workers, unemployed or in domestic service; professional occupations listed for them were nursing and teaching. The majority of Indian mothers were housewives.

5.2.2.3.3   Profile of Fathers

(i)   Age of Fathers

Table 5.11 indicates the mean age of Indian fathers was 44.4 years and that of African fathers was 46.7 years. The difference was not significant. The range was slightly greater for Indian fathers, but this must be seen in the context of the larger number of Indian fathers in the sample, 231 as against 35 African fathers.

Table 5.11   Age of Fathers in Sample

	Indian	African	Total
Mean	44.472	46.714	44.767
Median	43.000	47.000	43.000
Mode	42.000	34.000	42.000
Minimum	33.000	34.000	33.000
Maximum	68.000	67.000	68.000
Range	35.000	33.000	35.000
Std. Dev.	5.820	7.430	6.088
Valid cases	231	35	266

(ii) Educational Level of Fathers

The majority of fathers in the sample i.e. 43.3% had a secondary education with 29.2% having obtained a matriculation exemption; 24.6% of the fathers had tertiary education and 4.5% had only primary school education. The difference between the educational level of African and Indian fathers was not significant.

Table 5.12   Educational Level of Fathers

Value	Frequency	Valid Percent
No schooling	1	.4
Primary	12	4.5
Secondary	116	43.3
Matriculation	73	27.2
College	26	9.7
Technikon	21	7.8
University	19	7.1

(iii) Occupations of Fathers

The occupational profile of fathers was very different from that of mothers. The occupations were wide ranging, with the highest percentage in a single occupation at only 9.1%. Mothers on the other hand, had a clear majority of 54% who were housewives. The following occupations are listed in order of the highest frequencies and stated as valid percentages: 9.4% managers; 7.9% salesman; 7.8% drivers; 6% businessmen; 4.6% clerks; 2.5% teachers; 2.9% supervisors; 2% sales representatives: 1.8% mechanics; 1.4% builders; panel-beater 1.2% and 1% policeman.

The occupations with frequency counts of between one and three were: upholsterer; guard; broker; shop-fitter; storeman, prison-warden; sales representative, shoemaker; jeweler; exhaust fitter; machine operator; painter; plumber; shunter; administrative clerk; boat builder; boiler-maker; bookkeeper; taxi-driver; computer operator; designer; tool-maker; trucker; driving school instructor; estate agent; financial advisor; hairdresser; labourer; post-office worker; petrol attendant and computer technician.

Professional occupations listed were as follows: doctor; teacher; accountant; engineer; lecturer; pharmacist; and architect. The percentage of unemployed fathers was 9.5%; 2.5% were retired; 2.1% of the sample received grants or pensions and 2% were self – employed.

5.2.2.3.4 Profile of Guardians

The profile of guardians was regarded as important. One cannot make the assumption that families constitute parents and siblings alone. The pilot study and anecdotal evidence indicated that a number of African children live with guardians (aunts, uncles, grandparents and older siblings) rather than with their parents. The joint family system in both communities means that significant others could have an influence on the decision-making of girls in the survey. The respondents living with guardians were 8.6 % of the total sample, 3.9% of Indians and 4.7 % of Africans. In real terms proportionate to the sample demographics, 5% of Indian learners and 19% of African learners actually lived with guardians.

(i)   Age of Guardians

Table 5.13 indicates the differences in ages of the guardians in the sample. There was no significant difference between the ages of African and Indian guardians. The range of 56 (20 years to 76 years) indicated that older siblings and grandparents were guardians and the influence of each could be significantly different.

Table 5.13   Age of Guardians

	Indian	African	Total
Mean	48.444	46.300	47.316
Median	52.000	43.000	48.000
Mode	20.000	25.000	48.000
Minimum	20.000	25.000	20.000
Maximum	76.000	75.000	76.000
Std Deviation	19.164	18.306	18.221
Range	56.000	50.000	56.000
Valid cases	9	10	19

(ii)   Educational Level of Guardians

A larger percentage of guardians had no schooling i.e. 26.3% in comparison to mothers at 1.2% and fathers at 4%. The educational level indicated that the majority of guardians, as well as mothers and fathers had a secondary school education, which included a matriculation certificate. Of the guardians, 15.9% had tertiary education, in comparison to 12.7% of mothers and 24.6% of fathers. Refer to Table 5.14.

Table: 5.14   Educational Level of Guardians

Value	Frequency	Valid Percent
No schooling	5	26.3
Primary	2	10.5
Secondary	4	21.1
Matriculation	5	26.3
College	1	5.3
Technikon	1	5.3

(iii) Occupations of Guardians

The majority, i.e. 25% of the guardians were housewives, the rest of the occupations had a frequency count of one and are as follows: pensioner, driver, cleaner, hospital attendant, manager, operator, promoter, supervisor, and ticket manager. One was unemployed.

5.2.2.3.5   Profile of Siblings

The age, educational level and occupations of siblings were requested for a total of four sisters and four brothers for each respondent. The data was analyzed separately for brothers and sisters.

(i)   Age of Sisters

The ages ranged from 0 years (baby) to 38years with a mean age of 16.8 years. There was no significant difference between the races.

Table 5.15   Age of Sisters

	Indian	**African**	**Total**
Mean	16.714	17.000	16.857
Median	17.000	16.000	16.500
Minimum	0.000	2.000	0.000
Maximum	36.000	38.000	38.000
Range	36.000	38.000	38.000
Std. Deviation	7.0500	6.0000	6.5500
Valid cases	302	136	438

(ii)   Educational Level of Sisters

There was no significant difference in the educational level of the race groups. The highest percentage of sisters had secondary education i.e. 40.7%, with 6.2% obtaining a matriculation exemption; 15.5% had tertiary education and 7.1% had no schooling.

Table 5.16   Educational Level of Sisters

Value	Valid Percent
No schooling	7.1
Primary	26.4
Secondary	40.7
Matriculation	6.2
College	2.7
Technician	8.0
University	4.8

(iv)   Occupations of Sisters

The majority of sisters in the sample were scholars i.e. 28.1%. The rest were accounted for as follows: 8.8% students at tertiary institutions; 6.3% unemployed; 3.5% housewives; 1.7% policewomen; 1.8% teachers; 0.8% self-employed; 0.5% nurses. The other occupations mentioned with low frequency counts were as follows: bank - teller, waitress, hotel worker, receptionist, supervisor, post-office worker, tailor, cashier, computer programmer, credit controller, decorator, designer; pre-school teacher, prison warden, domestic worker, sales-assistant, radiographer, secretary, operator, tailor, and laboratory worker. Non-traditional careers listed were pilot and land surveyor. Professional occupations were nurse, teacher, accountant, pilot, surveyor, and radiographer.

(iv)   Age of Brothers

The mean age of brothers in the sample was 16 years with no significant difference between the races. The ages ranged from 1 year to 37 years old. The profile was similar to the sisters in the sample. Refer to Table 5.17.

Table 5.17   Age of Brothers

	Indian	African	Total
Mean	16.119	16.270	16.092
Median	16.000	15.000	16.000
Minimum	1.000	2.000	1.000
Maximum	37.000	33.000	37.000
Range	36.000	31.000	36.000
Std. Deviation	5.8660	6.7700	6.8000
Valid cases	265	116	381

(v)   Educational Level of Brothers

The educational level of brothers in the sample indicated that the majority had secondary education (31.6%), with 6.8% obtaining a matriculation pass; 30.1% had tertiary qualifications and 25.4% primary education with 6.1% who had no schooling. More brothers in the sample had tertiary education than sisters. The difference in race groups was not significant. Refer to Table 5.18.

Table 5.18   Educational Level of Brothers

Value	Valid Percent
No schooling	6.1%
Primary	25.4%
Secondary	31.6%
Matriculation	6.8%
College	9.7%
Technikon	9.1%
University	11.3%

(vi)   Occupations of Brothers

The majority of brothers were scholars i.e. 39% with 6% students and 6% unemployed. Artisans accounted for 9.6%; 5.8% professionals; 2.6% businessmen; 2.5% managers; 2.2% clerks; 1.4% drivers; 1% policemen and 1% factory workers. Occupations with low frequency counts were: guard, hairdresser, bank worker, buyer, graphics designer, merchandiser, shop-fitter, table-hand, tool assistant, quality controller, bus conductor, manufacturer, printer, and promoter. The professions listed were: teacher, pharmacist, accountant, and engineer.

(vii)   Discussion

The family profile of the learners indicated significant differences in the type of support received, with Indian learners from families with both parents living together, and African learners from single families. The age and educational levels of parents and guardians of both races was not significantly different. Fathers in the sample had a wider range of jobs than mothers. The sample was from the lower and middle income group. The profile of the siblings did not indicate significant differences between the two racial groups. The majority of brothers and sisters in the sample were scholars. More brothers had tertiary education than sisters. The range of occupations for sisters included only two occupations regarded as non-traditional, pilot and land surveyor. The detailed discussion of the family profiles of learners established the socio-economic status, family dynamics and support received, so that the variables of race, status and barriers to choice, could be discussed within the context of the society from which the sample was drawn.

5.2.2.4   Suitability of Occupations

A list of 20 occupations was presented to the scholars. They were required to indicate for each occupation, whether they considered it suitable for men only, women only or suitable for both. The occupations selected were familiar to them and had been pilot tested to ensure that they understood the work involved in each occupation. Table 5.19 indicates the selected response of the sample.

Table 5.19   Suitability of Occupations

	Occupation	Men only	Women only	Men & Women
		%	%	%
1	Security Guard	40.9		59.1*
2	Dentist	3.5		96.5*
3	Butcher	42.5	0.8	56.7*
4	Engineer	18.1	1.6	80.3*
5	Nurse	0.3	32.2	67.7*
6	Builder	67.4*		32.6
7	Social Worker	0.5	22	77.5*
8	Airline Pilot	18.5	0.8	80.7*
9	Secretary	1.0	25.5	73.5*
10	Lawyer	2.6		97.4*
11	Mechanic	40.6	0.8	58.6*
12	Police Officer	11.3	0.3	88.5*
13	Priest	51.1*	0.8	48.1
14	Cook	1.7	9.6	88.7*
15	Firefighter	38.1	0.3	61.7*
16	Sch. Teacher	0.5	14.5	84.9*
17	Politician	8.6	1.9	89.5*
18	Bus Driver	50.9*	0.3	48.8
19	Architect	13.2	1.4	85.4*
20	Electrician	36.3		63.7*

* Preferred choice according to the highest percentage of responses

The following occupations were regarded as suitable for men only: builder, priest, and bus driver. The occupation of builder with a response of 67.4% was the only occupation that emerged clearly as unsuitable for women; the occupations of priest and bus driver had a small margin of difference at 51.1% and 50. 9% respectively. No occupations were regarded as suitable for women only. Most of the occupations i.e. 17 of 20 were regarded as suitable for both men and women. The occupations of security guard, butcher, mechanic, firefighter, and electrician had a lower percentage,

less than two-thirds of the responses categorizing them as suitable for both genders, but all the rest had a clear majority of the responses.

Table 5.20   **Cross tabulations by Race**

	Occupation	Men only		Women only		Men & Women		Chi -Square
		Ind.	Afr.	Ind.	Afr.	Ind.	Afr.	
		%	%	%	%	%	%	
1	Security Guard	25.6	15.1			51.4	7.8	X^2 (30.00) p = 0.00*
2	Dentist	1.4	2.2			75.2	18.9	X^2(13.25) p = 0.00*
3	Butcher	33.1	9.3	0.3	0.5	44.2	12.7	X^2 (3.39) p = 0.18
4	Engineer	13.3	4.9	1.6	0.0	64.0	16.3	X^2 (3.06) p = 0.21
5	Nurse	0.3	0.0	22.4	9.9	54.9	12.5	X^2 (7.07) p = 0.02*
6	Builder	48.4	18.9			29.3	3.5	X^2 (14.59) p = 0.00*
7	Social Worker	0.3	0.3	13.0	9.0	64.2	13.3	X^2 (21.9) p = 0.00*
8	Airline Pilot	11.4	7.1	0.5	0.3	66.1	14.6	X^2 (14.24) p = 0.00*
9	Secretary	0.8	0.3	18.9	6.6	57.9	15.5	X^2 (0.90) p = 0.63
10	Lawyer	1.1	1.6			75.0	20.4	X^2 (8.67) p = 0.00*
11	Mechanic	28.7	11.7	0.8	0.0	48.7	10.1	X^2 (8.13) p = 0.01*
12	Police Officer	5.6	5.6	0.0	0.3	73.1	15.3	X^2 (27.49) p = 0.00*
13	Priest	39.4	11.6	0.3	0.5	38.8	9.4	X^2 (4.19) p = 0.12
14	Cook	1.1	0.6	4.1	5.5	72.7	16.0	X^2 (28.43) p = 0.00*
15	Firefighter	21.2	17.0	0.3	0.0	56.0	5.6	X^2 (61.21) p = 0.00*
16	Prim Teacher	0.5	0.0	7.7	6.9	69.0	15.9	X^2 (21.32) p = 0.00*
17	Politician	4.3	4.3	1.9	0.0	72.4	17.1	X^2 (18.50) p = 0.00*
18	Bus Driver	8.1	5.1	0.8	0.6	72.5	12.9	X^2 (2.66) p = 0.26
19	Architect	3.1	5.1	0.8	0.6	72.5	12.9	X^2 (16.01) p = 0.00*
20	Electrician	26.1	10.0			52.0	11.9	X^2 (4.27) p = 0.03*

*   ***P =< 0. 05***

The differences by race must be interpreted in the context of the significant difference between the race groups in number i.e. 76.6% of the sample is Indian and 23.4% is African. The sample, while representative of the category of schools selected, cannot be generalized to the population at large. The racial differences in categorization will be interpreted proportionally to sample size of 76.6% Indian and 23.4% African learners.

