

THE PERCEPTIONS OF GRADE ELEVEN PUPILS WITH
REGARDS TO CAREER CHOICE AND CAREER
INFORMATION

BY



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DECLARATION

I hereby certify that this research is the result of my own investigation and that it is not being submitted concurrently in candidature for any other degree.

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ABSTRACT

This study focuses on the exploration and analysis of Grade Elevens' perceptions of career choice and career information, within the Coastal region of the Durban Metropolitan area. The information about the scholars' perceptions was obtained through a structured questionnaire, with one hundred and twenty pupils who were purposively sampled from a simple random sample of public schools in the Coastal region of the Durban Metropolitan area. Both open-ended and closed-ended questions were used to gain access to their perceptions regarding career choice and career information.

Tentative findings suggest that scholars generally have a narrow and simplistic conceptualisation of the term 'career', and that their understanding of the term as a life-long job is inaccurate and distorted. Consequently, teachers may need to help scholars re-conceptualise their notion of the career as a dynamic entity that is shaped by current economic, political, social and technological changes. It was also found that the majority of scholars have made a tentative career choice, which suggests the establishment of a personal, career-related identity.

The findings indicate that scholars perceive the career information to which they have been exposed to be useful overall, in addition to being useful regarding its role in encouraging them to consider all possible careers, regardless of gender or culture. These findings, which contradict those of international research, seem to suggest that, in keeping with the current emphasis on national democracy in South Africa, scholars have been urged not to perceive their gender or culture as a barrier that would prevent them from pursuing their career of choice. However, cross-tabulations reveal that it is mainly girls who perceive the exploration of careers and career information in a positive light, while boys tend to hold a comparatively negative view. Girls also seemed to adopt more effective decision-making approaches in the process of choosing a career, compared to boys. Suggested interventions include greater accessibility to varied, possibly interactive forms of career information; for example, computer-aided career exploration, and that boys be encouraged to consult a wider range of career information sources.

Although scholars have been formally exposed to career guidance, tentative findings reveal a need for a more holistic and informal approach to career choice and career information; one that is well integrated within the school curriculum. This would require that all teaching staff

function as a team and develop role and functional flexibility, in order to help scholars adapt to changes in the learning environment, and to develop broad and integrated learning frameworks. Importantly, scholars are urged to take a pro-active role in their career exploration.

Statistical analysis indicates that girls' career choices are generally unrestricted by gender-role stereotypes, suggesting a growing interest in careers previously perceived to be male-typed, although emphasis must be placed on the importance of making realistic choices. Furthermore, cross-tabulations reveal that race and career choice are not related, thereby reinforcing the validity of earlier tentative findings, which point to the existence of generally positive perceptions of career information, with regards to its usefulness in encouraging scholars to consider a full range of careers, regardless of culture or race.

Further research into scholars' perceptions of career choice and career information through focus groups, with an emphasis on the changing career aspirations of girls, may serve to facilitate a deeper understanding of the issues and perceptions that either hinder or help scholars in the process of career choice. A thorough understanding of their perceptions and the factors that shape them is necessary in order to spearhead the development of educational programmes and workshops, the aim of which would be to ensure the holistic integration of these insights within the school curriculum. The rationale underpinning further research within this field, is that once scholars become aware of their distorted perceptions of career choice and career information, they will be empowered to change them. As a result, they will be equipped to make better-informed career choices that are consistent with individual interests and abilities.

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CHAPTER 1

INTRODUCTION AND PROBLEM STATEMENT

1.1. Introduction

The aim of this study is to investigate the perceptions of Grade Eleven pupils from public schools in the Coastal region of the Durban Metropolitan area, with regards to career choice and career information. The structure of the dissertation is as follows: Chapter One is the introduction and problem statement, which centres around a discussion of the research aim, and the relevance of the topic for research. Chapter Two is the theoretical framework, which is a critical discussion of the central theories on which the rationale of the study is founded. Chapter Three is the literature review. Essentially, this chapter is a summary of the studies that have been conducted on related aspects of the topic under investigation. The research methodology is documented in Chapter Four. The chapter involves a definition and critical discussion of the research methods used, including data collection methods, sampling, and finally qualitative and quantitative data analysis.

Questionnaire results are reported and the data is presented in Chapter Five, in addition to an analysis of the results, where conclusions are drawn and the related implications for career guidance discussed. Chapter Six is a summary of the most salient aspects of the dissertation, with an emphasis on the results obtained, the methodological problems encountered, and the conclusions drawn. In the final part of this chapter, suggestions for further research are outlined.

The purpose of Chapter One is to outline the topic and the research problem underpinning it, and to explain the value of the study in the light of previously conducted research.

1.2. Background to the study

According to Daphne et al (1998), there is an acute unemployment crisis in South Africa. Employment levels are extremely low, with "total unemployment estimated at twenty nine percent. Women and youth are particularly hard hit. The majority of unemployed people (sixty-nine percent) have never worked" (Daphne et al, 1998: 18). It has been suggested that this problem is a structural one, stemming from South Africa's past apartheid economy. A number of major

historical factors are thought to have contributed to the unemployment crisis, such as the reliance on low-wage, exploited black labour, limited worker mobility, the creation of separate 'homelands', the segmentation of the workforce along racial lines, and very importantly, the "systematic underdevelopment of skills" (Daphne et al, 1998: 20).

Since the political democratisation of South Africa in 1994, public schools have become integrated to incorporate scholars of all races, thereby ensuring that all have access to a standardised level of education, and consequently similar employment opportunities. However, Olivier (1998: 352) argues that South African schools at present are doing little to alleviate the unemployment problem in South Africa. Rather, he claims that unemployment is "aggravated by the fact that the current school system fails to prepare youngsters to earn their own keep".

1.3. Rationale for the study

In the past, local and international research has to a large extent focused on the perceptions of school pupils within a single cultural or racial context. For example, the literature review reveals a focus within American research on the development of career awareness programmes that are based on the career-related perceptions of predominantly white scholars, or alternatively, the perceptions of minority groups such as Hispanic and black scholars. Within the South African context, researchers have tended to focus on the issue of career choice and career information as experienced by black pupils, in light of the challenges and problems confronting them in the context of social and political constraints (refer to Chapter Two).

The perceptions of black, Indian, white and coloured scholars toward career choice within South African schools have not been extensively researched. Furthermore, there may be a number of possible factors stemming from this integration that may have influenced, and are currently shaping scholars' perceptions of career choice, which have not been examined. Research into scholars' perceptions toward career choice and career information has been conducted internationally, with regards to the way in which motives interests, attitudes, and other factors influence scholars' perceptions toward career choice and career information. However, a review of the available literature on the topic reveals that these issues have generally not been addressed in the context of South Africa's racially integrated schools.

A pressing issue requiring urgent redress in high schools at present is scholars' conceptualisation of the term 'career'. The conceptualisation of a career as a single and stable lifelong career is no longer plausible within the context of fast-paced technological advancement and an increasing emphasis on information systems. Individuals are required to cultivate a flexible attitude through expressing a willingness to learn the new skills required in order to adapt to and meet the demands of the transforming workplace.

In view of these changes, it is necessary to address the way in which the notion of 'the career' will be conceptualised in the study, since it informs the research in a pivotal way. With this definition as a foundation, the way in which scholars perceive the notion of the term 'career' will be assessed, and inconsistencies between the two identified. Perceptions play a pivotal role in shaping attitudes and behaviour, and hence the identification of scholars' perceptions of career choice and career information may offer insight into the different behaviours, strategies and decision-making styles that scholars adopt in the process of selecting possible career paths and exploring career information.

1.4. Statement of research

The study involves an investigation into the perceptions of Grade Eleven pupils from public schools in the Coastal region of the Durban Metropolitan area with regards to career choice and career information. A quantitative approach, namely the questionnaire survey, will be used to gather the necessary data. The research process is guided by one primary research objective and seven related objectives.

1.5. Primary and secondary objectives of the study

The primary objective of the study is to investigate the perceptions of Grade Eleven pupils with regards to career choice and career information.

This central issue inspires a number of secondary, yet more specific research objectives:

*** To explore the psychological theory underpinning the subject of people's perceptions:**

An investigation into the perceptions of Grade Eleven pupils requires that the following questions be asked:

- What is the nature of the psychological theory that explains and discusses the phenomenon of perception?
- What are the factors, inherent either in the perceiver or the object being perceived, which shape the way in which people see and interpret the world?

The answers to these questions will serve to anchor the study within a sound theoretical knowledge base. Hence, the emerging data may be reliably supported and verified.

*** To explore the ways in which people's perceptions influence their behaviour:**

The researcher hopes to establish the theoretical links between perceptions and behaviour by asking the following:

- Is perception linked to behaviour? In other words, how does the way in which people see things influence the way in which they behave?
- What do the various decision-making models entail, in terms of linking perception to behaviour?

*** To define the term 'career' and to ascertain the ways in which it is conceptualised by Grade Elevens':**

To ensure the success of vocational guidance programmes, those developing and running them must share a common understanding of the term 'career'. Consequently, it is necessary to examine the notion of the career, in terms of the way in which it has changed over time and requires re-conceptualisation within the context of the changing workplace. High school pupils' understanding of the meaning of this concept must be examined to ascertain whether their understanding is consistent with current reality.

*** To establish whether or not Grade Elevens' have a made a career choice, and to explore the types of careers that they have chosen:**

Drummond and Ryan (1995) suggest that the development of a healthy self-concept in adolescence equips teenagers with the self-knowledge to formulate tentative career plans. These tentative choices lay the foundation for the development of a career identity, thereby reinforcing their confidence in their unique abilities. It has been suggested that if teenagers do not formulate tentative career plans during adolescence, their indecision may result in confusion and anxiety with regards to the nature of their future role in life. In establishing whether or not subjects have made a tentative career choice, the researcher hopes to gain insight into their progress with regards to developing a career identity, and thereby ascertains whether or not they possess knowledge of their unique skills and abilities.

The researcher also hopes to explore the variety of careers that subjects have selected for the purpose of establishing and comparing the popularity of different careers, in addition to assessing whether or not subjects' choices are consistent with gender roles.

*** To establish the ways in which Grade Elevens' perceptions of career choice and career information affect their behaviour with regards to choosing a career and accessing career information:**

In the study, adolescents' behaviour with regards to choosing a career and accessing career information is conceptualised within a constructivist perspective. According to Zunker (1998), this position suggests that people construct their own ways of organising information and that what is perceived as truth or reality depends on these self-made constructs. Research findings reveal some of the factors shown to influence scholars' perceptions toward career choice and career information. These factors include career motives, interests, attitudes, and levels of career maturity, socio-economic and political factors as well as access to career information. Hence, the researcher will investigate the perceptions of Grade Eleven pupils with these factors in mind.

Drummond and Ryan (1995) propose that different sources of and types of career information utilised within or outside the school may influence the way in which pupils' perceive and approach it. Since senior high school pupils are already forced to adapt to the physical and emotional

transitions that naturally accompany adolescence, it has been suggested that the issue of career exploration represents yet another change and is therefore perceived by many as a threat. As a consequence of these negative perceptions related to career exploration, Drummond and Ryan (1995) suggest that individuals may become overwhelmed, confused and panic-stricken at the thought of sifting through vast amounts of career information, whilst simultaneously experiencing pressure to make the right career choice.

However, this period may also stimulate personal growth and learning if career exploration is conducted in a planned and systematic manner, and if the sources and types of information used are compatible with the learning style of the individual. In the light of this information, the researcher aims to investigate the way in which scholar perceptions affect their behaviour in terms of exploring possible careers and accessing career information.

*** To establish whether the career information available to Grade Eleven's is perceived by the subjects to be useful, as well being gender and culturally sensitive:**

Guidance counsellors need to realise that if career exploration to be a valuable learning experience for pupils within integrated schools, it must be free of gender and racial stereotypes. Scholars are less likely to feel threatened by the information and are more likely to learn from it if they feel that it is personally applicable to them.

On the other hand, if scholars are exposed only to outdated career information that differentiates between male-typed careers and female-typed careers, and which suggests that certain careers are more suitable or accessible to particular cultures or racial groups, they may feel threatened by it and lose interest in their career exploration. Alternatively, career information that is free of cultural and gender stereotypes is likely to have a positive impact on scholars' perceptions of career exploration. One of the researcher's aims therefore, is to investigate whether scholars are exposed to career information that perpetuates gender-role and cultural stereotypes, or whether they are exposed to information that encourages them to consider all possible careers, regardless of their culture or race.

*** To explore the effectiveness of the schools' role in providing holistic vocational guidance:**

International theory and research has revealed a pressing need for high schools to focus on career development in general, and more specifically, to help teenagers to formulate career plans, develop job skills and job-finding skills (Zunker, 1998). In view of these findings, the researcher aims to assess the level of effectiveness of the schools in the Coastal region of the Durban Metropolitan area, with regards to their role in providing holistic vocational guidance to scholars. The effectiveness of the schools' role in this regard will be assessed through tapping scholars' perceptions and experiences of the nature and extent of career guidance.

1.6. Value of the research

The thesis aims to target Grade Eleven pupils specifically, under the presumption that at this age, the majority have either considered the issue of career choice in some depth, or have made a career choice, and hence adopted a set of perceptions relating to career choice and career information. Furthermore, as was previously mentioned, senior high school pupils' perceptions toward career choice and career information have not been addressed in integrated schools in the province of KwaZulu Natal specifically.

Perceptions have been documented to be extremely powerful in shaping peoples' behaviour, most notably in terms of determining their decision-making strategies (Robbins, 1997). Underpinned by this theoretical rationale, the research intends to tap into information about scholars' perceptions which may be of great value in providing educators with further insight into the central issues to be addressed during the planning phase of career choice programmes in multi-racial schools. For these reasons, it is believed that the aim of the study not only warrants further research, but that the research results will constitute a solid foundation to spearhead positive change in the participating schools.

This study does not claim to provide a complete evaluation of Grade Elevens' perceptions toward career choice and career information, since time and resource limitations necessitated the establishment of a narrow methodological focus. The aim of the research is to gain access to scholars' perceptions of career choice and career information specifically via short responses to a structured questionnaire. The choice of research methodology is adequate for this purpose, since it

will measure only what is consistent with the aims of the research. A more in-depth, qualitative approach, for example, obtaining greater insight into questionnaire responses through focus group discussions, could possibly constitute the methodology for the purposes of a follow-up study.

1.7. Summary

This chapter has explained the background of the study, which has inspired the problem statement, in addition to the primary and secondary research objectives. The value of the study, in terms of its contribution to the body of knowledge in the research field of career choice, was also outlined. The aim of the study is to investigate the perceptions of Grade Eleven pupils with regards to career choice and career information. This investigation will establish the nature of the different perceptions that Grade Eleven's hold toward career choice and career information through the means of a questionnaire survey. The study does not claim to provide a complete exploration of subjects' perceptions, but rather to draw out the general perceptions and attitudinal patterns that emerge from the survey.

CHAPTER 2

LITERATURE REVIEW

2.1. Introduction

The purpose of this chapter is to explore the literature and research articles related to the topic, identify the gaps not dealt with by the available literature, and thereby verify that the selected area of research is worth examining. The literature review consists of the following sections: the nature of career information texts, factors that influence career choice, and the assessment of student services and teaching facilities for the purposes of enhancing the effectiveness of career choice and access to career information.

2.2. The nature of career information texts

The majority of literature dealing with the issue of career choice is internationally written, although recently, this issue as it relates to scholars in the South African context has received considerable attention. International texts focusing on career awareness programmes for students (Turlington, 1994), and career awareness, (St. Louis Public Schools Committee, 1981), are examples of American texts written and published in conjunction with the initiatives and aims of State education departments. While these texts may be useful in terms of guiding South African educators in their attempts to maximise the effective delivery of career information in high schools, South African literature was consulted for the purposes of establishing whether the issue of career choice, within the context of the country's unique set of socio-political and economic circumstances, has been adequately addressed.

A review of the local literature available suggests that the racial integration of public schools in South Africa has prompted a surge of local publications. These publications aim specifically to provide high schools with career information, in consideration of South Africa's economic status and market demands. The practical issues involved in choosing a career, such as knowing oneself before choosing a career and applying for a job, are addressed, and underpinned by the concept that career choice is an important decision, requiring careful thought, self-knowledge and planning (Williamson, 1991). Motivational guides on education and career orientation, which aim to increase scholars' awareness of the full range of career options open to them in the mid-1990's

have also been published (I Can Training Foundation, 1994). A related objective of these texts is to equip scholars with the necessary knowledge to make good career choices.

The range of career opportunities and study courses available in South Africa, information on career planning and career choice, compulsory and recommended subjects for courses of study, and obtaining financial aid, as well as teachers' role in acquiring self-knowledge have also been addressed (Zwiegers, 1996). More recently, information about new initiatives in career counselling, the role of the subject teacher, and study methods has also been made available to South African scholars (Human, 1998).

Reference to local texts illustrates the notion that in South Africa, the responsibility for ensuring that scholars obtain sufficient career information to make informed career choices rests on the career counsellor / vocational guidance teacher as well as on the individual scholar. In addition, these texts acknowledge the importance of publicising new careers that feed current economic demands, as well as providing information about school subjects and academic requirements necessary for the pursuit of various careers. These texts provide a large amount of necessary and currently relevant career-related information that is useful to scholars and career counsellors. However, they do not address the issue of South African scholars' perceptions toward career choice, and the complexities of the decision-making processes underpinning this choice. In an attempt to shed light on this issue, it is necessary to review some of the international and local career-related research conducted in multi-racial schools.

2.3. Factors that influence career choice

The following section highlights some of the factors that researchers have found to influence career choice. These factors include: the career motives, career interests and career attitudes of scholars, as well as socio-political and economic factors. Career development, career maturity, family and biographical variables, decision-making strategies and access to career information are also discussed. Since these factors inform the perceptions of scholars in a pivotal way, they provide a useful reference point from which to understand the findings of the study.

2.3.1. Career motives

A number of international research articles focusing on the factors influencing career choice were identified. Demidenko (1990) investigated the motives underpinning Soviet Students' career choices through the means of a survey with eighth-grade students in Berdiansk, as well as upper-grade, rural and urban Crimean students. The research report distinguishes between motives and stimuli, and between personal and social motives, and suggests that student interests are the primary motivation directing career choice. Twenty-one percent of the students in the study could not give reasons for their occupational choice. An exploration of the perceptions of university education by first year entrants against the background of current career counselling at school, suggests that South African students are driven by different motives. An analysis of the responses of six hundred first-year university students to a questionnaire revealed that course and subject choices are based primarily on job opportunities, and thereafter interest and personal satisfaction. The report concluded with the recommendation that counselling be directed to student development and academic support (Behr, 1987). Although the subjects who participated in the South African research were older than those in the Soviet Union study, the comparison is relevant to the study at hand since it highlights the differences between the motives of South African and international students with regards to career choice.

2.3.2. Career interests

The predictors of occupational choice among rural youth, and their implications for career guidance were researched by Conroy (1997). By identifying predictors of students' ideal jobs, the researcher developed further insight into the formation of adolescent occupational identity. Data was collected from six hundred and twelve of the seven hundred and fifty students in grades seven to twelve, in a rural Pennsylvanian school district, in the United States. Conroy (1997) identified four major predictors, which explained nineteen percent of variance in ideal job scores. Gender was the major influential factor, followed by average grades, knowledge about a certain job and its opportunities, and father's occupation.

The results of the study confirmed the hypothesis that American adolescents often have unrealistic occupational ideals in that "the job opportunities available to them do not match their expressed interests" (Conroy, 1997: 1). Conroy also found that student's salary expectations were

unrealistically high, and that female students identified less with traditional female occupations than they did twenty-five to thirty years ago. The data also revealed that students from advantaged backgrounds were more likely to aspire to high-status jobs compared to those from disadvantaged backgrounds. A number of recommendations were made in response to these findings.

Conroy (1997) recommended that job awareness and exploration be initiated at an earlier age, that data on market trends should be regularly provided to all students, that goal-setting skills which require students to investigate the characteristics of all major job categories be incorporated into the curriculum, thereby encouraging students to become involved in experiential activities and explore job opportunities, and that educational components be provided to compensate for the selective information to which individuals are exposed on the basis of their socio-economic status.

Mullis (1996) examined the stability of vocational interests among high school students in Florida in the United States. The stability of career interests was assessed using the String Campbell Interest Inventory (S.C.I.I.), with two hundred and seventy-one first year university students from a rural Mid-western state. They took the test twice, three years apart. Mullis then used the sample to compare occupational themes and basic interests of the test. The results of the study support previous research in that it indicated that the participants' career interests remained consistent over the three years from the end of high school through college. The findings strongly suggest that the variables of age, gender and parent socio-economic status be taken into account when assessing the stability of students' career interests. They also reinforce the importance of involving family members in discussions of careers and career exploration. (Mullis, 1996).

This review of international research into the career interests of scholars may prove useful in drawing comparisons between, or identifying similarities with these international studies and the findings of the study at hand.

2.3.3. Career attitudes

Parker (1995) conducted research on high school students' perceptions of the prestige ratings of contemporary occupations, in which ninety-seven high school seniors from urban and suburban settings commented on one hundred occupations and their perceived prestige. The results indicated a high level of awareness of the varying statuses of different jobs, which highlights the need for

counsellors to consider integrating prestige and social status information with traditional occupational data (Parker, 1995).

Along a similar vein, the existence of career mythology in a sample high school population, using the Survey of Career Attitudes, was explored (Dorn and Welch, 1985). The results of the study uncovered the existence of a number of career myths, such as: *Quitters Never Win*, *Sex Roles*, *The Perfect Job*, and *My Child the Doctor*. Career myths may be defined as ideals that individuals project onto specific occupations, for example, the perception by scholars of the existence of 'perfect jobs' such as medicine or law, or the perception that occupational choice should follow traditional gender roles.

While these findings by Dorn and Welch (1985) may be considered to be outdated, they offer a broad view of the way in which attitudes, and hence perceptions, may influence adolescents' choice of career, in addition to their personal interests, the stability of these interests over time, their expectations of occupations and their desire for status.

2.3.4. Socio-political and economic factors

The international research reports discussed thus far have identified motives, interests and attitudes as influential factors shaping career choice. However, the impact of socio-political and economic factors on career choice also requires consideration. During South Africa's apartheid years, Thaw (1984), argued that many black pupils did not have access to career guidance, and that due to social and political limitations, were severely limited in their choice of careers.

Despite South Africa's democratic transition in the mid 1990's, Miller (1999:2) reinforces Thaw's (1984) proposal, by claiming that "vocational psychology tends to neglect a critical extra-individual factor: the nature of the opportunity structure...[and that] true career choice may be the experience of only a small proportion of clients". Miller (1999) draws out the inadequacies of traditional vocational guidance approaches in terms of their relevance to individuals whose social, political or economic context has worked against them. He proposes that for these individuals, "the assumption that matching clients' interests, values, abilities and aptitudes to a suitable occupation will result in opportunities for self-actualisation and personal expression" (Miller, 1999: 2) are neither useful nor applicable. In view of this literature, the study hopes to explore the perceptions of scholars in

racially integrated schools, and hence establish whether or not socio-political and economic factors are perceived to limit their career of choice.

2.3.5. Career development and career maturity

In addition to the role that motives, interests, attitudes and socio-political and economic factors have been found to play in shaping career choice, the role of psychological factors, namely career development and career maturity, are important to consider. Researchers have examined adolescent career development and the manner in which this development is related to self-concept development and identity formation. An American study, in which two hundred and sixty-eight high school students participated, revealed that self-esteem and identity achievement were positively related to career exploration and planning. Furthermore, the findings suggested that female students spent more time exploring possible careers and planning for their futures compared to their male counterparts (Wallace-Broschious, 1994).

South African studies have also contributed to research on identity formation and career choice. Bester (1990) proposed that high school students might develop feelings of uncertainty about their identity. He suggested that this uncertainty is in part a result of adolescence and its accompanying physical and emotional changes, and in part due to the major career decisions that scholars are confronted with. It has also been suggested that career choice difficulties may be related to identity problems, and hence deciding on a future career will be an easier process if identity formation occurs smoothly (Bester, 1990).

The study aims to identify the existence of consistencies or contradictions between research conducted on career development and career maturity, and the findings of the study at hand.