Table 5.20 indicates cross tabulation of occupations by race. Racial differences in categorization of occupations are discussed in detail. Percentages were considered both in terms of the total sample and proportionate to the demographics of the racial composition of the group.

The following occupations were regarded as suitable for men only: builder, priest, and bus driver. The occupation of builder with a response of 67.4% was the only occupation that emerged clearly as unsuitable for women; the occupations of priest and bus driver had a small margin of difference at 51.1% and 50. 9% respectively. No occupations were regarded as suitable for women only. Most of the occupations i.e. 17 of 20 were regarded as suitable for both men and women. The occupations of security guard, butcher, mechanic, firefighter, and electrician had a lower percentage, less than two-thirds of the responses categorizing them as suitable for both genders, but all the rest had a clear majority of the responses.

5.2.2.4.1   Reasons for Choices of Occupations

Questions 8 and 9 of the questionnaire were open – ended and required learners to provide reasons for the way they categorized occupations. The expected outcome was that data could be analyzed to reflect cognitive processes without the constraints of a structured and prescriptive mode of answering. Thinking and reasoning skills, perceptions, and stereotypes could be ascertained from responses.

(i)   Question 8

Respondents were required to provide reasons for their choice of occupations indicated as suitable for men only (8.1.1); for women only (8.1.2); and for both men and women (8.1.3).

The purpose of this study, as stated in the introduction, was to determine the reasons for women's perceptions and choices of different categories of occupations. In order to explore perceptions and reasons for choices each questionnaire was studied to ascertain the following:

- range of reasons offered.
- most frequent reason offered for choice of occupation.
- stereotypical reasoning.
- common trends in thinking and reasoning which account for perceptions of suitability and categorization of careers.

In order to establish the range of reasons offered and the most frequent responses, questionnaires were analyzed according to the following: school groups, race and socio-economic status.

- Reasons were noted down as they were presented and frequencies established for each reason. Similar reasons were combined e.g. "Men are stronger" was combined with "Men are better equipped physically" to indicate physical strength was required for some jobs.
- For each school, a list was drawn up indicating the number of responses and the frequency of each response.
- Responses were recorded separately for the two race groups.
- Approximate percentages were estimated, as it was not possible to categorize each response strictly.

In order to analyze stereotypical reasoning, and establish common trends in thinking which account for perceptions of suitability and categorization of occupations, some reasons and comments were noted down verbatim from each school and then

analyzed. Examples of the most common, creative, and unusual responses were noted and then studied for patterns and commonality.

Range of Reasons

The responses were fairly consistent across schools in variety, number and similarity, however some differences were observed in terms of socio-economic status and race. Female learners from schools in better sauce-economic areas (Nuwest and A. D. Lazarus) offered a more extensive range of reasons and were more creative and confident about their choices than those from the more depressed areas (Bonella and Crossmoor). Schools like Marklands, which have a mix of pupils from both areas, reflected responses of both groups, some bright creative responses and other stereotypical ones. This was also observed in terms of race, Indian learners tended to offer a greater variety of reasons than their African counterparts. A possible explanation is that there were fewer African learners in the grade 11 classes than Indian learners, and that African learners in this sample came from more impoverished backgrounds. The problem of language is a very real one for African learners and could have also contributed to the smaller range of responses. The responses will be presented by referring to the questions in the survey questionnaire.

Question 8.1.1

" What are your reasons for choosing the occupations you have indicated as suitable for **MEN** only?"

The reasons offered were as follows in order of frequency:

- Men are physically stronger than women are and therefore more suited to occupations like security guard, builder and bus driver.
- Occupations that are dangerous and risky are more suitable for men.
- Men can handle pressure and stress better than women and would be more successful in some occupations.
- Occupations that require long working hours should be done by men.
- Men can work in hard and extreme conditions.

- Occupations like priesthood are only for men.
- One is accustomed to seeing men doing certain jobs.
- These occupations are more suitable for men (no reasons offered).
- Dirty jobs, like being a butcher, should be done by men.

The most frequent reason offered across race and socio-economic status, and which accounted for 70% of the total response, was that some occupations demanded physical stamina and were more suited to men. African females were particularly concerned about women being in occupations that were physically taxing. Some of the comments were frank and not very sympathetic!

" Men can carry heavy duty items and they can die first."

" These jobs are suitable for men only because most of them are stronger and don't mind getting dirty or becoming smelly."

" To be a firefighter or security guard you have to be huge in size and very fit."

" The only difference between men and women is physical strength, women actually have more brains."

"Men can do a lot of hard labour."

Another major concern was that jobs that were dangerous or risky should be rather taken by men than women. Some reasons were creative and again somewhat callous!

" Men can do all the dangerous jobs and die so long as they have wives who can look after the children."

" Men like working with knives and sharp instruments. It's okay for them to become security guards, policemen and butchers"

Occupations that were considered dirty or rough were regarded as more suitable for men by about a third of the respondents.

" Being a butcher is suitable for men because most women don't like the sight of blood and cleanliness is important to them. Men don't really care about that. "

" It is weird to picture a lady being a bus driver, prefer it to be a man."

A number of responses simply indicated that the jobs were "suitable for men" or " have only seen men doing these jobs" or " it's a man's job" without offering any further explanation.

About a quarter of the respondents commented on the occupation of priest. Both Indian and African girls felt quite strongly that only a man could be a priest.

" Men are considered more holy and pure and spiritual and only they can become priests."

"Women are not allowed to preach."

" Men become priests and women become nuns."

Question 8:1:2

What are your reasons for indicating some of the occupations as suitable for **WOMEN** only?

The following reasons were advanced and are reported on in order of frequency:

- Women are more suited for these jobs.
- Women are more sensitive, compassionate and gentle.
- Women have always done these jobs.
- Women are more understanding and patient.
- Women are caring and sensitive.
- Women handle stress better.
- Some jobs require a feminine touch.

80% of respondents expressed, in some form or other, the view that occupations like teaching, nursing, social work and secretarial work required a feminine touch. The

belief that women were better able to work with children and sick people because of their gentler nature was a recurring theme.

> " A woman knows best how to treat people, they are more sensitive than men."
>
> " Women are able to talk to people, and understand their point of view and deal with the problem."
>
> " They are sweet, patient and gentle people."
>
> " Women are warm at heart and they know how to cope with people better than men."
>
> " Women are good at looking after people."

The concern with social needs of politeness, appearance and feminine influence on occupations was also a common response. This was more pronounced with African learners.

> " Women is suitable for a polite job like a secretary, even though they have to receive a lot of phone calls but it is good for them."
>
> "I feel that women will have a certain imprint on these occupations. These jobs will have a woman's touch."

Some respondents clearly believed in the superiority of women.

> " Women have a larger attention span."
>
> " I really can't see a man making coffee-not in a male's job description."
>
> " Women alone can handle and take care of secretarial work. I feel most men are too dense to do that type of work or type."
>
> " Women are more independent, they have to fend for themselves and are capable of surviving any which way."
>
> " Women are more quick - minded and learn more easily than men."

A frank acknowledgment on the conditional superiority of women!

" Women are tough and strong, they can handle everything which is not dangerous."

The response of the female learners indicated confidence in the ability of women to handle most occupations. There was the view however, that women do have special qualities associated with their role as caregivers, and therefore more suited to some occupations like nursing. Responses to the next question confirm this point of view.

Question 8:1:3

What are your reasons for choosing the occupations you have indicated as suitable for **Men and Women?**

The following three response patterns emerged:
- There are no gender differences in the ability of men and women to work in any occupation.
- Women can compete with men on an equal footing and even outshine them.
- Women have choices and may avoid certain occupations, this does not mean they do not have the ability to manage them.

" Because there is no job not suitable for either men or women, everybody can do any job if necessary. It's just that women are interested to be nurses and teachers."

" Anything a man can do, a woman can do better."

" There is no job that a man does that a woman can't handle."

The following response summed up very ably the thinking of the majority of the learners.

" I believe that men and women are equal and there is no such thing as a 'man's job or a women's job'. You are able to do something depending on your skill, talent, determination and will power."

While African learners were more conservative in their responses, they also believed in the ability of women to do the same work as men. Their concern was the need for women to hold jobs that did not physically tax them and enhanced them socially.

The reasons offered for choices of occupations reflect accurately the actual choices made in the categorization of the occupations. Of the twenty occupations listed, seventeen were regarded as suitable for men and women and only three were deemed suitable for men only. There was a significant difference between the races in 15 occupations, with African learners having a more traditional view of the categories.

5.2.2.4.2   Personal Occupational Choices of Learners

(i)   Occupations Selected

Respondents were required to indicate an occupation they would definitely choose. The responses indicate that while some non-traditional occupations were selected, the traditional occupations were still popular. The traditional occupation of teacher however, appealed to only 0.5% of the sample. The difference between races in their occupational choices was not significant.

Traditional occupations, as indicated, were the most popular choices with 13.8% of the learners deciding on social work, 8.6% on nursing, and 8.3% on law. The non - traditional occupations of engineer and pilot were popular with 5.6% and 1.9 % of learners respectively. The other occupations selected were; 4.3% accountant, 4.3% the police force, 2.9% secretarial work, 2.9% medicine, 1.9% air hostess, 1.6% psychologist, 1.4% cook, 1.1% architect, 1.1% biologist, and 1.1% journalist. A wide range of occupations were chosen by a smaller percentage of the learners and included occupations like singer, physiotherapist, politician, radiographer, T. V. presenter, astronaut, au pair, beautician, auditor, architect, banker, computer technician, cosmetologist, decorator, editor, fashion designer, firefighter, and food technologist.

(ii)   Occupations Not Selected.

The respondents were requested to indicate those occupations they would definitely not choose. Differences between races were noted. In the analysis of results, where

necessary, the total percentages for the sample will be indicated as well as the percentages in proportion to the racial distribution of learners.

The most unpopular occupation selected by learners was teaching, with 10.3% indicating their rejection! Of these, 8.6% of the total sample were Indian learners and 1.7% African learners. Proportionate to the demographics of the sample, 11% were Indians learners and 7.6% Africans, which indicates that teaching, is more unpopular with Indians than with African learners. In the same way, the second most unpopular occupation was that of butcher at 8.9% for the total sample of which 8.6% were Indians and 0.3% were Africans. The proportionate percentage of 11% Indian learners and 1.2% African learners again indicates that significantly more Indians reject the occupation of butcher. The other unpopular occupations were the police force at 8.9%, nursing at 6.3%, builder at 5.7%, bus driver 5.4%, doctor, security guard at 5.2% and politician at 4%. In the case of builder, a significantly higher proportion of African learners i.e. 10% in comparison to Indians at 4% indicated that they would not select this occupation. The occupation of cook indicated racial differences as well; 3.8% Indians and 0% Africans rejected this occupation. The attitude towards certain occupations indicated racial differences in choices.

Some of the other occupations not selected were: priest, criminal, engineer, guard, firefighter, housewife, lawyer, pilot, prostitute, undertaker and vet.

(iii) Reasons for Choices

The most frequently mentioned reason for selecting an occupation was interest, followed by service to the community and then lifestyle preferences. Some responses were unusual like the following:

> Police Officer " I like catching crooks."
> Lawyer " Maybe I can't fight by hand, but I can fight by law."
> Accountant " I like to handle other people's money."
> Secretary " You always look like a lady."
> Mechanic " I have always loved cars and would like to make my dream a reality."