2.3.6. Family and biographical variables

Family and biographical variables, as well as psychological factors, have been found to influence career choice. South African research has documented the relationship between family and biographical variables on the one hand, and career maturity of first year students at the Rand Afrikaans University on the other hand (van der Peel, 1997). The following variables were predicted to have an impact on career choice: maturity of the adolescent, the individual's ordinal

position in the sequence of children in the family, the educational level of the father, the occupational category of the father, the attitudes of the parents towards the individual's studies, the place of residence, financing of study costs, family independence and personal freedom. Analysis of survey responses revealed that students from varying family and biographical backgrounds differed significantly with regards to their career maturity levels (van der Peel, 1997).

The influence of family and biographical variables on career choice will be examined within the study, in the light of this research.

2.3.7. Decision-making strategies

Chapter One made reference to the important link between perceptions and decision-making. In view of the difficulties and confusion associated with making a career choice, researchers have designed and assessed programmes to increase scholars' career decision making skills, within the broader aim of encouraging and equipping them to make the right choices. The results of a survey conducted in a selected school in South Carolina, in the United States, revealed that scholars used "inadequate decision-making strategies, that counsellors did not focus on career planning prior to and during registration and that the school district lacked a comprehensive career guidance programme" (Lee, 1993: 1). Findings also suggested that counsellors did not have enough time to work comprehensively with students, that the school district focused primarily on the college preparatory curriculum, that high unemployment rates in the area translated into a lack of job opportunities, and that inadequate teacher involvement stunted career development.

In view of these problems, the development of a preliminary, comprehensive career guidance programme was proposed. Other suggested interventions included the initiation of a teacher-replacement programme involving visits from representatives in business and industry, that field experiences for students be arranged, that parents become more involved in career decision making, and that mini sessions which focus on ethical decision making be run. The South Carolina school accepted and implemented all of Lee's proposals. Positive feedback following the implementation of the proposals revealed that students made more informed career decisions. As a result, the programme prompted the development of a district-wide programme. The appendices of the article

describe various programme outlines, surveys, job information, and career development activities (Lee, 1993).

While the primary purpose of Lee's research was to improve the career decision-making skills of adolescents, Galotti (1999) attempted to "describe how students structure[d] an important educational and life decision" (Galotti, 1999: 380). A related aim of the study was to discover whether or not rational, thorough and analytical decision-making led students to feel more comfortable and confident about their decision, or in other words, whether there are affective, or emotional benefits to decision making. Although the researcher chose to work with first and second year American college students, the study is nevertheless relevant for the purposes for this review; in that it illustrates since a group of highly motivated and intelligent students experienced difficulty in using rational means to decide on their majors. In view of the complexity of the process of decision-making, the importance of ensuring that the average scholar engages in rational decision-making when making a career choice must be highlighted.

Galotti's research proceeded as follows: College students from two colleges in Minnesota, USA were randomly selected. They completed surveys about their decision with regards to their proposed majors in their first year and again in their second year. The students listed a set of criteria and alternatives that they were considering, rated the importance of each, and expressed their general impressions of each alternative. Interestingly, only half of the criteria originally listed appeared in the survey a year later. While the students' overall impressions of alternatives were consistent with predictions of decision-making processes as suggested by linear models (such as the Optimising Model discussed in the theoretical framework), they did not, as a whole, feel confident and comfortable with their decisions. These findings suggest, "students may have maladaptive expectations about what effective real-life decision making should be" (Galotti, 1999: 379). In other words, they are not sure about whether the decision-making process they are using is the most effective approach. Moreover, while students' decision-making processes seemed to follow that of rational, linear models, they did not seem to be aware of this, suggesting that students do not generally apply an explicit model when making major life decisions.

Galotti (1999, 385) was puzzled by the findings that "greater rationality in decision-making did not result in better affective responses to the process". One possible explanation is that the students who use the most rational decision making processes are also the ones who consider the greatest

range of options. Faced with many options, students may become confused; perceive themselves as indecisive, and therefore as poor decision-makers. In addition, many students “equate effective decision making with fast decision making or with unambiguous outcomes” (Galotti, 1999: 386). On the other hand, students who use less logical and rational means of decision making may tend to limit their options so that they have less thinking to do. As a result, the process is quicker and seems less complicated, creating less anxiety. In other words, “if people expect major life decisions to be easy or obvious or to require little thought, then they might feel better about their decision making when there are only a few pieces of information to consider and the decisions require little work” (Galotti, 1999: 386). Conversely, the more a person thinks about a major decision, the more uncomfortable they are likely to be feel about it. The Satisficing Model reinforces this concept, since it posits that people will make a decision based on the first option that is ‘good enough’, but not necessarily the best (Robbins, 1996).

On the basis of these findings, it has been suggested that educators, such as vocational guidance teachers and university counsellors, encourage individuals to become comfortable with sifting through large amounts of information and considering a full range of subject or career options, since this exploration may lead to a considerable amount of uncertainty and stress. Educators also need to assure scholars that it is “normal to change one’s thinking, perhaps even drastically, during the period before the final choice” (Galotti, 1999: 386). Furthermore, they need to caution scholars against narrowing their subject or career options too early on, and to ensure that those considering many options engage in ‘effective, not “waffling”, decision making’ (Galotti, 1999: 386).

A review of research focusing on the decision-making strategies of students provides a useful point of reference for identifying the decision-making strategies of the scholars in the study at hand.

2.3.8. Access to career information

Another factor shaping career choice is access to career information. Scholars may become despondent and de-motivated, and come to view career exploration as a frustrating exercise if they experience difficulty accessing career information and obtaining guidance. Alternatively, if school

counsellors facilitate easy access to information and guidance through the means of well-stocked and organised resource centres, and make themselves readily available for consultation, the

experience of career exploration will be a positive and rewarding one (Drummond and Ryan, 1995). There are a number of research reports aimed at evaluating the accessibility of career information and counselling in schools, which will now be briefly reviewed

Lee and Ekstrom (1987) evaluated student access to guidance counselling in American high schools and found that guidance counselling is not equally available to all high school students, that minority students, students from families of low socio-economic status, and students in more rural areas are less likely to have access to the necessary guidance counselling that is needed in order to make good career choices (Lee and Ekstrom, 1987). More recently, the extent to which senior high school counselling and guidance strategies are delivered to students, and the extent to which they are effective were researched (Herring, 1990). The rationale underpinning this study is that there is a need for high school counsellors to advise students, especially ethnic minority students, of projected labour shortages, and that students should not merely focus on getting a job, but should become more career-oriented generally. Participants in the study were senior high school students in Arkansas, USA, of which fifty percent were African American and fifty percent were white. The students completed a questionnaire to assess their irrational perceptions of general career awareness, the findings of which revealed that subjects tended to hold irrational perceptions across cultures, gender, grade level, and area of school and residence.

On the basis of the results, Herring (1990) proposed firstly that career guidance and counselling required further emphasis in schools, and that secondly that there are differences in career guidance and counselling delivery relative to ethnicity. The article also proposes that students may have not processed sufficient career information by the end of their final school year in order to make an actual career choice. Since the results of the study indicate that high school students may not be receiving enough appropriate career information, they are not equipped to make career decisions, which may have disastrous consequences on students' futures; especially the futures of ethnic minority students (Herring, 1990).

A discussion of this research, which deals with career information access, is deemed relevant due to its similarity, in terms of scholars' age and racial demographics, to the study at hand. Although the studies by Lee and Ekstrom (1987) and Herring (1990) were conducted in the United States, it will be interesting to establish the existence of similarities or differences between their findings and those of this research.

Thus far, the review has explored research conducted on the factors which influence career choice such as motives, interests, attitudes, psychological factors, family variables, decision-making styles and access to career information. The following section of the literature review is an exploration of both international and local research on the assessment of the career guidance services offered to scholars. Research conducted on teachers' roles in career guidance and teaching styles will also be discussed. This research, and its relevance to the study, will now be discussed.

2.4. The facilitation of effective career choices through career guidance services and teaching styles

The medium, through which students receive information, as well as its relevance to them, is crucial in terms of shaping the way in which they perceive career choice. Hence, an exploration into the perceptions of scholars and teachers toward career guidance services and teaching styles is helpful in identifying areas requiring improvement. These perceptions, as well as suggestions offered for the improvement of these services, will now be discussed.

2.4.1. Vocational guidance programmes

While the research discussed thus far has dealt with the issues of student motives in career choice, as well as students' interests, attitudes, self-concept and access to career guidance, Maddy-Bernstein and Cunanan (1995) conducted research with the purpose of establishing whether or not there is a need to improve student services in secondary schools in the United States.

Their findings highlighted that many scholars were dissatisfied with these services. For the purposes of improving student services, it was suggested that they "must be drawn from all the resources of the school and community, available to all students, provided on an individual basis as needed, and coordinated to ensure that all students receive the necessary services" (Maddy-Bernstein and Cunanan, 1995) if they are to be effective. They also proposed that services should be provided throughout the different stages of secondary school: before enrolment (through assessment, orientation and career awareness), during enrolment (through academic advising, career planning, tutoring, mentoring and job placement), and post enrolment (through job placement and

follow-up). Finally, the researchers proposed that although there is no single best approach for providing student services, those involved, such as guidance teachers, need to collaborate and form teams in which they can develop some basic guidelines for establishing a common foundation in this area (Maddy-Bernstein and Cunanan, 1995).

Similarly, Lui (1989) conducted research into the effectiveness of career guidance approaches in Singapore, by comparing experimental groups and control groups, as well as group guidance and individual counselling, using secondary high school pupils from two government schools. A 'Career Self-concept checklist' was constructed for the purposes of the comparative study. The results of the study indicated that the package used was effective in group guidance and individual counselling, since the gain in mean scores was statistically significant for both schools. There were no statistically significant differences in the scores of the control groups of both schools. Hence, Lui (1989: 1) concluded, "Generally speaking, the career guidance package received very favourable responses from its users (teachers and pupils) in the experimental samples [and] therefore treatments were successful"

At this point, the research findings discussed have highlighted a need for integrated guidance services (Maddy-Bernstein and Cunanan, 1995), although individual guidance packages have been found to be successful (Lui, 1989). For the purposes of improving the quality of vocational programmes in the United States, Purcell and Nagle (1981) gathered information on twelve exemplary volunteer programmes in order to compile a manual for use by school officials, teachers, and volunteer coordinators. The manual examines the benefits of volunteer programmes to scholars and teachers in secondary schools, as well as the major factors to consider when developing programmes using students as volunteers in the roles of peer mentorship, counselling, tutoring and leadership. The manual also focuses on adult volunteer work with older students, and discusses the implementation of programmes dealing with issues such as career studies, tutoring by adults, the use of community resources and corporate volunteers (Purcell and Nagle: 1981).

International research into the perceptions of scholars and teachers toward vocational guidance programmes reveals both positive and negative perceptions. These perceptions will be viewed against those of the scholars in the study at hand. The suggestions offered by international researchers for the improvement of vocational guidance programmes may also prove to be useful in the South African context.

2.4.2. Computer-based career exploration

In addition to the assessment of manual-based vocational programmes, researchers have critically examined the usefulness of computer programmes with regards to their role in encouraging high school pupils to explore career options, while at the same time familiarising them with computers.

Hoskins and Rosenthal (1983) documented the role of the microcomputer in scheduling students into a number of small group career exploration sessions. The researchers found that the computer was extremely useful as it simplified the scheduling process, and facilitated the placement of all the students in groups where they could explore either their first or second career option.

Along a similar vein, Cianni and Growney (1987) outlined a programme developed to assist high school girls in learning more about computers while planning for their careers. Initially, the participants were given an overview of programming, hardware and software, after which they learned about their own personality and abilities in relation to careers and developed skills to help them plan their careers in a computer-dominated working environment.

More specifically, Sangster (1986) conducted an evaluation of the computer programme entitled CHOICES (Computer Heuristic Information and Career Exploration Systems) that was implemented in eight secondary schools in Ontario, Canada, in 1984. The study assessed the perceptions of teachers and counsellors of the participating schools with regards to the effectiveness of the CHOICES programme, and the effectiveness of career counselling involving CHOICES in achieving the aims of increased career awareness and self-awareness, the development of decision-making skills, and the development of motivation. Data was gathered through interviews with the counsellors and statistics for the use of CHOICES in the 1985 to 1986 academic years. Students' perspectives of the usage, implementation, advantages and disadvantages of CHOICES were also gathered.

Sangster (1986) found that CHOICES had been widely used in the participating schools, with about five hundred and eighty-eight students participating in the full CHOICES career-counselling programme. Although a few disadvantages of the programme were identified by some of the counsellors, in general, the responses of students and staff toward CHOICES was overwhelmingly positive. Moreover, programme participants showed higher levels of career maturity than those who

were not involved in the programme (Sangster, 1986).

A variation of the CHOICES programme, which is known in South Africa as DECISIONS, was first implemented in South African schools in 1992. At this time, educators believed that the programme had the potential to meet the massive needs of local schools, although the results of the programme are still tentative. No current updates of the effectiveness of the programme are available.

More recently, Chapman and DiBianco (1996) reviewed Internet sites with the purpose of establishing the usefulness of the Internet a valuable source of career information, in terms of helping high school seniors investigate colleges and explore employment opportunities. They identified twenty-two listed Web sites, and four online projects that have been developed by library media specialists for high school juniors and seniors involving online research, exploration of college Web sites, creation of working bibliographies and descriptions of job searches (Chapman and DiBianco, 1996). The findings of this research indicate that the Internet, in addition to computer programmes designed to aid students in career choice and planning, are quickly becoming the new career exploration tools of the future, due to the speed and efficiency with which vast amounts of up-to-date career information may be processed. For this reason, it is crucial that the merits of computer-based career exploration be emphasised in schools.

Overall, computer-based career guidance programmes have been found to be potentially very effective in a dual sense. They have been found to assist high school students in career exploration and career maturity development, as well as helping scholars to become more comfortable with using them. Gaining computer skills at high school prepares scholars to adapt to more complicated programmes in the tertiary educational context or the workplace. In addition to computer-based information systems, the use of career guidance instruments may be extremely beneficial in terms of helping students to discover their interests and their aptitudes. Although the validity and reliability of these instruments have been questioned by some researchers and academics, in many cases they have been found to be useful in helping students to develop a clearer picture of their individual strengths and interests, which in turn helps them whittle down their career options. Due to the controversy surrounding the use of these instruments, numerous researchers have attempted

to assess the validity and reliability of vocational programmes based on the results obtained through these instruments.

A review of both international and local research that highlights the merits of computer-based career exploration is important to consider with regards to the study at hand, due to its potential to add a new and positive dimension to career exploration.

2.4.3. Assessment instruments

Jones (1993) compared two career guidance instruments for the purpose of assessing their helpfulness to students and their effect on students' career exploration. The Career Key (C.K.) was compared with the Career Decision Making System (C.D.M.S.), in terms of students' perceptions of the usefulness of these instruments with regards to teaching them about specific occupations, as well as exploring the extent to which the instruments encouraged them to explore different careers. The findings revealed that of the two hundred and twenty-one Eleventh Graders who participated in the study, all reported that the C.K. was helpful in terms of informing them about different types of careers. However, neither C.D.M.S. nor C.K. appeared to encourage career exploration (Jones, 1993). In this particular case therefore, it seems that career guidance instruments may be useful in the sense that they inform students of the variety of careers available, but do not seem to promote career exploration.

However, Le Roux (1984) proposed that many assessment instruments might be deficient and not entirely suitable for use in the South African context. After assessing the 19-Field Interest Inventory (19FII), the Senior Aptitude Test (S.A.T) and the High School Personality Questionnaire (H.S.P.Q.) for career guidance, it was suggested that these tests be interpreted carefully and accurately, and that the dissemination of this information to students should be done so with care and tact (Le Roux, 1994).

Hence, a critical factor determining the usefulness of assessment instruments is the degree to which they are gender and culturally neutral. In the South African context especially, counsellors need to ensure that assessment instruments used are free of gender-role and cultural stereotypes if results are to accurately reflect the users' true interests and abilities.

While the merits and weaknesses of assessment instruments are important to consider, the literature review would be incomplete without an examination of the research conducted on the different sources of career information in terms of their relative strengths and weaknesses. Students embarking on the process of career exploration are often confused as to which sources to consult, thus beginning their search in the most easily accessible place: their school library. Consequently, researchers have assessed the usefulness of career information systems primarily in schools.

2.4.4. Career information

Chapman and Katz (1983) conducted a national survey of one thousand, eight hundred and ninety-seven secondary schools in the USA with the aim of assessing the usefulness and value of career information to students. The effectiveness of career information delivery systems was also evaluated. Findings revealed that while many sources of information were available, they either did not deal with interests, aptitudes, temperaments, and values consistently, or these factors were not dealt with at all (Chapman and Katz, 1983). These findings suggest that while large amounts of career information are available, it may not necessarily provide them with the type of information required to make more informed decisions.

Zunker (1998) emphasises the importance of providing high school students with career information that involves matching individual skills, interests, aptitudes and values with occupations, that will equip students with the information they need to make informed career choices. Hence, the findings of Chapman and Katz (1983) will be compared against those of the study at hand.

2.4.5. Skill and role flexibility amongst teachers

Thus far, the discussion has highlighted the growing importance of technology for the purposes of helping scholars make an informed career choice. From computer-generated assessment tests to career information downloaded from the Internet, scholars are receiving career information through different mediums and in new forms. In addition to a greater use of new technologies, the teaching process is being redefined to meet the new demands and challenges confronting school-leavers. The notion of skill and role flexibility amongst teachers is an issue that school administrators are forced to consider if teachers are to be equipped to tackle the challenges of an educational environment

in constant flux. In South Africa, these changes include increased racial integration, as well as the inclusion of more practically oriented school subjects in the curriculum.

Rosenblatt and Inbal (1999), from the University of Haifa, Israel, conducted an investigation into “the effect of skill flexibility on work attitudes, the performance [of teachers] and the managerial attitudes [of principals] toward skill flexibility” (Rosenblatt and Inbal, 1999: 345). Their investigation was fuelled by previous research that suggested that when teachers’ jobs were redesigned to extend beyond their specialised teaching subject, they experienced greater levels of job satisfaction. The findings also revealed that teachers who were given non-teaching roles, such as mentor roles or roles in curricula development, began to utilise other skills and improve their work performance. Following up on this research, their intentions were two-fold: to operationalise the notion of skill flexibility, and to differentiate between “role flexibility (the combination of teaching and other school roles) and functional flexibility (the combination of several teaching areas)” (Rosenblatt and Inbal, 1999: 345).

Through interviews conducted with teachers in Israeli secondary schools, Rosenblatt and Inbal (1999) discovered that skill flexibility was linked to positive work attitudes and increased work performance. Specifically, they discovered a connection between role flexibility (where teachers assumed at least one official school role in addition to their teaching) and organisational commitment and empowerment. The researchers suggested that the link between role flexibility (rather than skill flexibility), empowerment and commitment are especially strong.

The implications of these findings are significant: As teachers assume more responsibility in their jobs, as well as for their students, they experience a greater sense of control over their teaching, and generally become more committed to their students. In other words, “teachers who perform additional school roles tend to foster closer contact with the student body, are less restricted to a classroom perspective, and consequently more aware of the connection between classroom dynamics and achievement, and thus develop greater commitment” (Rosenblatt and Inbal, 1999: 361). Moreover, role-flexible teachers may help scholars to adapt to changes in the learning environment since they have the knowledge to explain and contextualise these changes (for example changes in the curricula). Furthermore, they may be able to help scholars develop broad and integrated learning frameworks (for example, they may be able to better facilitate the combination of different subject packages to match career options). Principals of the schools who

participated in the study also felt that their teachers who exhibited a high degree of role flexibility performed the best.

Furthermore, Rosenblatt and Inbal (1999) suggested that school principals perceive themselves as instructional leaders in order to develop role and functional flexibility amongst their teachers. Teachers would require encouragement to set goals, and would need to develop a broad vision of the way in which these roles and skills may best be integrated and used holistically within the school. In other words, the principal and staff would need to see themselves as a team with specific goals to improve the overall functioning of the school. The implementation of such an approach would benefit both teachers and scholars alike.

Academic programmes and training courses highlighting the links between school subjects and careers must be developed if functional flexibility is to be promoted. Zunker (1998: 221) reinforces the importance of vocational reform through programmes that aim to integrate both vocational and academic competencies, where “the major goal is to improve the educational and employment opportunities of students who face new technologies and business management systems that require high-level work skills”.

The development of functional flexibility amongst teachers and the implementation of programmes that integrate vocational and academic competencies are especially important to consider in South African schools, where changes in curriculum and demographic distribution are continually changing.

A review of the research conducted on the benefits of skill and role flexibility amongst teachers is relevant to the research at hand, since the study aims to assess whether or not scholars perceive and experience the benefits of this skill and role flexibility, and if so, the extent to which they do.

2.5. Conclusion

Importantly, the literature review points to the fact that most of the available research on minority and disadvantaged school pupils has been conducted overseas. The South African research

documented has investigated issues directly related to black students, such as the vocational orientation of the black adolescent (Nel, 1987), the problems faced by career guidance teachers when dealing with the social and political constraints that hamper black students' career choice (Thaw, 1984), and more recently, the aspirations, and related attitudes and perceptions of black matriculants (Haines, 1995). At present, there are no available research reports addressing scholars' perceptions toward career choice and information in public schools. The demographic makeup of public schools in the Coastal region of the Durban Metropolitan area, is likely to represent black white, Indian, and coloured students. Research on the perceptions of black, white, Indian and coloured high school pupils toward career choice has not yet been conducted in the Coastal region of the Durban Metropolitan area, which serves to validate the relevance and value of the study.

The literature review enhances the effectiveness and relevance of the study in two ways: Firstly it serves as a foundation from which one can begin the proposed thesis from a more informed position concerning the central issues related to the topic, and secondly, it ensures that previously conducted research is not duplicated. The research also offers insight into research procedures that may be effectively used in the study.

2.6. Summary

This chapter has explored the nature of career information texts, and has outlined some of the factors identified through research to influence career choice. The strengths and weaknesses of career guidance services and teaching styles, both internationally and locally have also been discussed.

CHAPTER 3

THEORETICAL FRAMEWORK

3.1. Introduction

The purpose of this chapter is to establish the relevant concepts, definitions and models that provide a theoretical foundation for the study. Firstly, the nature of perceptions and the relationship between perceptions and decision-making will be discussed. Thereafter, the redefinition of the career in the context of a rapidly changing society will be examined, followed by a review of career identity development, vocational theories and career information sources. The purpose of the theoretical framework is to ensure consistency between the nature and purpose of the study and the relevant theory on the topic.

3.2. Perceptions

The following section outlines the model that will be used to conceptualise human behaviour and development in this study. Furthermore, a discussion of the nature of perceptions, and their relationship to decision-making models, decision-making styles and decision-making characteristics serve as a theoretical foundation for the research.

3.2.1. The nature of perceptions

Since perception is a central concept informing the research, a contextual model for understanding human behaviour and development has been adopted. This model acknowledges the dialectical relationship between the individual and the environment, which are not seen as separate entities but perceived to interact with each other to shape development. The constructivist position is at the heart of this model. According to Zunker (1998), this position suggests that people construct their own ways of organising information, and that what is perceived as truth or reality depends on these self-made constructs. Within the context of the study, subjects' perceptions of career choice and career information are shaped by the personal constructs they have created. Subjects' perceptions of career choice and career information may be distorted or accurate depending on the nature of these constructs.

Perception is defined as “a process by which individuals organise and interpret their sensory impressions to give order and meaning to their environment” (Robbins, 1997: 132). People’s behaviour is based on their perception of reality, and since the way in which people may perceive things is not always consistent with objective reality, or with others’ perceptions, they respond to situations differently and behave in different ways.

There are a number of factors that influence the way in which people perceive the world around them. Firstly, these factors may originate within the perceiver. The way in which people perceive events is shaped by their individual characteristics, such as attitudes, motives, interests, past experience and expectations. For example, a scholar may choose to pursue a career in medicine in part due to the fact that an excellent biology teacher taught her. Consequently, perception of current events, people or objects is largely moulded by past experience.

Secondly, the factors that influence the way in which people see things may reside in the target or object being perceived. Robbins (1996) explains, “characteristics in the target that is being observed can affect what is perceived” (Robbins, 1996: 134). For example, if scholars focus only on the challenges involved in choosing a career, such as self-assessment, and confronting their feelings of uncertainty about the future, they may be blinded to the benefits of career exploration, such as establishing a career identity and a healthy self-concept. The context in which the target is situated also influences the way in which people perceive it. In other words, the target cannot be perceived in isolation, or as independent of its surroundings. For example, if career choice is the target being perceived, it will be viewed within the individual’s life context, and hence be shaped by teachers’, peers’ and parents’ perceptions of career choice and career information. Furthermore, if people, objects and events are close to one another in proximity, or are similar to one another, people often perceive them to be grouped together.