Reasons offered for not selecting occupations were far more telling! Some of the reasons mentioned were:

Cook	" Because I hate cooking, but love eating! I don't see myself as a cook, now or later."
Bus driver	" It's embarrassing for a lady to drive a bus."
Priest	"A women can never be a priest, it's not seen on T.V. "
	" I would never promise that I won't do sin again"
	" I don't picture myself being in a church."
Doctor	" I hate the sight of blood and I hate hospitals."
	" You have to handle people and look at disgusting ailments – no thank you!"
Politician	" Today's politicians are liars and consider making money for themselves and I am not that kind of person."
	" They are greedy only for money."
	" I would not want to rule a country that has the highest crime rate."
	" They are so boring."
Prostitute	" I don't want to face the risk of sexual diseases and it would interfere with my social life."
Dentist	" I can't stand looking down people's mouths."
Butcher	" I don't like to see dead sheep."
Teacher	" I hate screaming children."
	" I won't be able to cope with the stress."
	" There are too many problems with the department, and I won't be able to take the bad behaviour of children "
Vet	" I hate animals."
Builder	" After one rain storm, the house I build will fall down."
Housewife	" I believe a woman can make it big in the world of industry and there is more to life than cleaning."
Maid	" I rather work for myself and my family than work for someone who is too lazy to pick up a cup."
Lawyer	" I do not want to represent criminals"

The reasons offered for not selecting certain occupations are more out of personal preference than stereotypical thinking around issues of gender. Clearly gender is nor a deciding factor as far as ability is concerned. This finding is consistent and reflects a liberated view of occupational choices; females in the sample do not accept constraints and are confident there is true freedom of choice in South Africa. This sense of empowerment has to be investigated further to assess how sustainable it is, it may be a result of the current focus on women in the country.

(iv) Projected Problems

Learners were provided with a list of ten problems they were likely to experience and requested to select those that applied to them. The list of problems was compiled from research findings and responses obtained from the pilot test. The difference between races was not significant. The most common problem likely to be experienced was financial, 19% of respondents indicated this as a concern. The second highest frequency was 14% with learners considering admission requirements too difficult to meet and a further 11% expected problems with course work, especially science courses. Related to employment issues were the following concerns: a lack of employment opportunities for women (12%); of acceptance in the work place by male colleagues (10%); of dangerous work conditions (10%); and a lack of female mentors (8%). Parental approval of occupational choices featured as a minor concern with, 6% worried about how their fathers would react and 5% with how the mothers would react to their choices. An equally minor concern, at 5% was the effect of work demands on family life.

An open-ended question inviting discussion on any other concerns was left blank by most respondents. A few Indian learners expressed concern with the affirmative action policy of the government. Female learners in the sample view financial constraints and admission requirements to institutions as major concerns. This is to be expected of Grade 11 learners who are likely to be more concerned with entry level problems rather than problems likely to be faced in the work place.

5.2.2.5   Occupational Attitude Scale

A five-point summated or Likert attitude scale was constructed, consisting of nine positive and negative statements about the suitability of occupations for women. All the statements reflect stereotypical attitudes gleaned from research findings and from the pilot study. Learners were advised that there were no right or wrong answers and they merely had to indicate their degree of agreement or disagreement with the statement. The scale was constructed so that the total score would reflect the level of traditional attitudes toward occupational choices for women.

Responses were numbered and ranged from strongly agree (1) to strongly disagree (5) in the following order:

1   Strongly Agree

2   Agree

3   Neutral (Neither Agree nor Disagree)

4   Disagree

5   Strongly Disagree

The total score for the scale was 45; a high score indicated a very open, non-traditional attitude towards occupations for women and a low score was indicative of a traditional attitude. Low scorers would be in strong agreement with statements that indicated stereotypical thinking related to gender e.g.

" Occupations that require strong, leadership roles are not suitable for women."

The face validity of the survey questionnaire, which included aspects of the scale, was established and pilot tested with a group of 30 learners. The attitude scale was constructed taking into account the findings of the pilot study and the comments of the evaluators and learners. The face validity of the Occupational Attitude Scale was established and further pilot tested with a sample of 10 learners. The reliability of the scale was established by Cronbach's Coefficient Alpha (a), which indicated an internal consistency score of 0.75. This score reflects a high degree of consistency. The Occupational Attitude Scale can therefore be regarded as a reliable instrument.

A score that reflected a traditional or non-traditional attitude towards occupational choice was required to establish group attitudes and establish whether there were significant differences between and among groups. Table 5. 21 indicates the response pattern of the different race groups.

Table 5.21   Scores on the Occupational Attitude Scale obtained by
African and Indian learners

	Indian	African	Total
Mean	36.189	29.337	34.668
Median	37.000	29.000	35.000
Minimum	11.000	4.000	4.000
Std Deviation	5.669	7.879	6.838
Maximum	45.000	45.000	45.000
Range	34.000	41.000	41.000
Std Deviation	5.669	7.876	6.838
Valid cases	291	83	374

Note: z *(7.39)* $p = 0.00$ (**z-test for two sample means).** ***P =< 0. 05**

The difference in attitude to occupations by race was highly significant z *(7.39)* p = 0.00. African learners were significantly more traditional in their attitude to occupational choices than Indian learners. The mean score of African learners was 29 and Indians 36. A range of 34 and a standard deviation of 6 suggested that the Indians were a more homogeneous group than African learners who had a range of 41 and a standard deviation of 8. The wider dispersion of scores of African learners from a minimum 4 to a maximum of 45 is indicative of the very different circumstances at school and home of African learners. 75% of Indian learners lived with both parents whereas only 32% of African learners lived with both parents. Many had single parents, with mothers being the breadwinners in the family. The problems experienced by learners traveling from the townships to schools in former Indian areas added to the less stable backgrounds of African learners. The profile of African learners from the pilot study and the current research suggested that the socio - economic status, family stability and school environment was varied with those from

more stable homes having a more confident attitude. Anecdotal evidence and responses from open-ended questions on the questionnaire indicated a range of very conservative responses to very emancipated views. Responses of Indian students tended to be less extreme.

GLM ANOVA tests were used to analyze the effect of two independent variables on attitude. The following tests were run:

Attitude score by Race and Age

Attitude score by Race and Subject Choice (Mathematics, Biology, & Physics)

Attitude score by Race and Parental Education (Mother, Father, Guardian)

The interaction between race and age was not significant. The age range between African and Indian learners was significant with African learners, slightly older and with a wider range, but this did not impact significantly on their attitude to occupations. The two-way interaction between race and subject choice was significant in the case of mathematics $F (4.91) p = 0.02$ but not in the case of Biology $F(3.44) p = 0.06$ and Physical Science $F (1.32) p = 0.25$. The difference in attitude to occupational choices between African and Indian learners who took Mathematics must be interpreted in the context of the higher percentage of Indian learners taking Mathematics as a subject. Literature points to self efficacy concerns expressed by females who believe that mathematics is too difficult for females and tend to shy away from occupations in the science and technical fields. Even though significantly more Indian learners took Physical Science as a subject the interaction was not significant. There was no significant difference between races in the number who selected Biology as a subject and the interaction on attitude score was also not significant. The Indian girls who were studying mathematics were more non–traditional in their attitude to occupations than the African girls.

The two-way interaction between race and level of parental education on attitude was not significant. The difference between the races in the educational level of mothers and fathers in the sample was not significant and the attitude of learners was also not influenced by the level of education of their parents. The Occupational Attitude Scale has revealed a highly significant difference between African and Indian learners to occupational choice, with African learners being more traditional in their views. The

only other variable identified which had a significant influence on attitude is the selection of mathematics as a school subject. Indian learners, who took mathematics as a subject, were significantly more non-traditional than their African counterparts.

The data obtained from interviews conducted with mothers in traditional occupations and daughters in non-traditional occupations, is analyzed in Chapter Six.

CHAPTER SIX

INTERVIEWS: MOTHERS AND DAUGHTERS

Part Two: Analysis of Interviews of Daughters in Traditional Occupations and Mothers in Non-Traditional Occupations

The data obtained from the interviews was analyzed qualitatively and integrated with the findings from the survey. The process of validation of the semi-structured interview questionnaire, the data collection, and the biographical details of the participants have been included in the main text instead of the appendices, as they were regarded important to the discussion. The mother/daughter interviews have been summarized and integrated into a discussion of the critical questions. The interview schedules; transcript of pilot test and revised schedules will be found in Appendix B. The validation of the semi-structured interview questionnaire has been discussed in Chapter Four.

6.1 Data Collection

6.1.1 Procedure

The following procedure outlined in Chapter Four, was used:

- From the sample surveyed, triads would be established if possible i.e. daughters in Grade 11 who had filled in the survey questionnaire, their sisters employed in non-traditional occupations and mothers in traditional occupations.
- Semi-structured interviews would be conducted with sisters and mothers.
- In the event of a sample of 6 sisters and 6 mothers not being identified from the sample surveyed, women outside the sample would be identified and interviewed.

6.1.2 Sample

The sample comprised of African and Indian women in the age range 21 – 60 years. Attempts to interview mothers in traditional occupations and sisters in non-traditional occupations of the Grade 11 learners surveyed were unsuccessful. Only two sisters were working in non-traditional occupations, one mother was in a non-traditional occupation and therefore did not meet the requirements of the sample. For the sake of consistency it was decided to interview all the women from outside the surveyed sample. The semi-structured interview schedule was pilot tested on one mother/daughter pair and re-designed before the actual interviews were conducted. Three African and three Indian women in non-traditional occupations and their mothers, who were in traditional occupations, were interviewed. The sample was obtained through contact with the media, requests to tertiary institutions and from acquaintances. Telephonic interviews were only conducted when it was not possible to meet for a face to face interview. Twelve women were interviewed i.e. a sample of six daughters and six mothers.

6.1.3 Research Instrument

Interviews were semi-structured. Eight questions for each sample were selected to probe the following themes:

- reasons advanced for selecting occupations,
- influence of social and contextual factors,
- influence of significant others,
- influence of gender stereotyping on choice,
- impact of race or culture on choice,
- barriers to advancement in male-dominated occupations,
- perceptions of traditionality,
- categorization of occupations, and
- changes in patterns of conceptualization of suitability of occupations over two generations.

6.2   Interviews

The questions were not posed in the any particular order; they were introduced as part of the conversation. The emphasis was on establishing rapport that would enable the women to speak freely and not feel as if they were under interrogation. Some notes were taken in the course of the interview, especially comments that needed to be recorded verbatim. Detailed records were written after each interview. Daughters were interviewed first, followed by their mothers. The time lapse between interviews was kept to a minimum, not longer than a week for each pair. The women were asked whether they were comfortable with their names being used in the report. Five women expressed reservations about being identified and three women felt that some responses should be confidential. The remaining four women had no reservations about their identities being revealed. For the purposes of confidentiality names will not disclosed, initials will be used to identify the women. Biographical details will be provided.

Daughters and mothers were interviewed separately but a combined report was drawn up on each pair. A summary of the interviews will be reported under the following headings, as they are applicable:

Race:

Occupation of Daughter:

Age of Daughter:

Occupation of Mother:

Age of Mother:

Family Details:

Biographical and Academic Details of Daughter:

Biographical and Academic Details of Mother:

Work History:

Summary:

6.2.1 Interview Report 1

(i)   Identification details:

Race: African

Daughter: LDN

Occupation of Daughter: Printing Press Operator

Age: 27

Mother: TM

Occupation of Mother: Housewife

Age: 58

(ii)   Family Details

The mother was a single parent and there were six siblings in the family. The older brother was a schoolteacher and the younger, a scholar. The four daughters were employed as follows: nurse, fashion designer, self-employed (managing a printing press), and printing press operator.

(iii)   Biographical and Academic Details of Daughter (LDN)

LDN was single and the fifth child in a family of six. She attended a rural school in Eshowe and studied a science course, which included Physical Science. After secondary school she enrolled for a Diploma in Analytical Chemistry at the Natal Technikon, but dropped out after one year. She subsequently did a short course in a print shop in order to assist her sister who had opened up a printing company.

(iv)   Work History

LDN had problems with her sister and left her printing company. The Natal Newspapers advertised for printing press assistants and LDN applied. She was initially rejected but persisted by "forcing open doors". She became the first woman artisan in the machine room of the Independent Newspapers in its 121 years of existence. She indicated that the 42 men in the printing room accepted her and that

they soon realized that she was as good as any one of them. However, her initial entry in this male-dominated environment was not easy:

> "They hardly recognize you, they don't want to know what you know. You have to prove yourself."

LDN did not allow race or culture to stand in her way. She commented that some people in the community could not understand her work because of their lack of knowledge of technology. Her mother did not approve of her choice of occupation at first and would have preferred her to become a professional, but ultimately wanted what was best for her. This was confirmed by her mother, who expressed her pride when her daughter featured in The Daily News, dated 9/9/1999 as the first women to work in the printing press at The Natal Newspapers. Two supervisors, both white and male, expressed their admiration for her work and regarded her as the best candidate for the job. She did not experience any problems at work and advised other women to persist as opportunities were opening up for them.