Thirdly, factors in the environment may influence people’s perceptions. An economic decline coupled with the experience of the retrenchment of one or more family members may contribute to a negative perception of career choice, while economic growth and a demand for jobs in the market place may contribute to scholars’ confidence in getting a job and hence positively shape their perceptions in this regard. Although the target and the perceiver are the same, the situation is different. Therefore, situational factors such as time and location may influence the way in which people perceive things (Robbins, 1996). The factors influencing perception are important to

acknowledge, since they serve as a vantage point from which to gain insight into scholars' perceptions of career choice and career information. In addition to outlining the factors that influence perception, the links between perception and decision-making must also be established.

3.2.2. Perception and decision-making models

Senior high school pupils must make a decision with regards to their future career. Since decision-making requires that the individual make a choice from among two or more alternatives, individuals must interpret and evaluate information in terms of the relevant data to be considered. The relevance of different sources of career information is determined by the way in which the person subjectively perceives the information, after which alternatives are developed and evaluated in terms of their perceived strengths and weaknesses. Since the strengths and weaknesses of different sources of career information and careers are subjectively evaluated, the final career choice is largely a result of the individual's perceptions of the right career. (Robbins, 1996). A number of decision-making models have been developed to address the way in which people's perceptions *should ideally* be linked to decision-making, as well as some of the more common ways in which they *are more likely* to be linked.

The Optimising Model is a "decision making model that describes how individuals should behave in order to maximise some outcome" (Robbins, 1996: 144). The theory will be discussed in terms of its applicability to career choice. According to this model, there are six steps involved in making a decision:

1. **Ascertain the need for a decision:** The individual realises that there is a problem, or a disparity between some desired and actual state, and therefore acknowledges that a decision must be made. *For example, a Grade Eleven pupil realises that the following year, she will be leaving school and needs to make a decision as to which career she is going to follow.*
2. **Identify the decision criteria:** The individual identifies the criteria that will be important to consider when making the decision. *For example, the criteria that a Grade Eleven pupil may perceive as being important when deciding on her career may include security, and a high salary.* In this model, it is equally important to consider the criteria

that the pupil does not perceive to be important, such as whether or not the career is intrinsically rewarding, the number of working hours required and associated stress levels.

3. **Allocate weights to the criteria:** Since some criteria are perceived to be more important than the others, criteria related to decision-making need to be prioritised by weighting criteria according to their value as perceived by the decision-maker.
4. **Develop the alternatives:** The decision-maker is required to list possible alternatives in order to solve the problem. *For example, the Grade Eleven pupil would be required to think of a range of possible careers matching personal interests and aptitudes.*
5. **Evaluate the alternatives:** Each alternative (career) must be critically evaluated in terms of its strengths and shortcomings as compared against the previously established criteria (salary, security, level of challenge provided).
6. **Select the best alternative:** Once each alternative has been evaluated against the selected criteria, the best alternative is chosen in terms of the option (career) that reflects the highest score (Robbins, 1996).

While this linear-type model is helpful in terms of providing people with a structured decision-making framework, a number of inherent shortcomings are evident therein. Firstly, the model assumes that all individuals are goal oriented, as opposed to harbouring uncertainties about their aims and goals. Secondly, the model assumes that the individual is aware of all possible options, which is not always the case. Usually, when people make decisions, they are not aware of all the alternatives available to them, and do not always assess criteria and alternatives in a consistent manner. The Optimising Model also assumes that the options and criteria that people choose will always be clear and constant, and that perceptions related to their preferences will never change. Finally, the model assumes that the ultimate choice will maximise the outcome; in other words, that the choice with the highest score will always be selected (Robbins, 1996).

Galotti (1999: 380) proposes that the use of such linear decision-making models, "even inappropriate ones, almost always leads to better decisions than does the exclusive use of clinical or

personal intuitions". However, according to Galotti (1999), researchers and theorists agree that linear models such as the Optimising Model do not describe people's typical behaviour when faced with important decisions, especially if the decision requires that they deal with a large amounts of information, as is the case when choosing a career. Furthermore, it is thought that linear models such as the Optimising Model are inappropriate for the purposes of evaluating the decision-making processes of non-experts, such as scholars (Galotti, 1999).

In response to the criticism directed at the Optimising Model, theorists have turned to alternative decision-making models. These models help to explain the ways in which people may make complex decisions not previously been encountered, for example, in the case of a Grade Eleven pupil faced with the decision of choosing a career. These models, and the way in which they contribute to an understanding of perception, will now be briefly discussed.

The Satisficing Model is the first of these alternative decision-making models. It is a model "where a decision maker chooses the first solution that is 'good enough'; that is, satisfactory and sufficient" (Robbins, 1996: 150). The model acknowledges that people are limited in terms of their ability to behave rationally, and proposes that they are capable of operating within the confines of bounded rationality. Bounded rationality refers to behaviour whereby "individuals make decisions by constructing simplified models that extract the essential features from problems without capturing all their complexity" (Robbins, 1996: 150). In terms of the Satisficing Model, the high school pupil would not consider a wide range of careers in the process of making an occupational choice. Rather, she would make a choice based on the information received from friends and relatives, or from career guidance books and her school counsellor. Hence, her decision would be based on this information and some simple criteria, and she would probably decide on a career that meets her minimum criteria, without exploring other careers. The Implicit Favourite model is another model that people may use to deal with new and complex decisions.

The Implicit Favourite model is defined as " a decision-making model where the decision maker implicitly selects a preferred alternative early in the decision process and biases the evaluation of all other choices" (Robbins, 1996: 152). While individuals are seen to simplify the decision-making process, they do not rationally and objectively evaluate all the possible alternatives. Rather, the individual implicitly chooses a preferred option at the beginning of the process. From this point on, the person engages in behaviours that will essentially confirm the early favourite. For example, a

high school pupil may have already decided, on the basis of the knowledge that she has a flair for coming up with creative ideas, that a career in marketing would be best for her. From this point on, all the literature she reads and the advice she seeks is merely used to confirm that this career is the right choice for her, since her efforts are not directed toward finding alternative options. The early choice of a favourite option is not necessarily conscious. Rather, individuals may generate alternatives in order to convince themselves that they are making an objective decision. Nevertheless, the evaluation of their favourite option will be a distorted one. (Robbins, 1996).

The final alternative model to be discussed is the Intuitive Model, which has recently gained respect as a rational and effective means of decision-making. The model proposes that intuitive decision-making, which is defined as the “unconscious process created out of distilled experience” (Robbins, 1996: 154), operates in conjunction with rational analysis. According to Robbins (1996), people are most likely to use intuitive decision-making when they are extremely uncertain, the variables involved are less scientifically predictable, they do not have enough facts, the situation is difficult to analyse, and there are limited plausible alternatives. Since career information is made available to the majority of Grade Eleven pupils, it would be unwise for them to base their career choice on pure intuition.

3.2.3. Perception and decision-making styles

An analysis of decision-making models lays the groundwork for a thorough understanding of the various decision-making strategies that high school pupils may employ when deciding on a career. However, these models are not practically useful unless adolescents are able to identify their personal decision-making style and understand the way in which certain perceptions have shaped it. An instrument requiring scholars to rank statements relating to the way, in which they arrived at their career choice, has proved to be effective in helping them to understand their individual perceptions underpinning the process (Drummond and Ryan, 1995). For example, students would ask themselves: *I will make / am making my career choice based on:*

- *My feelings of what I like or want (perception of career choice as an emotional decision)*
- *My feeling that this choice is right or inevitable (perception of career choice as a decision that is based on intuition)*
- *My feeling at this moment in time. I have not given it much thought (perception of career*

choice as a decision to be ignored or avoided)

- *What my parents or peers or other adults expect of me (perception of career choice as an annoying decision to be made to avoid being pestered by parents and peers).*
- *My analysis of all the possibilities considered that fit in with my ideas (perception of career choice as a logical decision)*
- *My comparisons and analyses I am not ready to commit myself to right now (perception of career choice as a decision that is approached with hesitancy)* (adapted from Drummond and Ryan, 1995: 120).

Once scholars have identified their personal decision-making style, they should then be encouraged to assess the advantages and disadvantages of using the particular style in terms of the likely outcomes that would result. As scholars develop a greater awareness of their personal decision-making style, they are able to realise its limitations and perhaps adopt a combination of styles in order to make more productive and satisfying decisions (Drummond and Ryan, 1995).

3.2.4. Perception and decision-making characteristics

Drummond and Ryan (1995) suggest that counsellors need to be aware of four major career decision-making characteristics that inform adolescents' approach career choice. Firstly, counsellors need to realise that in general, adolescents want to know more about the working world and the necessary requirements to enter specific professions. Unfortunately, many scholars base their career decisions on limited or inadequate information. Secondly, they need to realise that implicit values such as security are often at the forefront of adolescents' minds when considering career options.

The issue of financial security has a major influence on shaping the decisions of adolescents (Zunker, 1998), and in particular South Africans, in part due to the unstable economic climate, as well as affirmative action policies in the workplace. Understandably, many scholars may choose to pursue careers promising relative job security, such as those in the medical profession and accounting. This concern for job security often overshadows their thinking to such an extent that challenge, interest and job satisfaction are not considered in the decision-making process. Thirdly, adolescents are often highly influenced by their parents' ideas and advice concerning their future career and may therefore feel pressurised to consider careers that would gain their parents approval.

Lastly, the personal experiences of adolescents at school, such as success, failure or mediocrity within certain subjects begins to shape their decisions (Drummond and Ryan, 1995).

If counsellors inform scholars of the impact of these decision-making characteristics early on, they are able to identify them and ensure that choices are not made at the cost of individual abilities and interests.

3.3. A new understanding of the term 'career'

While the role of perceptions and the ways in which they are linked to decision-making are important in terms of understanding how scholars' perceptions influence their career decisions, the way in which the term 'career' is conceptualised, by teachers and scholars alike plays an important role in informing scholars' expectations of the workforce.

The changing nature of work over the late nineteenth and twentieth centuries has had enormous effects on the general functioning of society. According to Castells (1996: 31), "the core of the transformation we are experiencing in the current revolution refers to technologies of information processing and communication" which feeds back again into further innovation. Castells (1996) emphasises that cultural and institutional contexts (such as the workplace) interact with this system, which has its "own embedded logic, characterised by the capacity to translate all inputs into a common information system, and to process such information at increasing speed, with increasing power, at decreasing cost" (Castells, 1996: 33) in this retrieving and distributing network. Since smaller firms are more flexible and resilient, downsizing becomes a necessity to enable competition with other firms. There is also a greater emphasis on learning by doing, and sharing of knowledge in the workplace, as opposed to rigidly demarcated jobs. In view of increasing gender and cultural diversity within the workplace, more women and people from diverse cultures are entering organisations than ever before. Consequently, working relationships require greater levels of tolerance and interpersonal communication if they are to survive (Zunker, 1998).

According to Castells (1996), the new Network Enterprise or organisation has fundamentally transformed the structure of employment. The technological revolution requires an increased input of brainpower in the work process, especially in terms of creating and maintaining the informational networks so crucial for inter-firm competitiveness. Hence, a demand is created for

skilled computer operators. While individuals are required to develop advanced computer skills, they must also develop increased autonomy and take greater responsibility for their work.

In the 1980's and 1990's, major capitalist restructuring led to the rapid phasing out of the direct production workforce, as workers were replaced by machinery in order to streamline business functions. According to Zunker (1998), forty-three million jobs, many of which were well-paid, white-collar jobs, have been lost since 1979. Since production is largely market driven, workers need to become more flexible in terms of working irregular hours and shifts to meet production demands as they arise (Castells, 1996). These changes make the idea of getting a lifetime job a very improbable one.

Vocational theorists have reinforced the necessity of a re-conceptualisation of the career. Since the 1960's, many writers and researchers have agreed on a definition of vocational development as the "interaction of psychological, sociological, economic, physical and chance factors that shape the career or sequence of occupations, jobs and positions that individuals hold during their lives" (Gysbers and Moore, 1979: 314). Hence, career development is conceptualised as the integration of all the roles, events and settings of the individuals' life span, and in this way provides a holistic view of self-development. This view of career development is particularly useful, and must be clarified with scholars, since it may help them connect their past and present circumstances to future opportunities (Gysbers and Moore, 1979).

Whilst the informational paradigm has had a significant impact on the way in which work is viewed and conducted, one cannot ignore the effect of other social and economic factors that serve to redefine the concept of the career, as it should be understood today. In the South African context particularly, with its struggling economy, retrenchment has become a common means of downsizing in order to streamline functions to ensure continued competitiveness. In addition, affirmative action policies are implemented to ensure that employees in general are more representative of the demographics of the country. While these policies are necessary in order to redress the political inequalities of South Africa's past, many scholars, especially white males, are extremely concerned with regards to the way in which these policies will impact on their future career.

As technological, political and economic change and instability increases, scholars need to come to

terms with the fact that a career is not a lifelong and stable position in a single occupation, but is subject to change and instability. Sharpes (1994: 74) argues that if the youth are to be prepared for the changing work world, then “preparing for schooling in the twenty-first century will require dramatic changes in programmes and attitudes”. Likewise, Gouws (1993: 140), on the basis of a national survey of guidance teachers’ responses, concluded that there is a “strong need for the upgrading of the theoretical knowledge and skills which are required to guide pupils to a realistic career choice in the present economic, political and social conditions of the country”.

Consequently, the concept of the career, as it is relevant to scholars in the late 1990's, must be conceptualised as a dynamic activity that is inextricably connected to the social, political, economic and technological context of the present time. Since economics and technology are in constant flux, certain occupations are adapted to meet changing demands, while the need for other types of occupations will grow. This is evident when one considers that the past two decades have been dubbed the Information Age, in view of the domination of the computer industry over the job market.

In sum, teachers and scholars need to conceptualise the career not as “a single, isolated decision taken by an individual; [but as an] extension of the self concept which develop[s] over a number of years” (Henen, 1991: 1456). Vocational guidance programmes as well as the content of career information produced for use in schools must be consistent with this new understanding of the career. Moreover, educators and counsellors need to be aware of the way in which peoples’ self concept changes with age and maturity, thereby possibly prompting them to consider a career change or a number of career changes over the course of their lifetime. These interventions will help to ensure that scholars plan their careers with an emphasis on acquiring the skills of flexibility, adaptability and critical thinking.

These skills and values will be invaluable regardless of the career changes that many individuals will have to face over the course of their working life. This re-definition of the career as a developmental process necessitates a brief review of the major vocational theories.

3.4. Vocational theories

A fascination with vocational development and the psychological changes underpinning it prompted the formulation of various theories centring on this development. The first theory that will be briefly discussed is John Holland's theory of vocational choice, followed by Donald Super's theory of vocational development. These theories merit review since they have largely informed the body of vocational guidance knowledge that teachers and educators draw from today.

3.4.1. Holland's theory of vocational choice

Holland's Theory of vocational choice (1973), posits that "vocational interests are one aspect of what is commonly called personality, and that the description of an individual's vocational interests also describes the individual's personality" (Weinrach, 1979: 85). His theory is based on four major assumptions. The first is that every individual may be described as being closely associated with predominantly one of six personality types: *realistic, investigative, artistic, social, enterprising or conventional*, although most people may be described as being affected primarily by one and further influenced by a second and third type. These personality types are associated with distinct behaviours. Secondly, there are six types of environments that are characterised by the individuals who operate within them. The third assumption is that people will seek environments that allow them to practise their skills and abilities, and to express their attitudes and values. The fourth assumption is that peoples' behaviour is a product of the fit between environment and personality (Weinrach, 1979).

The applicability of Holland's theory to the study is particularly helpful. Grade Eleven pupils are confronted with a vast number of career choices, which is often an intimidating and overwhelming experience. Scholars must whittle down their list of career choices in order to focus on ones to which they are more suited. From the 1960's, the premises of Holland's theory have formed the basis for psychometric tests, the purpose of which is to help individuals discover their personality type by responding to questions based on vocational and personal interests. Particularly, the Self-Directed Search (S.D.S.) has been widely used with scholars globally to help them 'match' their personality type(s) to a specific selection of occupations. While the results of such a test should not be prescriptive in terms of limiting scholars to a restricted number of careers, they may be helpful in giving scholars a broad sense of career direction and offer some insight into the characteristics of

their personality.

Holland's theory has provided many individuals with insight into careers that may possibly suit them, although some critics have suggested that it is sexist, since they argue that the S.D.S. in particular does not encourage women to enter skilled trades, but confines them to social roles. It has also been criticised for being too simplistic and rigid, as it does not explain the origins of different personality types. Critics have stressed that career counselling must be a personalised process, free from imposed stereotypes that pressure individuals to choose from a limited set of occupations.

3.4.2. Super's theory of vocational development

While Holland's theory of vocational choice is founded on the study of different personality types, Super's theory of vocational development (1972) is based on the development of the self-concept, which, as he suggests, changes and grows over a series of life stages (growth, exploration, establishment, maintenance and decline). Super does not place as great an emphasis on matching occupations to personality types as Holland does. Instead, he proposes a broader range of personality types that may function well within a number of environments. The career pattern of the individual is shaped by a combination of socio-economic, mental, personality and chance factors, although the transition through these life stages occurs more smoothly and rapidly if the individual is encouraged to mature, gain and awareness of his / her abilities and interests, participate in reality testing and develop a healthy self-concept (Super, 1979).

Vocational development is conceptualised by Super as a process of developing and implementing a self-concept, requiring that the individual continually compromise between others' interests and their own. Eventually, a more sophisticated self-concept is formulated as the individual learns to assimilate or incorporate the differences of one-self and others, through developing greater congruency between personal experiences and a consciousness of the work world (Drummond and Ryan, 1995). The individual's satisfaction in the work environment depends on the extent to which they are given the opportunities to express their abilities, interests, values and personality traits (Super, 1979).

Super extended his theory through the formulation of five vocational developmental stages. The first is that of *growth*, (from birth to age fourteen / fifteen), where the child develops attitudes,

interests and needs connected to self-concepts, while the second is the *exploratory stage*, (from ages fifteen to twenty-four), where choices are tentatively narrowed down but not finalised. In the *establishment stage* (ages twenty-five to forty-four) the individual tries to gain a sense of stability through work experiences, while *maintenance* (ages forty-five to sixty-four) and *decline* (ages sixty-five plus) are characterised by continual job adjustment followed by retirement. In application of this theory to the research, the Grade Elevens' in the study would be classified as being in the exploratory stage (ages fifteen to twenty-four), in light of biographical data obtained from the survey that reveals that the majority of the scholars are aged between sixteen and seventeen. According to Super's life-stages, these individuals are in the process of tentative exploration of careers. Although most will have attempted to narrow their focus to more specific career options, very few will have made a final choice (Drummond and Ryan, 1995).

These stages constitute the broad framework within which to conceptualise career-related behaviours and attitudes manifested in the vocational tasks of crystallisation, specification, implementation, stabilisation and consolidation, and which occur parallel to the vocational stages. An application of the theory to the study reveals that the scholars are involved in the crystallisation task (ages fourteen to eighteen), where they would be engaged in a cognitive process of developing a career plan and considering the different ways of implementing this plan. Crystallisation also involves exploring the relevant information, with the aim of obtaining the relevant knowledge associated with this choice. According to Super, the successful accomplishment of these tasks, followed by a smooth transition to the next would result in career maturity. (Drummond and Ryan, 1995).

Super's theory of vocational development has generally been well received by those vocational guidance experts, due to its comprehensive theory, availability of assessment instruments and explanation of career development from birth to retirement (Zunker, 1998). In 1951, Super established that a sample of boys who were vocationally mature in Grade Nine were significantly more successful as adults than those who were less vocationally mature at this stage (Drummond and Ryan, 1995). However, Super's work has been criticised on the grounds that his theory has not been substantiated by sufficient empirical research. Furthermore, it has been argued that Super's hypothetical constructs are too vague, not operationally defined and therefore not easily measured or tested. These arguments aside, even critics cannot deny the massive impact of Super's work on the conceptualisation of career development (Drummond and Ryan, 1995).

As is evident from the above discussion, prominent theorists have linked vocational development with factors such as personality and the self-concept. However, it is necessary to further explore the way in which scholars' self-concept and sense of career identity shapes the way in which they perceive the process of career choice.

Jordaan (1963 in Drummond and Ryan, 1995) proposed that "occupational choice of individuals is a function of [the adolescents'] self concept at the time of decision" (Drummond and Ryan, 1995: 155), to which Super added that they progress through various phases of career development, hence redefining the self-concept further. Bester (1990: 11) reinforces this idea. After conducting research with high-school pupils in South Africa, he explained that "the choice must be made at a time when several changes and developments in the life and circumstances of the adolescent occurs which can result in uncertainty about themselves. [Therefore] ... the choice of career will be less problematic if identity formation occurs smoothly". On the basis of this theory and research, one may conclude that the way in which high school pupils' self-concept; or the way in which they perceive themselves, is a crucial factor shaping career choice, hence reinforcing the relevance of the study. In light of developmental theorists' focus on the critical role that identity development plays in career choice, career identity development will now be discussed.

3.4.3. Career identity development

Erikson (1968 in Drummond and Ryan, 1995) suggested that between the ages of twelve and eighteen, adolescents must deal with the phase of identity versus role confusion, where they are forced to make choices that will help them forge an identity for themselves. One of these fundamental choices is that of choosing a career. In order to do this they need to "know themselves, their capabilities and limitations, develop a positive self-concept, and identify their interests, aptitudes, values, and achievement. It is vital that they develop skill in self-evaluation and tie it to knowledge of the world of work. Formulating tentative but realistic career plans is a priority" (Drummond and Ryan, 1995: 115). The formulation of a positive self-concept is the crucial foundation on which the adolescent can begin to develop the necessary coping skills to tackle the challenges they are faced with everyday, and to develop autonomy from parents, teachers and peers.

Erikson (1968 in Drummond and Ryan, 1995) postulated that career choice might have a negative impact on adolescent identity. He suggested that scholars who perceive career choice as a threat

should postpone the decision until a later stage, to allow extra time to explore career options and make an informed choice. However, if the inner conflict related to career choice is not resolved during this time, it has been suggested that individuals may develop a negative career identity which causes them to behave in destructive and defiant ways, for example theft and vandalism (Drummond and Ryan, 1995).

In addition to a failure to resolve inner conflict over career choice, there are a number of other factors that hinder career exploration. Drummond and Ryan (1995) suggest that adolescents might not engage in a thorough career search because they feel anxious and afraid that they have no control over the situation. They consequently assume that the search is hopeless and a waste of time.

Scholars who do not take responsibility for their career exploration may rely too heavily on the advice of friends, peers and family, hence limiting their choices to those suggested by family and friends, or gathering inaccurate or biased information. If such scholars do engage in a search, it may be unfocused and ineffective if they neglect to follow an organised and systematic approach. On the other hand, if career exploration is conducted in a systematic and planned manner, it can be a valuable learning experience for the individual, contributing to the development of career maturity. Career maturity refers to the notion of the individual attaining “the proper position in the continuum of vocational development as to their life stage of development and age” (Drummond and Ryan, 1995: 117). Factors that impact on this development, according to Crites (1978 in Drummond and Ryan, 1995: 117) include “consistency of career choice, career choice content, realism of career choice, career choice competencies, career choice process, and career choice attitudes”.

Drummond and Ryan (1995) propose that the exploration of self-awareness should not focus solely on the individual, but “should include factors such as family, personal life, community involvement, leisure pursuits and even religious practices” (Drummond, 1997: 160) Since these values are inextricably tied to the individual’s self-concept, they should be acknowledged during the process of career choice. A career that contradicts these values will ultimately result in frustration and job dissatisfaction.

A discussion of the vocational theories, including an exploration of career identity development is

followed by a critique of these theories.

3.5. Critique of the vocational theories

While criticisms are often directed at individual vocational theories, the credibility and value of vocational theories as a whole have also been questioned. Firstly, Warnath (1979) argues that "one basic assumption underlying the current vocational theories is populist in nature: that each individual, with adequate motivation, information and guidance, can move through the educational process to satisfying job goals that allow him or her to express personality or implement the self-concept". He claims that this would only be possible if each person could be matched to an ideal job, which is not practical or realistic in terms of the general population. Warnath (1979) also argues that the individual's job is no longer the central focus in their life. Furthermore, the individual's needs are often neglected in favour of the needs and goals of the organisation, which take the form of profits and increased productivity.