(v)   Biographical Details of Mother (TM)

TM was a single parent who did not want to discuss the father of her children. She indicated that African fathers played a minimal role in the family, it was the mothers who nurtured and guided their children. TM was a highly articulate and intelligent woman. She had no formal schooling, but learnt to read and continues to read extensively. If she had the opportunity, she would have become an interior decorator. She believed that women in the "new South Africa" had many opportunities but that they do not use them:

> " They are waiting for someone to do things for them, and wasting valuable time."

She emphasized that young women should not be influenced by their peers and should forge ahead doing what really interested them. She firmly believed that the "new South Africa " had no place for the restrictions of the past placed on women, be it of race or culture. She regarded her daughter as a "go-getter" and a "bookworm" and saw no barriers in her career path that she would not be able to overcome.

(vi)   Summary of Interview

Both mother and daughter were strong women who had decided views and would not allow anything to stand in their way. LDN saw her mother as a role model, who had encouraged her to read and pursue her ambitions. Both firmly believed that there were no restrictions on women, they were capable of doing any work done by men. Their responses were very similar, with constant references to the "new" South Africa, in which women were free to enter and progress in the occupations of their choice. Cultural and racial barriers were regarded as "things of the past." A decided denial of the role of the father or any other male in the lives of mother and daughter was apparent. They would reject any intrusion by traditional belief systems, which minimized the role of women or left decision-making in the hands of men. An interest in chemistry and a science course at school, to a large extent influenced LDN's choice of occupation in a field of science and technology.

6.2.2   Interview Report 2

(i)   Identification details:
     Race: African
     Daughter: PN
     Occupation of Daughter: Engineer (Heavy current)
     Age of Daughter: 24
     Mother: DM
     Occupation of Mother: Sales Assistant (formerly an Enrolled Nurse)
     Age of Mother: 49

(ii)   Family Details

The mother was a single parent and the father was deceased. PN was an only child and her mother, DM had brought her up without any assistance.

(iii)   Biographical and Academic Details of Daughter

PN lived a rural existence until she came to study in a tertiary institution in Durban. She was a strong, sturdy girl, tall and well built. She had very little recollection of her father, knew he worked for a petrol company but was not clear in what capacity. She was entirely dependent on her mother for support and guidance. PN attended a farm school, studied a science course, which included mathematics and physics. She was accepted into a bridging programme for prospective engineering students, and obtained admission into a tertiary institution to study engineering. She was concerned that she had made a wrong choice and would rather study medicine, but could no longer exercise this option.

(iv)   Work History

PN had not started a full-time job to date, but had done some part-time work. She admitted that she did not have extensive experience, but thus far had not experienced any problems with her male colleagues. She was confident that she would be able to deal with any barriers that impeded her progress. Her work environment did not involve dangerous or strenuous fieldwork.

(v)   Biographical and Academic Details of Mother (DM)

DM completed Grade 10 (Std 8) and was accepted for training as an enrolled nurse. Unfortunately, she fell pregnant and was forced to leave after two years. She had to support her daughter alone as the father of her child did not contribute to her upbringing. He was now deceased. She had made good progress in her current job at a major chain store and held a managerial post. She was happy with her job and had no desire to change.

(vi)   Summary

Both mother and daughter saw vast opportunities for women in the country and had little time for cultural barriers. They were clear that men would not dominate them in their work or personal lives. When questioned about the influence the father had on PN's choice of occupation, her mother responded as follows:

> " You do not understand, African men have no say in the way we bring up our daughters, we take care of them and we decide for them."

PN responded in the same way indicating that her mother made the decisions. Initially, PN's mother did not approve of her choice of career but was now very pleased. She did not know that her daughter had doubts about her choice and would have preferred a medical career. PN indicated that the community had reservations about her choice but did not raise serious objections. She considered a lack of understanding of technology as one of the reasons why people disapproved:

> " They just can't understand all this talk of heavy current and light current."

When questioned about why she had selected engineering as a career, she replied that it was because she had taken a science course at school. Another option she would have considered was Chartered Accountancy. Her choices spanned across different fields with a high status range and those that demanded good computational skills. This indicated a confident and capable individual, able to manage science and mathematics and not prepared to settle for second best.

6.2.3 Interview Report 3

(i) Identification details:

Race: African

Daughter: BZ

Occupation of Daughter: Train Driver

Age of Daughter: 36

Mother: MZ

Occupation of Mother: Housewife

Age of Mother: 60

(ii) Family Details

BZ had two siblings, her sister worked for Metrorail in their administrative offices, and her brother worked at Mac Donald's, the burger outlet. The father was a retired police officer.

(iii) Biographical and Academic Details of Daughter

BZ was a single mother, and had two daughters at school. She had little contact with the father of her children. She attended high school in Kwa Mashu, passed Grade 12 with Biology, Mathematics, Languages, Biblical Studies and History. She did a short course in typing after leaving school.

(iv)   Work History

She started work as a security guard for Metrorail. Her sister informed her of a training programme for women train drivers, which was to be introduced at Metrorail and encouraged her to apply. After a tough selection process, she was accepted together with six other African women and two White women.

(v)   Biographical and Academic Details of Mother

MZ had no formal schooling. She had little say in the lives of her children, and regarded herself as a very traditional woman.

(vi)   Summary

The influence of parents on BZ's choice of occupation was minimal. The influence and encouragement of BZ's sister was apparent, she helped her obtain her first job at Metrorail, and also encouraged her to become a train driver. BZ had very strong views on men who tried to dominate women:

" They think a lady's place is in the kitchen, or to plough the fields. We must not be treated like factories, making babies."

She was quite determined to prove herself in her male-dominated occupation:

" They think you know nothing, you have to show them you are as good as them. Then they accept you and give you no trouble."

BZ was a tough, strong woman who could accept the challenge of a harsh working environment. She had the physical and mental stamina required to do the job. She was very happy in her job, and particularly pleased that she obtained the same salary as her male counterparts. When questioned about the reaction of the passengers to a

female driver, she indicated that they were concerned at first, but now accepted her. Her response was a matter of fact, " if women can drive cars, they can drive trains." BZ did not consider that her school or her choice of subjects influenced her career path. Her strong physique, personality and having a sister working at Metrorail, influenced her choice of job as security guard, and subsequently as a train driver.

6.2.4   Interview Report 4

(i)   Identification details:

     Race: Indian

     Daughter: AP

     Occupation of Daughter: Electronic Engineer

     Age of Daughter: 24

     Mother: SP

     Occupation of Mother: Librarian

     Age of Mother: 48

(ii)   Family Details

AP was the eldest daughter, with a younger sister working in travel and tourism and a brother, who was a computer technician. The father was 56 years old and a shopkeeper.

(iii)   Biographical and Academic Details of Daughter (AP)

AP was single, still lived at home and was part of a supportive family. She went to a public school in Wyebank, and studied a science course with Computer Science as a subject. She obtained a Bachelor of Science Degree in Electronic Engineering from University of Natal. She is currently studying towards a Master of Business Administration (MBA) degree.

(iv)   Work History

She was employed by Metrorail and in her first job. AP had also been selected to visit the United Kingdom for more advanced training in her field of specialization. She found her job challenging and was comfortable in a "protected environment". Her work was mainly consultative and did not entail fieldwork or extensive travel. AP expressed concern about the sexist attitudes of the males in her work environment. She quoted the example of train drivers who bypassed her and consulted her junior:

> " They easily forget that I am the engineer and they should be consulting me. I have to fight for respect. If you do not keep in touch they forget about you. You have to constantly prove yourself. "

She also found that the men, especially the older ones, often ignored her instructions:

> " It's hard for them to let you in."

Despite these problems, she was happy with her job and positive about changing attitudes. She was one of three Indian female engineers who had qualified at the same time and kept in touch in order to support each other.

(v)   Biographical and Academic Details of Mother

SP completed her matriculation examination and married soon after leaving school. Her daughter described her as a housewife, but she insisted that she was a librarian who worked for the Municipal Library, and not a housewife. It was obvious throughout the interview that SP was very conscious of status, and also suspicious of everyone's motives. She had to be convinced that there was no ulterior motive before she agreed to an interview. This, despite being informed in advance by her daughter, that the interview was for research purposes only. She was proud of her daughter's achievements and preferred discussing her, rather than responding to the questions about her life. SP loved to cook and assisted her husband in their family business.

(vi)   Summary

AP was a petite young woman, highly motivated, academically inclined, and had a friendly personality. AP acknowledged that marriage and family life may affect her priorities and aspirations, but she was not in a serious relationship and saw that as a problem in the distant future. Her mother however, was adamant that nothing would affect her daughter's career path:

" She is very capable, and will manage any problem easily."

Her mother had great confidence in AP's ability to manage a career and family life. She had assisted her mother by taking total responsibility for the care of her younger sister. SP indicated that there were limited opportunities for Indian women in the country. AP, who saw affirmative action as a major stumbling block, echoed this view as well. Both acknowledging that AP had moved up the ladder very quickly, but still expressed a lack of the confidence in the future. What came across was a sense of uncertainty and concern that the government was not able to meet the needs of all the people in a fair and equitable way. Barriers of race and culture were not regarded as matters of concern; government policy was viewed as discriminatory and stifling to the progress of Indian women.

6.2.5   Interview Report 5

(i)   Identification details:

Race: Indian

Daughter: MS

Occupation of Daughter: Quantity Surveyor

Age of Daughter: 30

Mother: RN

Occupation of Mother: Housewife (worked as a Hospital Attendant)

Age of Mother: 54

(ii)   Family Details

MS had two brothers, the eldest was 36 years old and a highly qualified statistician. The younger brother was 21 years old, worked as a clerk and was currently studying a computer course. The father was 60 years old and a retired Superintendent of Schools.

(iii) Biographical and Academic Details of Daughter (MS)

MS attended local public schools in Shallcross. She studied a science course, with Music as one of her subjects. She was advised by her father to become a music

teacher. This did not appeal to her but there was nothing else specific she wanted to do. After her matriculation examinations, she sought help from her brother in filling in her application forms to apply for admission to the University of Natal. Their parents were abroad and he encouraged her to study towards a Bachelor of Science Degree in Quantity Surveying. She agreed, unaware that her brother had given her incorrect information about quantity surveying. It was only after she started her studies that she understood what quantity surveying actually involved. In spite of her misgivings, she persisted and qualified as a quantity surveyor six years ago.

(iv)   Work History

MS was employed by a large company of consultants, and was the only female in professional practice working for that company. She enjoyed her work even though it was difficult and very challenging:

"Each project is different and I am learning all the time".

She had good rapport with male colleagues in her company, but experienced difficulties with clients, who were not accustomed to dealing with a woman quantity surveyor. An example cited was a recent project, in which all her correspondence was directed to her male supervisor. She persisted in drawing attention to the fact that she was responsible for the project until it dawned on the contracting company they had to deal with her. She often found that she was the only female in the boardroom and felt too intimidated to participate in the discussion, even when she had a valid contribution to make. She had overcome this problem by writing memorandums stating her views:

" I find I have to work harder than my male colleagues to prove myself, I am constantly having to prove myself. Men do not take you seriously and often overlook your presence."

She indicated that there were few women in construction, and fewer in management positions. A project, for which she was expected to locate female workers as the requirement was an all-female contracting company, was problematic because of this lack. She sometimes had to visit construction sites but did not like these visits:

> " The men stop working and stare at me. I dress in jeans, boots and wear a
> hard hat for these visits. They are just not used to seeing a woman on a
> building site".

MS was a striking woman, tall with long black hair, good complexion and beautiful features. The men were probably awestruck by all this beauty in boots! She had no plans to go into private practice or start her own company. She did not believe that a company owned by a female would attract business. Her prospects for promotion would be enhanced by affirmative action policies required by the government, but she preferred promotion on merit.

(v)   Biographical and Academic Details of Mother (RN)

RN left school before completing her matriculation examinations. She married young because of family expectations and pressure. After leaving school she was expected to prepare for marriage, learn how to cook and run a household. Her life was controlled by an older aunt "Big Mother" who made all the decisions. Her mother had little say in decisions affecting her children. Her father or aunt decided when children left school and vetted the choice of suitors. As the eldest sister in a family of four sisters and a brother, she was expected to be a role model for the younger siblings. RN was a tall and beautiful woman who had a lot of suitors:

> " I became fed up with going to the well to fetch water so that some young
> man could look at me and decide if he wanted to marry me. I was not
> interested in anyone until MS's father came along. Somehow I changed my
> mind and agreed to marry him."

When questioned about the job she held as a hospital attendant, she indicated that she had felt a real need to escape the routine of household chores, and that she was relieved when her husband allowed her to work. She felt that there was no real encouragement or support from her family either before or after her marriage to pursue a career. If she had the choice, she would have considered modeling as a career. She was offered a job once to model jeans but her husband did not approve of this and preferred that she remain at home.

(vi)   Summary

MS became a quantity surveyor by chance, and her choice was based on inaccurate information provided by her brother:

> " If I knew then what I know now first hand about quantity surveying, I would have definitely selected this career. At the time of choosing, if I had based my choice on information from career brochures, I would probably not have selected this option. You only know a job once you have actually worked for some time in it."

Her mother disapproved very strongly of her choice and did not really understand what her work entailed. Her father was more supportive as he had a better understanding of her work. MS indicated that most women could not understand her work and accepted that it was something to do with buildings, the rest was beyond their comprehension. This was especially true of the women in her family. She had not experienced problems or reservations in the community about her work except for those mentioned. When her mother was questioned about her reaction to her daughter's choice of occupation, she agreed that she had been very unhappy and very concerned:

> " I cried at the thought that my daughter had to wear boots and a hard hat and work on building sites. I am very proud of her now, especially when I hear that she is assisting her father-in-law with his construction."

RN felt that her own life had been constrained by the barriers of race and culture and by the expectation that her role in life was to be a housewife. She had decisions made for her by her aunt and then her husband. Her daughter, on the other hand, had no such constraints placed on her and was free to choose her own career path.

6.2.6　Interview Report 6

(i)　Identification details:

     Race: Indian

     Daughter: FB

     Occupation of Daughter: Hydrologist

     Age of Daughter: 30

     Mother: ZB

     Occupation of Mother: Principal Tutor-Nursing College

Age of Mother: 56

(ii)   Family Details

FB had two younger brothers, the elder of the two was studying architecture and the younger was still at school. The family had a strong business background, with the grandparents having pioneered a business in the music industry in Pietermaritzburg. The family also has an academic background. The great grandfather was a highly intelligent, widely read accountant, experimental farmer and theologian. The family members had always been exposed to books because of a vast library accumulated over the years. An older, paternal aunt was the first Indian female doctor in Pietermaritzburg. The father was a businessman.

(iii)   Biographical and Academic Details of Daughter

FB was married to an auto electrician and had a baby, who was three months old at the time of interview. She had experienced serious health problems but overcame these with a single-minded determination. Her stamina and zest for life were evident in her active participation in marathons and hiking. FB attended public schools in Pietermaritzburg. She studied a science course at school. After matriculating, she enrolled at the M. L. Sultan Technikon for a Diploma in Chemical Engineering, but dropped out after one year. She subsequently studied for a Bachelor of Science Degree at the University of Natal, Pietermaritzburg. With few options available to her, she decided to major in Hydrology and subsequently went on to do her Honours Degree in Hydrology.

(iv)   Work History

FB worked at the University of Natal as a research assistant in the Department of Hydrology for two years. She then obtained a post with the Department of Water Affairs in Pretoria and worked there for a year. She was subsequently transferred on promotion as senior hydrologist to Natal. She filled this post for two years, but from the year 2000 had taken up a position as Regional Director and was based in Durban.

FB indicated that hydrology was a very male-dominated career, especially dominated by White Afrikaner males. FB was a determined young woman, able to stand her ground and had obtained acceptance and recognition despite some problems. She remarked that the males often forgot that she was female. On field trips, the conditions were very basic and she had to contend with a lack of toilet facilities. Her male counterparts were quite comfortable using the bush! No allowances were made for her gender, she had to traverse the harsh terrain and keep up with the men in the team. Men also smoked in her presence and conversed in Afrikaans. She had brushed up on her Afrikaans to ensure that she could participate in the discussions. Her ability to cope with the fieldwork and the harsh conditions was remarkable, given that she was very petite and had to contend with a chronic health condition. She worked late into her pregnancy, traveling as required. Ironically, her work mates had a " baby shower " for her before she left on maternity leave. The government policy, regarding affirmative action for women had assisted her in her upward mobility. It was also her commitment to her work and acceptance, that she could not expect concessions because she was female, that had contributed to her success.

(v)   Biographical and Academic Details of Mother (ZB)

ZB studied at public schools in Pietermaritzburg. She attended the Pietermaritzburg Indian Girls' High School, which had an all-female staff. After completing her matriculation examination, she wanted to pursue a career in medicine or nursing. She was unable to study medicine because she did not meet the admission requirements. Her parents were reluctant to allow her to become a nurse because "it was not a suitable occupation for Muslim females". She was expected to prepare for marriage and had to learning to cook and run a household. ZB rejected all the marriage proposals she received, and insisted on studying further. Her parents were quite happy to send her to a teacher training college but she was adamant that she would not become a teacher. After spending three years at home, she applied to King Edward V111 Hospital without the knowledge of her parents. She was accepted and informed her parents overnight, that she was leaving home to stay at the Hospital and train as a nurse. Her younger sister was already in her first year, studying toward a Bachelor of Arts Degree with the full support and approval of her parents. Her father accepted her decision, but her mother was very distressed and insisted that she would not be able to

cope with the demands of the job. ZB has acquired a number of diplomas in Psychiatric Nursing, Community Health, and Midwifery. She qualified as a nursing tutor and held the post of Principal of Northdale Nursing College. Her nursing career has spanned three decades.

(vi)   Summary

FB's choice of occupation was by pure chance. She did not plan to become a hydrologist. As a result of her limited options in finding a major subject, she choose hydrology with the idea of competing her Bachelor of Science Degree and then deciding on her career prospects. Her mother, on the other hand, had very definite ideas about her career path. She persisted in her ambition to be a nurse despite the fact that her parents and the community did not approve of nursing as a career for Muslim women. She did not allow the constraints of race and culture to stand in her way. Even though nursing was regarded as a traditional occupation for women, it was not considered suitable for women from conservative communities. She broke with tradition by pursuing her choice. FB had fewer racial and cultural constraints placed on her, and the only barrier she had to overcome was that of gender. She had made great strides in her professional life and was able to combine marriage and motherhood.

6.3   Discussion of results

The purpose of this study was to determine the reasons for women's perceptions and choices of different categories of occupations. The interviews were analyzed with this purpose in mind. The critical questions, which guided this research and which have been previously stated, are as follows:

- What are women's perceptions of the different occupational categories (traditional and non-traditional)?
- Why do women choose particular occupational categories and not others?

- To what extent do women's occupational choices correspond with their racial class or cultural status?

- What are the social, educational and personal barriers that affect women in their choice of occupations?

While the first two questions were specifically answered by the survey, and the last two questions were explored in the interviews, discussion will be integrated. Data has come from all sources; the interviews focused as well on issues raised in the survey. The discussion on trends and patterns of thinking that emerged from the interviews will be reported on in terms of the critical questions posed in the introductory chapter.

6.3.1 What were women's perceptions of the different occupational categories (traditional and non-traditional)?

The interviews indicated that the daughters, who were all working in non-traditional careers, did not focus on gender differences in their original choice of occupations. They did not categorize occupations as suitable for men or for women and did not consider their choices as "non-traditional". With the exception of the two engineers, the others entered their professions by default. Even with the engineers, their first choice of occupation was the medical profession, and engineering was the second option. One of the women was quite content as an engineer, but the other would have liked to change her occupation and become a medical doctor. The women made occupational choices based on their school subjects and what was available to them, rather than on categories of occupations deemed suitable. Not one of them responded in the affirmative in answer to question 3 : "Do you consider that some occupations should be only for men?" The open-ended questions in the survey also indicated that the majority of Grade 11 learners did not categorize occupations as traditional and non-traditional for women.

The mothers, on the other hand, had mixed views. In their own choice of occupations, all of them chose occupations that were regarded as traditional occupations; nurse, librarian, housewife and sales assistant. Five of the women were supportive of the choices made by their daughters; only one, RN had serious reservations about her

daughter entering into a male-dominated environment. RN had changed her mind and was now clearly proud of her daughter and job she currently held. One of the mothers, ZB was determined to become a nurse despite her parents' objections that it was not a suitable occupation for Muslim females. This indicates that even jobs regarded as traditional for women in general, are not regarded as suitable by certain conservative and religious groups. In the pilot test MG, the mother who was also a nurse, indicated that her brother raised objections because he regarded nurses as too free and flirtatious, and nursing not a suitable occupation for girls from reputable families. The women in the sample did not categorize occupations in terms of gender and suitability, but clearly believed that women could, and should pursue any occupation they chose. A clear theme to emerge was that a woman could do any job that a man could do, and that it was only a matter of personal choice.

6.3.2 Why did women choose particular occupational categories and not others?

The interviews revealed that all the women in non-traditional careers did science subjects, including mathematics, at school. All the women, except the train driver, indicated that the fact that they had taken science subjects at school influenced their occupational choices. Two of the African women particularly enjoyed physical science; one of them had even enrolled for a Diploma in Analytical Chemistry because "she was always fascinated by chemicals." The literature review confirms that women who have concerns about their ability to manage mathematics shy away from non-traditional careers.

The women interviewed were, with one exception, assertive, confident and ambitious. MS, the quantity surveyor had a quiet, gentle demeanor and gave the impression almost of timidity until one actually talked to her. She was gentle but very firm. The personality type, identified in literature as the one more likely to choose a non-traditional career, has predominantly masculine characteristics. All the African women interviewed were physically well built, strong, assertive and confident. The Indian women were smaller built, with one tall but very slim. They looked delicate but were as assertive and confident as the African women in the sample.

The "chance" factor played a part in the occupational choices of five of the seven women interviewed. Three women had to select specialization options while studying towards Bachelor of Science Degrees, which eventually led them to their careers almost by default, while two were in the right place at the right time. One woman based her decision on inaccurate information, but again, by chance moved into a non-traditional career she really enjoyed. Only the two engineers decided from the outset what careers they planned to work towards, however, it was second choice for both, as they did not gain admission to medical school.

The influence of parents on actual choices was not apparent in any of the cases. What was apparent was that the parents wanted what was best for their daughters, and allowed them the freedom to decide on their occupations. They did not impose their choices on their daughters. Two of the African mothers and two of the Indian mothers were liberated in their views and believed that women were capable of succeeding in any career they chose. The African mothers were powerful and confident women who had no hesitation in rejecting constraints imposed by traditional practice. They were firm believers in the "new South Africa" as a liberating force that provided women with opportunities they had not previously enjoyed. The Indian women did not have the same confidence in the country, but believed in the capacity of women to do any job. One Indian mother and one African mother expressed more traditional views, but wanted whatever made their daughters' happy. Indian fathers had a more influential role than African fathers in the lives of their daughters. One of the women interviewed, indicated that her mother had little understanding of what her job entailed whereas her father understood, and had been more supportive.

From the sample interviewed one can conclude that women do not categorize occupations as traditional or non-traditional, but choose particular categories over others depending on the following:

- Their subject choices at school.
- The supportive role of parents, especially mothers.
- Self-efficacy beliefs. A confident and a firm conviction that they are capable of doing any occupation that they desire.

- A rejection of gender-role stereotyping of occupations.
- An acceptance that the government is genuine in its policy of affirmative action for women.
- A desire to access the opportunities open to them
- A rejection of past restraints of race or culture.

6.3.3 To what extent did women's occupational choices correspond with their racial class or cultural status?

The six women working in non-traditional occupations showed no differences in terms of race or culture in their choices of traditional and non-traditional occupations. The only difference was a greater sense of confidence in the "new South Africa" expressed by African women, and concerns by Indian women that restrictions based on race were being placed on them. All the African women were quite firm that racial and cultural barriers of the past had no influence on their career paths. Indian women conceded that opportunities had also opened up for them but did not express the same level of confidence. The women interviewed were from both rural and urban areas, with two of the African women having attended "farm" schools.

The mothers who were in traditional occupations, on the other hand, considered that barriers of race and culture had influenced their lives. Each of the six women interviewed, indicated that they had to deal with restrictions imposed on their advancement. Of the three nurses interviewed, including the mother who participated in the pilot test, one had to drop out because she became pregnant, the other waited for two years because of parental objections to her choice of career, and the third had to contend with the perception that nurses had low morals. The three housewives felt that they were denied the opportunity for self-development. One housewife constantly expressed resentment that her family initially, and subsequently her husband, made all the decisions for her. She felt that the only role cast for her was that of housewife; preparation as a young woman for this role and subjugation by her husband who wanted her to remain a housewife. The other women indicated that there were no expectations on them to pursue careers, their lives revolved around their children and the men in their lives. The librarian, who was actually a library assistant

and described as a "housewife" by her daughter, was quite clearly resentful of being regarded as a housewife. The desire for a career and status, denied her by marriage immediately after leaving school, had been projected onto her daughter. She was very proud of her daughter's achievement and constantly referred to her being profiled in the media. Her pride came from her daughter's achievements rather than her own.