Secondly, Warnath (1979: 39) argues that because career development is an abstract construct, it allows vocational theorists to "hypothesise about factors that appear to affect vocational decision making, without regard for the quality of jobs in which people eventually find themselves". It is doubtful whether the new nature of work, as was previously discussed, and characterised by automation, flexible work hours and flexible pay, can provide personal fulfilment and satisfaction for the average employee. To add to this, Warnath (1979) suggests that vocational theorists have failed to consider the arguments of writers who suggest that the meaningfulness of work in modern society is a myth.

Thirdly, while vocational guidance may have been successful in matching people to certain jobs, there is little evidence to suggest that these matches have resulted in personal job satisfaction and fulfilment. Warnath (1979) suggests that when vocational theorists such as Holland refer to 'fulfilment', they are not referring to a deep sense of personal satisfaction, but to an impersonal 'fit' between a person's abilities, interests, and their job. The fact that an individual may be able to use his/her abilities in his/her job does not translate automatically into fulfilment. Fulfilment is a complex and intangible concept that is difficult to separate out into its component parts. Warnath (1970: 40) proposes that work should not be conceptualised as a 'calling' which is accompanied by personal fulfilment, but should rather be defined as "a role within a system of communication and

social relations".

Fourth, Warnath (1979) points out that vocational theorists have emphasised that men in particular, use their line of work to define and establish their social roles. He argues that this assumption is problematic in that current work values are no longer as they were in the past. Previously, work may have been viewed as an outlet for abilities and talents, as was evident in skilled crafts such as carpentry and sewing. However, current work values are centred on the efficient production of goods and services. Hence, most of the time, the majority are powerless in terms of using their jobs to define who they are because they are too busy trying to meet the organisation's goals.

Warnath (1979) levels a fifth criticism at the vocational theories, on the grounds that vocational decision-making is conceptualised as centring on the individual's needs and interests. He argues that vocational theories place a heavy emphasis on career choice as a means of self-realisation, and that this view has blinded them to the realities of society. He argues that jobs in western economies are not designed to meet the personal needs of individuals, but to meet the needs of production. The crux of the argument is that vocational theorists fail to realise that there is an inherent contradiction between the needs of individuals and the needs of an economy, and that ultimately, the economy's needs come first.

Sixth, Warnath (1979) asserts that vocational theorists have ignored the idea that at all levels of western economies, from the plant floor to management, employees are experiencing a consistent reduction of power and control over their work. He suggests that the bulk of power in the work place is shifting into the hands of scientists and engineers, while even well educated professionals are finding their work becoming increasingly computerised, routine and compartmentalised. Warnath (1979: 42) takes this argument one step further by suggesting that vocational theorists themselves apply their theories in an attempt to predict and control the decision-making behaviour of people, albeit disguised as a "humanistic enterprise" centred on a concern for the welfare of people's futures.

To fill the theoretical gaps left by vocational theorists, Warnath (1979) suggests a new perspective on vocational theorising. He proposes that firstly, it should be acknowledged that vocational choice based on interests and aptitudes may only be relevant for a small, privileged part of a country's population. Secondly, rather than perceiving work as a means to define people's self worth,

Warnath (1979: 44) suggests that counsellors seriously question the out-dated assumptions made by theorists, and find ways in which people can "express their individuality and gain a sense of control over significant parts of their lives".

While Warnath's criticisms of the vocational theories are valid and thus important to consider, the reality of the situation is that a large proportion of the population spend the majority of their lives working. Of those people, not everyone dislikes their jobs or finds them boring and unsatisfying. In his pessimistic review of the modern work place and the new nature of work, Warnath (1979) fails to examine some of the more positive aspects which may indeed enhance the personal satisfaction of employees, for example, the collapse of the traditional hierarchical organisational structure into inter-dependent work teams, where individual responsibility and accountability is increased, and social interaction and communication between employees and employers is enhanced.

Although it is simplistic to assume that a perfect 'fit' between people's personalities and their jobs will result in intrinsic motivation and fulfilment, the vocational theories are nevertheless useful in terms of providing direction to individuals confronted and overwhelmed by a multitude of different career choices. Furthermore, a movement to combine the existing theories on career development for the purposes of uniting vocational psychology with other psychological disciplines has prompted theorists to renovate their theories so that they remain relevant in the context of social change (Zunker, 1998).

While vocational theories and their related assessment instruments should not be used to dictate people's career choices, they are useful if used in conjunction with career information sources from which individuals may draw in the process of deciding on a career. Hence, another source of reference that scholars need to incorporate into their decision making process is career information, which will now be discussed.

3.6. Sources of career information

Career theorists propose that career information is an important variable to consider in the process of career development. However, scholars are often unsure with regards to the kinds of information to look for, where to find it and so on. Moreover, controversy exists in terms of establishing the most effective types and sources of career information, although direct work experience through

internships or apprenticeships have been found to have a greater impact on shaping this decision than do literature sources. The Career-counselling Model, which will now be discussed, is one means of evaluating the effectiveness of various sources of occupational information.

The model consists of six stages:

1. **Identifying the goals and objectives of the information:** Identifying the purposes for which the information is needed, for example, investigating a specific career, or the universities that offer a particular curriculum.
2. **Identifying who needs the information:** Establishing whether the information is needed by an individual or a group, as well as establishing additional information about the user, such as educational level and learning style.
3. **Considering the context in which the information will be used:** Establishing whether the information will be used in group sessions or one-to-one counselling, whether it will be used in a library or resource centre, for planned use or for self-research.
4. **Considering the format to be used:** Considering whether the information will be used in printed format, video, computer-assisted, and whether the format chosen will be appropriate for the educational level and learning needs of the target group.
5. **Considering the cost of the information:** Considering whether the information is free (from professional organisations or government) or must be paid for (audio-visual information).
6. **Evaluating whether the goals set for using the information were appropriate:** Considering whether the information source provided the information that was needed (Adapted from Drummond and Ryan, 1995, 256).

If career information is to have a direct and positive impact on decision-making, the right delivery approach, in an appropriate setting must be employed. The approach must also account for the different learning styles of the individuals involved. Information sources need to be assessed and

used in terms of their probability of motivating individuals to use and act on the information. For example, an individual with an audio-visually oriented learning style may not respond well to printed material (Drummond and Ryan, 1995). This issue necessitates a review of the different types and sources of career information.

Career information may be presented in a number of different formats, including printed formats, audiovisuals, computer-based systems, personal presentations, simulation (interaction through computer games on certain jobs), and realistic job previews. Whilst printed information is usually the most accessible, people who are familiar with the occupation of interest are one of the richest and most valuable sources of career information. For example, scholars may obtain invaluable information from informed career counsellors, as well as from people in particular professions. Simulated approaches, such as computer games, are useful in the preliminary stages of career exploration since they encourage scholars to become focused on career choice in an indirect and non-threatening way. Realistic job previews are valuable since they enable scholars to view the way in which people operate from day to day in their professions. Field trips and job shadowing allows scholars to catch a first-hand glimpse of this reality. In addition to the different types of career information, there are also a variety of sources of career information (Drummond and Ryan, 1995). These sources will now be reviewed in terms of their strengths and weaknesses.

A variety of career information sources must be tapped if scholars are to obtain a broad view of local, regional, national and even international career opportunities. Information from the national department of labour often prints needs projections, which may provide scholars with information about current occupational needs and future trends. For example, the Dictionary of Occupational Titles (D.O.T.) was last revised in 1977 by the Department of Labour in the United States. The dictionary cites thousands of listings of occupational titles, of which each is coded according to an occupational classification system (Zunker, 1998). On the other hand, local information provided by small businesses is important to review, since it allows scholars to assess the career opportunities in their specific area (Drummond and Ryan, 1995).

Different sources of career information include major government sources, such as the Department of Labour, as well as non-governmental sources, which include professional and private organisations, such as the South African Psychological Association. However, scholars need to be aware that while non-governmental sources are useful for identifying accredited programmes, they

may be biased in that they tend to emphasise the glamorous aspects of a career while ignoring the negative factors. Scholars also need to be aware that while annual reports may encourage an awareness of different jobs, information from businesses and industries may not always be accurate, requiring verification by a counsellor. In terms of international career information, the Internet is an invaluable and inexhaustible source, where scholars may find information about the careers available abroad. Commercial publishers also print career-related material, which may take the form of fiction novels centring on people in different career fields, career encyclopaedias, biographies, autobiographies, and directories (Drummond and Ryan, 1995).

Educational institutions such as universities and technical colleges offer career-related information. This information is usually linked to specific programmes, courses and degrees obtainable through enrolment in the institution. While biographies and indices often publish valuable career resources, monographs are useful since they often focus on careers for special populations, for example, the disabled. Media resources like films and videos may appeal to visual learners and unmotivated individuals. It should be mentioned though, that media materials be previewed to ensure that the style of the material is contemporary and offers an unbiased view of careers. As was previously mentioned, apprenticeships and job analyses are valuable sources of information, although tapping these information sources requires that individuals be highly motivated in order to assume an active and participative role (Drummond and Ryan, 1995).

Career resource centres within or outside the school are useful sources of information, provided that they are accessible, attractive, operate with ease, are adaptable enough to incorporate new information regularly, and provide for diverse career information. Materials in the career resource centre should be coded and organised to facilitate easy access and re-filing. Moreover, the individual or group of individuals running the centre should form internal networks with teachers in the school as well as external networks with professionals in business. In this way, the information in the centre is determined both by scholars' career interests as well as external job demands, so that the information is useful and meaningful to the scholars who will be using it (Drummond and Ryan, 1995).

If career information is to be applicable and meaningful to all pupils, it must be gender sensitive, in terms of encouraging males and females to freely investigate the full range of careers available to them. For example, an adolescent boy may want to explore a career as nurse, while a girl of the

same age may want to explore a career as a mechanic. Career information should not reinforce gender-stereotypes often attached to jobs that are perceived to be traditionally 'male' or 'female' typed occupations. Furthermore, career information must be culturally neutral, thereby encouraging scholars to consider a full range of careers, regardless of their culture or race. For the purposes of reinforcing the value of access to career information that is free of gender-role stereotypes, the relationship between gender and scholars' perceptions of career choice and career information will be examined.

3.7. Gender and scholar perception of career choice and career information

According to Zunker (1998), women's career choices were previously largely restricted to jobs that reinforced traditionally held working roles, such as teaching or nursing. However, in the past few decades, these roles have expanded to include jobs previously perceived to be men's jobs, such as medicine, science and careers in business. Career counsellors now find that "women are rearranging their career priorities – planning for a life-long career in a wide range of occupations has become the highest priority. Career now and marriage later is the new order and preference for many" (Zunker, 1998: 365). Although many women express a desire to pursue a life-long career, researchers have identified a number of obstacles that block this pursuit.

Women often have to deal with bias linked to gender-role stereotypes, which have developed through societal perceptions of certain occupations as being gender-typed. A gender-typed occupation is defined as an "occupation congruent with sex-role stereotypes and dominated by one gender" (Ragins, 1988: 55). Female-typed occupations are usually associated with less power, less pay and less status compared to male-typed occupations. Women, who choose to devote a large portion of their time to their career, and especially those in male-typed occupations, may experience negative gender-role stereotyping from co-workers in addition to personal conflict associated with their role as workingwoman. They may also encounter resistance from family, spouses, and even counsellors who are battling to accept that women's career choices and priorities are changing.

Other factors, in addition to changing social values, influence women's decisions to pursue a full-time career. Tough financial times may require that women start working to supplement their husband's income. While jobs previously reserved for men are now available to women, an emphasis on racial and gender equality, implemented through affirmative action programmes, have

given women considerable leverage in the workplace to ascend the previously male-dominated hierarchy. Despite these social changes, research suggests that their roles, as well as their special needs in the workplace, need to be urgently addressed if women are to be satisfied and productive (Zunker, 1998).