There were few racial differences, both Indian and African women expressed the same constraints. Both groups of women were also subject to similar racial barriers. One of the African mothers indicated that the only careers open to women were teaching and nursing, this was the same for Indian women. African women, however, again expressed stronger views on the political constraints. Cultural status was linked to conservative religious values for Indian women. Nursing, for example, was not considered acceptable as an occupation for decent Muslim women. Strict Islamic countries, such as Saudi Arabia, still seem to have this view. Jobs for nurses are easily available and very well paid in these countries because Muslim women are discouraged from becoming nurses. The African women expressed concern about rural woman who still had to deal with conservative male-dominated rule. Urban women were more liberated, and those whose daughters were brought up at home on the farms, ensured that they had all the opportunities now open to them.

6.3.4 What were the social, educational and personal barriers that affected women in their choice of occupations?

(i) Social Barriers

In South Africa, social barriers should be viewed as socio-political barriers because of the social engineering that was part of the apartheid legacy. Unlike many western countries were women had to deal with social barriers arising from gender-role socialization only, South African women have had the constraints of political intervention, together with gender-role socialization to contend with. This was apparent in the differences in the career paths of mothers and daughters, who belong to two different political eras, and in racial differences in attitudes to the past and to the present. The daughters, in comparison with their mothers, had fewer socio-political concerns impacting on their career choices and self-actualization. Racial

differences in this regard, indicated that African women had stronger views on the political constraints placed on them in the past because of race. They expressed anger and resentment that the other races had better opportunities and that African women were only expected to become domestic workers. This anger is justified, and the fact that a large number of African women still remain in domestic service, bears testimony to past policy. Indian women felt that the present political order discriminated against them in the same way as the past political order. In the past, they had to contend with White affirmative action and now they were confronted with African affirmative action. The Indian women did acknowledge that more opportunities had opened up for women in general in the country, but that preference was given to the advancement of Africans first, and then women. African women were positive about policy changes in the country for women and lamented that some were not taking advantage of these opportunities. One of the African mothers strongly condemned the view held by some younger African women that their advancement would come "on a plate" and that they did not have to make any effort. Indian women, on the other hand, both mothers and daughters expressed the view that Indians constantly had to work harder to gain admission to tertiary institutions and jobs. All the women agreed that social conditions had changed with fewer restrictions on gender, and attributed these to lobby groups and policy changes for the advancement of women. They acknowledged the role played by the present government.

(ii)   Educational Barriers

Subject choice was a major factor that encouraged the women interviewed to pursue non-traditional careers. All the women had taken mathematics as one of their subjects and five had taken physical science as well. Science and technological fields have mathematics and physical science as admission requirements and are dominated by men. The literature reviewed, has clearly documented the problems associated with females taking these subjects at school and the limited numbers of women in the fields of science and technology in all countries. This in not just a South African problem. The type of school attended, rural or urban did not significantly affect choices, but one has to take into account the very limited sample and generalizations cannot be made from this finding. The educational level of the mothers, as expected,

limited the careers they were able to pursue, but did not impact on the career paths of their daughters. All the mothers interviewed were supportive of their daughters and wanted to ensure that their daughters utilized all the opportunities that had been previously denied to them.

(iii)   Personal Barriers

The daughters, in non-traditional careers, did not regard personal life styles or goals as barriers to choice. Long term goals like marriage, and motherhood did not affect their choices. They acknowledged that problems may arise but were confident that they would be able to cope with these. All the women interviewed expressed the view that men in their lives would have to share the responsibilities of children and running a home and that they would not sacrifice their careers for these responsibilities. A very clear message from these young women was that personal development and self-actualization was a priority in their lives. The hydrologist, who has recently had a baby, and a promotion that involves relocation to Durban, expected her husband to take care of the baby and relocate if need be, because he was self-employed and had more flexibility. Her husband did not have serious problems with this expectation and was entirely supportive of his wife. Cultural status was not a factor, African and Indian women equally, came from conservative male-dominated cultures and equally, rejected the traditional roles ascribed to them. Only one of the Indian women expressed some concern about her daughter having a family but this was not linked to the fact that she was in a male-dominated career.

African mothers were confident that their daughters would be able to manage their lives very well and accept any challenge thrown to them. They rejected any domination by men in either their lives or the lives of their daughters. The mothers, who were brought up in far more traditional homes than their daughters, reflected as liberated a view as their daughters. The interviews reflect the views of a limited sample of women and cannot be generalized as the views of African and Indian women in the country, but they are representative of a section of the population and do reflect current thinking of women as reported in the media and elsewhere.

Chapter Seven concludes this study. In the final chapter the findings are summarized, limitations of the study discussed, and recommendations made for future research. Throughout the report reference has been made to the purpose of the study and the critical questions that guided the research. The concluding comments are a condensed summary of all the discussion that has already taken place. In order to maintain consistency the purpose of the study will be reiterated and the critical questions answered in an integrated discussion of all the findings.

CHAPTER SEVEN

CONCLUSION:
SUMMARY OF FINDINGS; LIMITATIONS OF STUDY AND
RECOMMENDATIONS

This study was both a survey and a qualitative analysis of interviews to ascertain perceptions and choices of occupations of South African women. A survey, as reported in Chapter One, is an attempt to collect data from members of a population in order to determine the current status of that population with respect to one or more variables (Gay, 1987; Huysamen, 1994). The process of determining "the current status of that population" has involved an assessment of various types of information; attitudes, opinions, characteristics, and demographic data. Interviews conducted with older women allowed for more in-depth probing and discussion and complemented the descriptive analysis. The task has been completed! There are limitations though, and these will be discussed.

The topic "Occupational Choices of Women In South Africa" could have been researched in a variety of ways, some far superior to the methodology used in this study. The decision to marry a descriptive, scientific investigation and a more flexible qualitative analysis has resulted in a report that attempts a fine balancing act. As the research progressed, a strong need developed to ensure that the voices of three generations of women were heard. Direct quotations have been used to this end. There is likely to be some confusion in reporting style and in the discussion as all the threads of the research are pulled together.

The survey questionnaires and the semi-structured interviews together, provided the answers to the critical questions. The quantitative analysis of the survey, and qualitative analysis of the open-ended questions in the questionnaire and the interviews, provided information on attitudes to occupations of three generations of women. An attitude scale, developed specifically for this research, allowed for group comparisons. Characteristics of the women researched, and their opinions on opportunities and barriers to occupational choices, were obtained by the interviews

and comments in the questionnaire. The demographic information was compiled from family profiles of 390 learners who answered the questionnaire, and twelve women who were interviewed. The detailed analysis of occupations and educational level of family members was used to ascertain the socio-economic status of the family, as many of the learners did not know the family income. Reference has been made to the purpose of the study and the critical questions throughout the report. In this chapter, a general summary of the findings, limitations of the study and recommendations for further research will be discussed.

The purpose of this study was to determine the reasons for women's perceptions and choices of different categories of occupations. The critical questions that guided this research helped achieve the purpose of the study with some limitations. Each question will be discussed with data integrated from the survey and from the interviews.

7.1 Critical Questions

7.1.1 What are women's perceptions of the different occupational categories (traditional and non-traditional)?

The data from the survey and the interviews provided clear indicators and trends of women's perceptions of different categories of occupations over a period of approximately fifty years. Older women in the sample understood the social and political constraints of entering male-dominated occupations, but did not question the ability of women to succeed in any profession they chose. The majority of females in the sample did not categorize occupations according to gender. The sample of mothers however, is too small to generalize these findings to other settings and populations. It is likely that a sample of African mothers from a rural area will have different perceptions of the suitability of occupations for women. The daughters who were employed in non-traditional occupations, some of whom were from farm schools or rural areas, had a strong sense of empowerment. They admitted to facing barriers at work, but did not see these barriers as insurmountable. They did not believe that occupations should be categorized according to gender. African women in the sample had a positive attitude about the changes in the country and were not deterred by

cultural constraints or gender discrimination. There was a clear view that the new government had swept aside barriers, and opportunities were open to those who made the effort. Younger African women in the sample, more specifically the learners at school, had more traditional views than their Indian counterparts and the African mothers and daughters. This is likely to be the case because of the small size of the sample of older women, and the fact that they were already a select group having broken traditional barriers.

There were racial differences in the categorization of occupations. The occupations that indicated a significant difference between races revealed a more traditional response in all instances from African learners. The scores on the <u>Occupational Attitude Scale</u> confirmed this trend as African learners obtained a significantly higher traditional score than Indian learners. The younger African women in the sample came from lower socio-economic backgrounds, had less exposure to the media and limited vocational guidance. Schools that were located in lower socio-economic environments tended to have more conservative learners across race groups. Hackett and Byars (1996) suggest that the early gender-role socialization of Afro-American women is less sex-role stereotyped than their White counterparts because the harsh economic realities of their existence demand that everyone in the family do whatever it takes to survive. Results of this survey do not support this view for African women in the country. A more representative sample of African women may reveal different findings. African female learners in schools appear to have numerous problems. Anecdotal evidence suggests that there is a high incidence of teenage pregnancy, poverty, minimal family support and subsequently a low rate of school attendance. Many of the learners are likely to be more concerned with survival and obtaining an education in the hope that it would lead to a job when they leave school, than choices of occupations. In the open-ended questions in the survey questionnaire, many expressed the desire to have a "nice job" and leave the dangerous and dirty work to men. Despite the more conservative views, both African and Indian female learners do not categorize suitability of occupations in terms of gender.

Grade 11 learners categorized only three of twenty occupations as suitable for men only: builder, priest and bus driver. Only the occupation of builder had a high percentage (67.4%) of respondents who regarded it clearly as unsuitable for women.

The quantity surveyor interviewed, also indicated that there were very few women in construction. The harsh work conditions and physical stamina required in construction work were cited as reasons why this occupation was unsuitable for women. The occupations of priest and bus driver were regarded as suitable for men only by a small majority of the respondents. None of the occupations were regarded as suitable for women only, not even nursing even though it had the highest percentage (32%) of the occupations categorized as suitable for women. Nursing, which has been regarded as an occupation traditionally reserved for women, was categorized as suitable for both genders by 67.7% of the learners. Male learners may have clearly different views! The results indicate that the perceptions of traditional and non-traditional occupations were not based on gender stereotyping. The majority of women in the sample had high self-efficacy expectations, except for some who had concerns about science and mathematics-related occupations. Research evidence supports this view as a number of studies have refuted Gottfredson's (1981) theory that sex-typing views influence occupational choices.

This study did not specifically research social cognitive theory and therefore conclusions cannot be drawn about the relevance of this theory to the South African context. The results of the research point to a strong sense of self-efficacy of women in the country. This may be a result of concerted efforts by the government and women's organizations to empower women, and hence verbal persuasion and vicarious learning may have been more influential than personal performance accomplishments and emotional arousal. There is a decided need to conduct further research in this area.

7.1.2 Why do women choose particular occupational categories and not others?

The reasons for the choice of particular categories of occupations were probed in the open-ended questions in the survey questionnaire, and in the interviews. A detailed analysis of the reasons can be referred to in Chapter Five and in Chapter Six. Women in the sample, selected occupations for women, on the basis of suitable work conditions i.e. safe, less strenuous and physically demanding, and less stressful, not on the basis of ability or competence to do the job. The majority of women were of the view, that anything a man could do, a woman could do equally well if she wanted to,

and it was only a matter of personal preference. The personal choices of learners indicate that interest was more important than any other factor in selecting occupations. Hesketh, Durant and Pryor (1990) found that interests were more important than prestige, which was more important than sex-type, in their research on Gottfredson's (1981) theory. Similar results led Swanson (1992) to suggest that this theory should be revised because there is no clear evidence of gender-role stereotyping.

Interviews conducted with women working in non-traditional occupations revealed that chance was a major factor in their choices. A number started with more traditional choices, but drifted into their present occupations because of opportunities opening up. Some opted for second choice because they were not able to obtain admission for their first choice of occupation. With the exception of one woman, the rest were happy in their occupations and had no desire for change. All the women in the sample had taken science and mathematics at school and were confident about their ability to manage technical or computational aspects of their jobs. Choice of school subjects seemed to be a deciding factor in actual choice of occupations. A major concern in the country at present is the low pass rate of African learners in mathematics and science and concerted efforts are being made to address this problem. De Bruin (1999) suggests that low self-efficacy expectations of African learners can be attributed to a lack of resources and trained teachers in many public schools. Chipman, Krantz, and Silver (1992); Lips (1992) and Mau, Domick and Ellsworth (1995) confirm the importance of a mathematics/science orientation in selecting occupations. The present study is limited to an assessment of the current status of women's perceptions and choices and lacks in-depth probing into issues like the self-efficacy expectations of women for science-related occupations. The general sense of empowerment that women in the sample indicated suggests strong efficacy beliefs, but the source or reasons for such beliefs is not clear. This is yet another area of research that has to be explored before any conclusions can be drawn about women's occupational perceptions and choices.

7.1.3 To what extent do women's occupational choices correspond with their racial class or cultural status?

There was evidence of an interaction between race, class and choice. African learners were more traditional in their choices than Indian learners. The significant difference between races in the categorization of occupations and the scores on the <u>Occupational Attitude Scale</u> confirms this. The older African women were less traditional in their choices and perceptions than the younger women at school. The socio-economic level of the learners suggests that class is a factor. The older women were from a middle income group, however the small sample size does not allow for generalizations. An investigation of the perceptions and choices of higher income African learners in private or former model C schools will be a clearer indication of class differences. The effect of social class on aspirations of Afro-American females was researched by Mickelson (1990) and Ogbu (1991) who found middle class females had higher aspirations than lower class females. The complexity of South African society, with issues of race, class, mobility, diversity, political and social transformation does not allow for easy generalizations. Extensive research across all race groups has to be conducted before a clearer picture emerges of the women in the country.

7.1.4 What are the social, educational and personal barriers that affect women in their choice of occupations?

The survey questionnaire (D:2:4) provided a closed list of 10 problems learners were likely to face, and they were requested to indicate possible barriers. An open-ended question also invited other concerns not listed. The most likely barrier mentioned was financial, with admission requirements and course work problems following in order of importance. A relatively small number of Indian learners indicated affirmative action, which favours Africans, as a likely barrier to their progress. A detailed discussion of the barriers experienced by the women who were interviewed can be found in Chapter Six. The social, educational and personal barriers women experience cannot be divorced from the problems that all aspirant students and workers face in preparing for and entering an occupation. Disadvantaged students, in particular African students, have easier access to education and training than in the past, but problems of finance lead to situations of turmoil in tertiary institutions. The

real barriers to progress at present can be located in the process of transformation that the country is embarking on. On the one hand, it has opened up opportunities for females but also limited access in general, by its policies and management of the economy and structures. The high unemployment rate, mismanagement of education at both secondary and tertiary level, inability to attract investment, rigid labour market legislation and reduction of funding of tertiary institutions, are some of the problems that impact on all workers and learners in the country.

7.2 Limitations

A limitation of this study is the under representation of African female Grade 11 learners. The schools were randomly selected using a process of cluster sampling and were confined to former Indian schools, which had a mix of African and Indian learners. The sample reflects the demographics of that population; the percentage of African pupils in schools surveyed ranged from 40% to 80%, but many African females drop out of school by the time they reach Grade 11 and have a lower representation in most schools. The pilot study had an equal representation of African and Indian female learners and the results were similar. This suggests that in spite of the lower representation of African learners in the main study, the results can be regarded as representative of learners in the type of schools surveyed. A sample of African female learners from the full range of schools, i.e. private, ex-model C, township and rural areas will reflect a truer representation of the perceptions and occupational choices of African women in this country. Another limitation of this research is the omission of Coloured and White women. Cross-cultural comparisons would have provided a clearer picture of how women differ in the way they perceive and choose occupations. A further limitation is that the sample selected came from the middle and lower income groups; it would have been more representative if the higher income groups were also included.

7.3   Recommendations

The research into perceptions of traditional and non-traditional occupations should include a sample of males. This will allow for comparisons across gender and race. It will also help to inform males about their own gender biases and will open up opportunities for them in "traditional" female occupations. This is also a way of

addressing the "male mandate" that often poses problems and barriers for women who move into male-dominated environments.

Results of this study confirm the view that perceptions of what constitutes "traditional" and "non-traditional" occupations are subject to time; occupations, like medicine and law that were once regarded as the domain of men only, are accepted as traditional occupations for women today. Perceptions of traditionality are linked to perceptions of suitability of occupations for each gender and cannot be categorized in terms of percentage of same gender members only. Further research is recommended to investigate how occupations are categorized over a period of time.

The importance of cultural and social norms that affect perceptions of suitability of occupations, is another area of research. It is clear that there is no standard list that can be drawn up to categorize occupations in terms of traditional and non-traditional occupations for either gender. Career guidance programmes and career counselling for women should be ongoing to avoid the type of situation that confronts the United Kingdom. Woolf (2000), in an article in the Sunday Times, reports on assertiveness training programmes for teenage girls in the United Kingdom to help them resist pressure to go into "female" occupations like beauty and child care industries, despite the fact that their performance at school is better than their male counter-parts. The women in this study revealed strong self-efficacy beliefs; this sense of empowerment can only be sustained if effective career counselling is offered at secondary and tertiary institutions.

A recurring theme in this study was "anything a man can do, a woman can do, and often better ". This may reflect the focus on women in the country by the government as part of its broader policy to affirm the previously disadvantaged and may not be sustainable. Extensive research should be conducted with female learners in the country to probe problems associated with power relations between the genders. The incidence of rape, violence and intimidation experienced by young women suggests that the reality may be different and women are not as empowered as one is led to believe.

Researchers in the country constantly emphasize the need for more research in all aspects of career development and career choice. Until a substantial database is developed, research studies will have a narrow focus. The constant reference to research and theoretical frameworks relevant to other countries allows for comparisons and provides a yardstick, but does not substitute for research conducted in this country. The South African context is complicated by the past, the present transition and visions for the future. Affirmative action policies based on race and gender also add to the complexity. This study provides an important glimmer of how women perceive and choose occupations, but the full picture has yet to emerge.

A Personal Conclusion

My research report started on a personal note and I would like to conclude with a personal comment. The courage and endeavour of many of the older women, who have persisted in pursuing their occupations in spite of many barriers is often taken for granted. Many of these women have combined their professional responsibilities with their roles of mothers and wives successfully over the years. A number of these women do not feature in my research. There are still many untold stories! Communicating with the women in my country has been an exciting and rewarding experience. The undertaking of this research has been a personal mission and accomplishment for me.

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APPENDICES

| | Questionnaire on Occupational Choice | |

Thank you for responding to this questionnaire. The purpose of this survey is to determine your views on the suitability of different occupations for women and your reasons for these views. Information from this survey will be used to plan career guidance and counselling programmes for women. Biographical details will be used for the purposes of research across cultures.

Biographical Details:
Age: _20_
Race: _AFRICAN_
Home Language: _Zulu_

Academic Details:
Std: _9_
Subjects Taken: _ENGLISH, AFRIKAANS_
HOME ECONOMICS, BIOLOGY
GEOGRAPHY, TYPING

Family Details:
Indicate age and occupation of family members. In the case of a guardian indicate M (male) or F (female).

	Age:	Occupation:
Father:		
Mother:	36	FRAME GROUP
Guardian:		
Brothers:		
1		
2		
3		
4		
Sisters:		
1	20	STUDY
2	20	N/A
3	22	N/A
4	24	RESTAURANT

Occupational Choices

Section A

Consider the list of 20 occupations provided. For each occupation indicate whether you consider the occupation suitable for women; suitable for men; suitable for both women and men. Indicate your choice by ticking the column describing your choice and briefly indicate your reasons.

Consider each occupation separately. Tick the appropriate column. Provide reasons for your choice.

This occupation is suitable for:

	Men	Women	Men & Women	Reasons For Choice

Occupation:

		Men	Women	Men & Women	Reasons For Choice
1	Security Guard	MEN			CAUSE MEN CUT A POWER
2	Dentist			MEN & WOMEN	IT SWEETABLE FOR BOTH OF THE
3	Butcher			✓	SWEETABLE FOR BOTH
4	Engineer	✓			BECAUSE MEN HAVE A POWER
5	Nurse			✓	FOR BOTH
6	Builder	✓			FOR MEN
7	Social Worker		✓		FOR WOMEN
8	Airplane Pilot			✓	SWEETABLE FOR BOTH
9	Secretary			✓	FOR BOTH
10	Lawyer			✓	
11	Mechanic	✓			
12	Police officer			✓	
13	Priest	✓			
14	Medical Doctor			✓	
15	Firefighter	✓			
16	Clerk			✓	
17	Politician			✓	
18	Bus Driver	✓			
19	Architect	✓			
20	Electrician			✓	

Section B
List any three occupations you would like to follow, in order of importance. These do not have to be on the list.

1. ACTOR
2. RADIO PRESENTER
3. T-V PRESENTER

Section C

What problems will you experience in pursuing the occupation of your choice? Put a tick next to those that apply to you.

		( )
1	My father does not approve of my choice.	( )
2	My mother does not approve of my choice.	(✓)
3	Too few women in this occupation who be can role models.	( )
4	I am worried about working with men who may not approve of me.	( )
5	The work is physically demanding or dangerous.	( )
6	There are few opportunities for women to obtain employment.	( )
7	Admission requirements are too difficult to meet.	( )
8	I may not manage the course work, especially science subjects	( )
9	My home and family life will suffer because work demands.	(✓)
10	I have financial problems.	( )

Mention any others:

Frequency Table of Occupational Choices of Indian & African Female Pupils

Separate Groups of Pupils							Comined		
	Ind	Afric	Ind	Afric	Ind	Afric			
Total No.	15	15	15	15	15	15	30	30	30
Occupations Suitable for:	Men	Men	Won	Won	Both	Both	Men	Won	Both
Sec. guard	11	15	0	0	4	0	26	0	4
Dentist	0	2	0	0	15	13	2	0	28
Butcher	7	4	0	0	8	11	2	0	19
Engineer	7	6	0	1	8	6	13	1	14
Nurse	0	1	6	10	8	4	1	16	12
Builder	13	11	0	2	2	2	24	2	4
So.cial Wk	0	1	8	5	7	9	1	13	16
Pilot	3	9	0	1	10	5	12	1	15
Secretary	0	1	4	10	9	1	1	9	19
Lawyer	1	2	0	1	13	10	3	1	23
Mechanic	14	9	0	1	1	5	23	1	6
Police	1	2	0	1	14	12	3	1	26
Priest	10	8	1	2	4	5	18	3	9
Doctor	0	2	0	1	14	10	2	1	24
Firefighter	14	12	0	2	1	1	26	2	2
Clerk	1	1	0	1	14	11	2	1	25
Politician	1	1	0	3	14	8	2	3	22
Bus Driver	7	10	1	2	1	7	17	3	8
Architect	2	9	0	1	11	4	11	1	15
Electrician	8	9	0	4	7	2	17	4	9

Frequency Table As Percentages Indicating Occupational Choices

Separate Groups of Female Pupils:							Combined		
	Ind	Afric	Ind	Afric	Ind	Afric			
Total No:	15	15	15	15	15	15	30	30	30
Occupations Suitable for:	Men	Men	Wom	Wom	Both	Both	Men	Wom	Both
Percentage	0%	0%	0%	0%	0%	0%	0%	0%	0%
Sec. guard	73	100	0	0	27	0	87	0	13
Dentist	0	13	0	0	100	87	13	0	93
Butcher	46	31	0	0	53	73	13	0	63
Engineer	46	40	0	7	53	40	43	3	47
Nurse	0	7	40	66	53	27	3	53	40
Builder	86	73	0	13	13	13	80	7	13
So.cial Wk	0	7	53	33	46	60	3	43	53
Pilot	20	60	0	7	66	33	40	3	50
Secretary	0	7	27	33	66	60	3	30	63
Lawyer	7	13	0	7	86	66	10	3	77
Mechanic	93	60	0	7	7	33	77	3	20
Police	7	13	0	7	93	80	10	3	87
Priest	66	56	7	13	31	33	60	10	30
Doctor	0	13	0	7	93	66	7	3	80
Firefighter	93	80	0	13	7	7	86	7	7
Clerk	7	7	0	7	93	73	7	3	83
Politician	7	7	0	20	93	53	7	10	73
Bus Driver	46	66	7	13	7	46	57	10	27
Architect	13	60	0	17	73	27	31	3	50
Electrician	53	60	0	31	46	13	57	13	9

SURVEY ON OCCUPATIONAL CHOICES

THE PURPOSE OF THIS SURVEY IS TO DETERMINE YOUR VIEWS ON THE SUITABILITY OF DIFFERENT OCCUPATIONS FOR WOMEN AND YOUR REASONS FOR THESE VIEWS. OVER THE YEARS OCCUPATIONS THAT HAVE BEEN REGARDED AS SUITABLE FOR WOMEN HAVE BEEN CONSIDERED "TRADITIONAL" OCCUPATIONS FOR WOMEN AND THOSE REGARDED AS UNSUITABLE AS "NON-TRADITIONAL" OCCUPATIONS FOR WOMEN. BIOGRAPHICAL DETAILS WILL BE USED SOLELY FOR THE PURPOSE OF THIS RESEARCH AND INFORMATION FROM THIS SURVEY WILL BE USED TO PLAN CAREER GUIDANCE AND COUNSELLING PROGRAMMES FOR WOMEN.

PLEASE [✓ or ✗] APPROPRIATE ☐ BOXES WHERE APPLICABLE

A. BIOGRAPHICAL DETAILS

1. Name: _____

2. Age: (Please tick [✓] the appropriate box
    ₁☐ 14yrs   ₂☐ 15yrs   ₃☐ 16yrs   ₄☐ 17yrs
    ₅☐ 18yrs   ₆☐ 19yrs   ₇☐ 20yrs   ₈☐ 21yrs
    ₉☐ 22yrs and over

3. What is your First Language
    ₁☐ English   ₂☐ isiZulu   ₃☐ isiXhosa   ₄☐ seSotho
    ₅☐ Other (Specify): _____

B. ACADEMIC DETAILS

4. Tick the subjects you are studying this year.

SUBJECT	English	Afrikaans	IsiZulu	Maths	Biology
TICK					
	1	2	3	4	5
SUBJECT	Physics	History	Geography	Home Econ.	Computers
TICK					
	6	7	8	9	10
SUBJECT	Art	Drama	Other		
TICK					
	11	12	13		

C. FAMILY DETAILS

5. Whom do you live with:
    ₁☐ Both parents   ₂☐ Mother   ₃☐ Father   ₄☐ Guardian

6. Please indicate approximate family income per month. If you are uncertain indicate how much money you think the family on the whole has available to spend per month.
    ₁☐ less R500   ₂☐ R500 - R1499   ₃☐ R1500-R2999   ₄☐ R3000-R4999
    ₅☐ R5000-R6999   ₆☐ R7000-R8999   ₇☐ R9000 +

6.1. MOTHER'S PROFILE:

6.1.1 Mother's Age:_____

6.1.2 Mother's Occupation:_____

6.1.3 Mother's Educational Level: Tick [✓] the appropriate box.

1☐ No Schooling   2☐ Primary   3☐ Secondary   4☐ Matric
5☐ College   6☐ Technikon   7☐ University

6.2. FATHER'S PROFILE

6.2.1. Age:_____

6.2.2. Occupation:_____

6.2.3. Father's Educational Level: Tick [✓] the appropriate box.

1☐ No Schooling   2☐ Primary   3☐ Secondary   4☐ Matric
5☐ College   6☐ Technikon   7☐ University

6.3. GUARDIAN'S PROFILE

6.3.1.   Age:_____

6.3.2.   Occupation: _____

6.3.3.   Guardian's Educational Level: Tick [✓] the appropriate box.

1☐ No Schooling   2☐ Primary   3☐ Secondary   4☐ Matric
5☐ College   6☐ Technikon   7☐ University

7.   SIBLINGS

Please indicate the highest educational level, age and occupations of your siblings. You do not have to mention their names, use the numbers to indicate eldest to youngest. Add more numbers if necessary

7.1   SISTERS

7.1.1   Indicate educational level of your sisters by ticking in the appropriate box.

	EDUCATIONAL LEVEL	SISTERS					
		1	2	3	4	5	6
1	No Schooling						
2	Primary						
3	Secondary						
4	College						
5	Technician						
6	University						
7	Other						

7.1.2   Indicate age and occupations of your sisters.

Sisters	Age	Occupation
1.		
2.		
3.		
4.		
5.		

Sisters	Age	Occupation
6.		
7.		
8.		
9.		
10.		

7.2 Brothers

7.2.1 Indicate educational level of your brothers by ticking in the appropriate box.

	EDUCATIONAL LEVEL	Brothers					
		1	2	3	4	5	6
1	No Schooling						
2	Primary						
3	Secondary						
4	College						
5	Technician						
6	University						
7	Other						

7.3 Indicate age and occupations of your brothers.

Brothers	Age	Occupation
1.		
2.		
3.		
4.		
5.		

Brothers	Age	Occupation
6.		
7.		
8.		
9.		
10.		

D. SUITABILITY OF OCCUPATIONS

8. Consider the list of 20 occupations carefully. For each occupation indicate whether you consider the occupation **suitable for women only**, **suitable for men only**, or **suitable for both women and men**. Indicate your choice by ticking the column describing your choice. Each occupation should have 1 tick only.

	OCCUPATIONS	MEN ONLY	WOMEN ONLY	MEN & WOMEN
1	Security Guard			
2	Dentist			
3	Butcher			
4	Engineer			
5	Nurse			
6	Builder			
7	Social Worker			
8	Airline Pilot			
9	Secretary			
10	Lawyer			
11	Mechanic			
12	Police Officer			
13	Priest			
14	Cook			
15	Firefighter			
16	Primary School Teacher			
17	Politician			
18	Bus Driver			
19	Architect			
20	Electrician			

8.1. Reasons for choices of occupations

Indicate your reasons in general, and mention any occupations for which you have particular reasons for your choice.

8.1.1. What are your reasons for choosing the occupations you have indicated as suitable for __MEN__ only?

_____

_____

_____

_____

8.1.2. What are your reasons for indicating some of the occupations as suitable for __WOMEN__ only?

_____

_____

8.1.3. What are you reasons for choosing the occupations you have indicated as suitable for __MEN__ and __WOMEN__?

_____

_____

_____

9. Personal Choice

Indicate one occupation you would definitely choose if you had a choice and your reasons for this choice.

9.1. The occupation I would choose is: _____

9.2. My reasons are:

_____

_____

Indicate one occupation you would definitely not choose and your reasons for not selecting this occupation.

9.3. The occupation I would definitely not choose is: _____

9.4. My reasons are:

_____

_____

9.5. What problems will you experience in pursuing the occupation of your choice? Tick those that apply to you.

1.		TICK
2.	My father does not approve of my choice	
3.	My mother does not approve of my choice	
4.	Too few women in this occupation	
5.	I am worried about working with men who may not approve of me	
6.	The work is physically demanding or dangerous	
7.	There are few opportunities for women to obtain employment	
8.	Admission requirements are too difficult to meet	
9.	I may not manage the course work, especially science subjects	
10.	My home and family life will suffer because of work demands	
11.	I have financial problems	

9.6.   Mention any other concerns you may have in pursuing the occupations of your choice?

_____

_____

E.   OCCUPATIONAL ATTITUDE SCALE

The following scale provides a list of statements. Read the statement and consider your response carefully. There are no right or wrong answers. Tick the number that you think best reflects your opinion. The numbers indicate the following responses:

① = Strongly Agree   ② = Agree   ③ = Neutral (Neither Agree nor Disagree)
④ = Disagree   ⑤ = Strongly Disagree

Tick only one number in every row.

		Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1	Occupations that require strenuous physical work are not suitable for women	①	②	③	④	⑤
2	Occupations that involve helping people are only suitable for women	①	②	③	④	⑤
3	Occupations that demand time away from family are not suitable for women	①	②	③	④	⑤
4	Occupations that require strong leadership roles are not suitable for women	①	②	③	④	⑤
5	Occupations dominated by men are not suitable for women	①	②	③	④	⑤
6	Occupations that do not require maths and science are suitable for women	①	②	③	④	⑤
7	Occupations that have many female roles models are suitable for women	①	②	③	④	⑤
8	Occupations that do not interfere with the traditional role of wife and mother are suitable for women	①	②	③	④	⑤
9	Occupations that are technical or scientific are not suitable for women	①	②	③	④	⑤

Thank you!   Z.N. UDW

APPENDIX B

1   **Original Interview Schedule for Daughters in Non-Traditional Occupations**

Name:

Occupation :

Age:

Academic Details:

Occupation of Mother:

Age of Mother:

Family Details:

1   Why did you select the career you are currently in?

2   If you had a choice will you change your career?

3   Do you consider that some career should be only for men ?

4   Do women have a large enough range of career options?

5   What are some of the barriers women experience in pursuing their careers?

6   Has race or culture played a part in your career choice?

7   Do your parents approve your choice of career?

8   What problems are you experiencing in your male-dominated career?

Additional Information:

Comments:

2   Original Interview Schedule for Mothers in Traditional Occupations

Name:

Occupation :

Age:

Academic Details:

Occupation of Daughter:

Age of Daughter:

Family Details:

1   Why did you select the career you are currently in?

2   If you had a choice will you change your career?

3   Do you consider that some career should be only for men ?

4   Do women have a large enough range of career options?

5   What are some of the barriers women experience in pursuing their careers?

6   Has race or culture played a part in your career choice?

7   Do you approve of your daughter's choice of career?

8   What problems do you think she will experience in her male-dominated
        career?

Additional Information:

Comments:

Pilot Test Interviews

Transcript of Interview with Daughter

Name: NG

Occupation : Ecologist

Age: 21

Academic Details: Completed matriculation exams at Kharwastan Secondary School. Completed a Bachelor of Science & Honours Degree at the University of Natal and is currently working on her Masters Degree.

Occupation of Mother: Nurse

Age: 44

Family: Younger sister is 18 years old and at school. Father is a foreman at a shoe factory.

Transcript of Responses:

1   **Why did you select the career you are currently in?**

I wanted to do medicine but my matriculation results were not good enough. I decided to do Bachelor of Science at UND. In my second year I selected Environmental Biology instead of Cell Biology and became interested in conservation. I would really like to work in a game reserve as a researcher. Currently, I am a research assistant and working towards my Masters Degree in Environmental Biology.

2   **If you had a choice will you change your career?**

No, I wanted to do medicine originally but no longer feel the need to change my career. I find my field of work exciting and challenging.

3   **Do you consider that some career should be only for men?**

No, women can do anything they set their minds on. They will struggle with some tasks but they will cope. I was always terrified of snakes and crawly things but had to overcome this. I am researching spiders and go out on field trips.

4   Do women have a large enough range of career options?

No, they do not have sufficient exposure to the many careers available. Somehow men still have a larger range of options. There are gender differences when it comes to what women can do.

5   What are some of the barriers women experience in pursuing their careers?

You have to prove yourself time and time again. You are not taken seriously. If go out on field trips, a real problem is toilets

6   Has race or culture played a part in your career choice?

My family find it strange that I want to work as an ecologist, they do not disapprove, only consider it unusual.

7   Do your parents approve your choice of career?

Yes, they want whatever makes me happy.

8   What problems are you experiencing in your male-dominated career?

In my field of work there is some resistance from guards to taking orders from a women. There is a lot of gender-role stereotyping of what women do. This is likely to affect my advancement.

Interview with mother, MG.

Name: MG

Occupation : Nurse

Age: 44

Academic Details: Matriculation. Diploma in Nursing

Occupation of Daughter: Ecologist

Age of Daughter: 21

Family Details: Older brother, parents were poor, working class people.

1   Why did you select the career you are currently in ?

I became a nurse because of financial reasons. I wanted to study medicine but we were too poor. Nursing was the next option because I could earn a salary and study at the same time.

2   If you had a choice will you change your career ?

No.

3   Do you consider that some careers should be only for men?

No, women should be given the same opportunities as men.

4   Do women have a large enough range of career options?

No, there are still problems that women face when they want to select careers. They have more restrictions.

5   What are some of the barriers women experience in pursuing their career?

They have to contend with men who feel superior.

6   Has race or culture played a part in your choice of career?

Yes, my parents approved but my brother objected very strongly. He felt that as a conservative Indian female, nursing, especially at the R. K. Khan Hospital was out of the question. Nurses had the reputation of being of low morals. He expected that I would run around with men, have no control because of the freedom of living on my own.

7   Do you approve of your daughter's choice of career?

As long as she is happy, I approve of her choice.

8   What problems do you think she will experience in her male-dominated career?

The trips that she has to make out in the bush are difficult, contending with all the animals out there is also a problem.

Additional Information: None

Comments: Biographical data not easily obtained once interview commenced.
Should have more flexible approach to questions, somewhat rigid.

Adjusted Interview Schedules

The questions in the interviews were changed to replace the term "occupation" with term "career".

Adjusted Interview Schedule for Daughters

Name:

Occupation :

Age:

Academic Details:

Occupation of Mother:

Age of Mother:

Family Details:

1   Why did you select the occupation you are currently in?

2   If you had a choice will you change your occupation?

3   Do you consider that some occupations should be for men only?

4   Do women have a large enough range of options?

6   What are some of the barriers women experience in pursuing their occupations?

7   Has race or culture played a part in your choice of occupation?

8   Do you approve of your daughter's choice of occupation?

8   What problems do you think she will experience in her male-dominated occupation?

Additional Information:

Comments:

Adjusted Interview Schedule for Mothers

Name:

Occupation :

Age:

Academic Details:

Occupation of Mother:

Age of Mother:

Family Details:

1   Why did you select the occupation you are currently in?

2   If you had a choice will you change your occupation?

3   Do you consider that some occupations should be for men only?

4   Do women have a large enough range of options?

5   What are some of the barriers women experience in pursuing their occupations?

6   Has race or culture played a part in your choice of occupation?

7   Do you approve of your daughter's choice of occupation?

8   What problems do you think she will experience in her male-dominated occupation?

Additional Information:

Comments