Vocational theories have been criticised for perpetuating gender stereotypes, for example Holland's Six Typologies Theory. However, Super's Double-track Career Pattern (1990) and Ginsberg's Lifestyle Dimensions for Women (1966) acknowledge women's multiple roles as well as their fear of pursuing a career, which is often associated with the loss of a stereotypical, yet socially acceptable female identity. Consequently, this fear associated with the thought of losing a socially acceptable female identity may distract women from conducting a focused career exploration. While these theories are progressive in their acknowledgement of the multiple and often conflicting roles of women, they reflect gender-role stereotypes in their conceptualisation of home-making as a 'typical' option, with an equal emphasis on home and career considered to be 'innovative' (Zunker, 1998).

Zunker (1998) explains that women's career choices are largely shaped by variables such as culturally and socially generated attitudes, values and perceptions of women's social roles, which may conflict with personal motivation. This conflict prevents the smooth formation of identity, since women, unlike men, are not offered, "clearly defined boundaries of images of appropriate gender-linked roles" (Zunker, 1998: 368). It has also been suggested that female developmental tasks differ significantly to masculine ones. The early transitional stage (ages seventeen to twenty-eight), which is relevant to the study at hand, affects young women and men in different ways.

Although both young women and men must attempt to establish a personal identity, Zunker (1998) argues that this process is more difficult for women, since they receive less encouragement and social pressure to become independent, and therefore find it difficult to separate from the parental home.

Research suggests that the school environment may serve to reinforce gender-role stereotypes, as boys may be encouraged to be aggressive and assertive (especially with regards to achieving success in the sporting arena), while girls tend to be noticed for clingy, dependent behaviour. Research also suggests that within the school context, girls are not always encouraged to fully

express themselves. As a consequence, young women may be unaware of their individual abilities and interests (Zunker, 1998).

In addition to identifying their special needs, theorists and researchers have also attempted to study the characteristics and profiles of women who have successfully established non-traditional careers, for example in medicine, engineering, law, construction and science. Findings suggest that these women have personality characteristics that are very similar to those attributed to men, for example, they are more independent, dominant, individualistic and active; and identify more readily with men. These women also seem to be better educated, have well educated fathers and have better mental health.

At this point it is important to briefly examine the relationship between gender and power, as theorised by Ragins (1988). Power may be defined as having influence over others. It may stem from holding a particular position, "from an interpersonal relationship, or from an individual characteristic" (Ragins, 1988: 51). Since power may be either objective or perceived, gender-role stereotypes may lead others to see women as having less power than they actually have. Women themselves may foster this perception, resulting in low self-esteem. Ragins (1988) also posits that power develops over time as resources, such as education and training, accumulate.

With reference to the definition of power, it would seem that the individual characteristics of women who have succeeded in non-traditional careers (autonomy, dominance, assertiveness), as well as their background traits such as access to resources (good education), serve to empower and enable them to rise above gender-role stereotypes and to establish a career for themselves based on their true abilities and interests.

While these findings offer insight into the individual and background traits of women who have successfully pursued non-traditional careers, researchers still do not know enough about women's needs in the workplace and hence, what serves to positively reinforce them, as they have not been able, like men to establish a wide range of work skills in the workplace. Zunker (1998) suggests the following interventions:

- Access to information resources about non-traditional occupations for women.
- Access to a wider range of career choices available to female scholars (for example,

school programmes informing women of non-traditional jobs for which there is a market demand).

- Training of school staff to inform them of the need for broad career exploration.
- Access to updated labour market information that is gender-neutral.
- Establishing and encouraging the exploration of non-traditional jobs in the community.
- Encouraging networking with women in non-traditional occupations.

In the past, much of the career information and career counselling available to adolescents was structured around gender-role stereotypes (Zunker, 1998). Career counselling and career information that encourages adolescents to consider a variety of careers, regardless of their gender, plays a crucial role in empowering women in the workplace. This information provides women with the resources that will enable them to make career choices free of gender-role stereotyping (Ragins, 1988). Furthermore, the emphasis of career counselling should be on helping women to “identify their abilities and skills and provide them with the same opportunities given to men in making use of their talents in our society” (Zunker, 1998: 372).

The attempt to do away with negative gender-role stereotyping and the general societal shift toward androgyny means that men, as well as women have special needs that must be addressed through career counselling and career information. According to Zunker (1998), gender-role socialisation has led men to adopt negative perceptions and associations with femininity (weakness, emotionality, submissiveness, passivity), which result in an aversion to female-typed occupations. As women have been socialised to assume gender roles that reinforce their femininity, men have been socialised to adopt gender roles that reinforce their masculinity. They need to be encouraged to make career choices based on their interests and abilities, even if these choices do not perpetuate the masculine ideals of status, power and dominance.

In addition to overcoming their fear of femininity, men need to reassess the idea that achievement, success and occupational status are the primary measures of their manhood. They need to adopt a healthy perspective of success, and learn to relax and take more leisure time. Emotional expression and self-disclosure may also serve to combat the stress that men may place themselves under in an attempt to achieve success. This stress is aggravated by the compulsion to be competitive, and to levels of honesty, openness and cooperation amongst co-workers. As a result, men may need to adopt a less competitive, and more co-operative approach to their work. (Zunker, 1998). Teachers

and counsellors need to encourage productive and cooperative behaviours and attitudes at a school level, so that young men will adapt to the future workplace more easily.

Zunker (1998) also emphasises the value of encouraging boys and young men to take part in household duties, on the basis that if the entire family shares these tasks, they will no longer be viewed as female-typed work. This concept of “shared responsibility is a step toward accepting new learning patterns that may require shifting roles for both husbands and wives in dual-career homes” (Zunker, 1998: 396).

3.8. Summary

The chapter has discussed the theoretical links between perception and decision-making models, styles and characteristics, as well as the re-conceptualisation of the career. The vocational theories and a critique of these theories were outlined, as well as the relative advantages and disadvantages of the different types and sources of career information. The effects of gender-role stereotypes on individuals’ perceptions of career choice and career information were also identified. The discussion of these concepts provides a meaningful theoretical framework from which to conceptualise the way in which scholars’ perceptions of career choice and career information are shaped.

CHAPTER 4

RESEARCH DESIGN

4.1. Introduction

The purpose of this chapter is to explain and discuss the research design. The specific research approach and methodology will be outlined, followed by a discussion of the data collection and analysis procedures used. Some of the ethical issues requiring consideration when conducting educational research are also reviewed.

4.2. Research approaches

In recent years, there have been some major conceptual shifts in methodological research practice in the social sciences. One of the major changes has been characterised by a shift in focus from quantitative to qualitative research methods. The superiority of the interview over the questionnaire has oft been argued, since it produces in-depth data, and allows for the expression of attitudes and values not accessible via structured questionnaires. Best (1977) suggests that either quantitative or qualitative methods may be more appropriate depending on the situation and type of research. However, since both types of methodology reflect different biases and shortcomings, researchers must be aware of the merits of combining them. In this way, they may generate more accurate data where appropriate. Both qualitative and quantitative methods were used in this the study.

4.3. Research methodology

There were two main stages in the research process: the preliminary stage and the survey research stage, both of which will be discussed in the chapter.

4.3.1. Preliminary research

Firstly, the researcher conducted a thorough review of both international and local literature which revealed that a large amount of research on career choice and career information had been conducted with scholars and teachers. The purpose of the review was to gain a broad understanding of the research problem, and to guard against unnecessary duplication of others' work, thereby

extending the knowledge within this area of research.

Secondly, once the questionnaire had been drafted, the researcher conducted a pre-test or pilot study to evaluate its effectiveness in obtaining the required data and to detect any problematic items (Baker, 1988).

The pilot study was conducted as follows:

- Copies of the questionnaire were given to a number of friends and acquaintances, as well as two high school pupils with similar profiles to those who would eventually be participating in the survey.
- The researcher's friends and acquaintances were required only to read through the questionnaire and add comments and criticisms where necessary, whereas the scholars were asked to complete the questionnaire as well as to comment on the nature and structure of the questions.

After the question items were prepared and tested in the pilot study, certain items were identified as unclear, ambiguous and difficult to interpret. Consequently, the researcher took steps to improve them.

Through obtaining varied opinions on the structure and wording of the questionnaire, the researcher hoped to attain an objective perspective in terms of identifying areas for improvement. In addition, the pilot study served to affirm the researcher of well-structured and well-phrased questions, resulting in increased levels of confidence in the questionnaire's ability to measure the desired criteria. Once the questionnaire had been designed and approved, the researcher had to decide on whom it would be completed by. Hence, the population and sampling frame was established.

4.3.2. Survey research

In this section, the population, sample, sampling methods and data collection procedures of the study will be examined, followed by ethical considerations and data analysis.

4.3.2.1. The population

A population may be defined as the larger pool of cases, elements or units from which a limited number of units will then be sampled. In order to define a population for the purposes of research, the researcher "specifies the unit being sampled, the geographical location, and the temporal boundaries of populations" (Neuman, 1997: 203). In this particular study, the population comprises all the Grade Eleven pupils in public high schools in the Coastal region of the Durban Metropolitan area. Although the population was confined to this region, due to practical limitations of time and money, a review of the literature revealed that research on career choice has not been conducted with scholars in public, integrated high schools in this area. Furthermore, the findings of the research would be more applicable to public schools in this area since the majority share similar racial demographics; comprising white, black, Indian and a few coloured scholars.

The researcher needed to obtain a sampling frame for the purposes of operationalisation the population. A sampling frame, defined as, "a specific list that closely approximates all the elements in the population" (Neuman, 1997: 203) was generated using a listing of all the public high schools in the Coastal region of the Durban Metropolitan area. This listing was generated from a larger list of KwaZulu Natal schools, obtained from the Department of Education.

4.3.2.2. Selection of the sample

Sampling may be understood as a "process of systematically selecting cases for inclusion in a research project" (Neuman, 1997: 201). There are a number of different types of sampling methods. They include probability sampling, such as simple random sampling, where the researcher "develops an accurate sampling frame, selects elements from the sampling frame according to a mathematically random procedure, and then locates the exact element that was selected for inclusion in the sample" (Neuman, 1997: 208) as well as non-probability sampling. The sampling process consisted of the following steps:

1. The first step was to select all the schools within the Coastal region of the Durban Metropolitan area from the KwaZulu Natal high schools listing. The restriction of the population to the Coastal region was essential due to the practical limitations of including schools that, due to their proximity, would be difficult to access. This list was then divided

into three separate lists of boys' high schools, girls' high schools and co-educational high schools (refer to Appendix A).

2. The schools in these lists were alphabetically arranged.
3. A probability sample of the schools was selected using simple random sampling. The researcher randomly selected the *second* school from each list.
4. Eighty Grade Eleven boys, eighty Grade Eleven girls and a mixed group of eighty Grade Eleven co-educational pupils were selected to complete the questionnaire, in the hope that one hundred and twenty completed questionnaires in all (at least half) would be returned. Since the purpose of the study was to obtain responses that were representative of the grade as a whole, the vocational guidance teachers selected classes for participation in the study that were believed to reflect the general perceptions of the entire grade.

Furthermore, the vocational teaching staff were familiar with the grading systems of the classes, and hence assumed responsibility for sampling pupils for participation. This sampling stage may be described as purposive sampling, since the two middle classes in the grade were selected with the specific purpose of gathering responses that would reflect the perceptions of the average or typical scholar, rather than those who were academically above or below average.

The researcher used a combination of probability and non-probability sampling techniques. While simple random probability sampling is considered the most accurate and precise method of probability sampling in that it enables the researcher to use a variety of statistical techniques to analyse the data, purposive non-probability sampling is deemed acceptable only in special situations where it "uses the judgement of an expert in selecting cases or it selects cases with a specific purpose in mind" (Neuman, 1997: 206). In this study, the vocational guidance teachers may be perceived as the 'experts' whose selection of classes was based on their objective of obtaining a sample that was representative of the entire grade.

An associated shortcoming of working with a sample size of one hundred and twenty is that the researcher is restricted in terms of the type and range of statistical analyses that may be conducted

with the data. Due to the moderate sample size, and the exploratory nature of the study, descriptive statistics were used to establish data patterns and observe relationships between variables. The drawing of firm conclusions was restricted to results obtained through cross-tabulations.

4.3.2.3. Demographic profile of the sample

The purpose of the demographic profile is to provide a basis for understanding differences encountered within the sample. An examination of the composition of the sample assists in the analysis of the scholars' perceptions, in that certain demographical patterns may help the researcher to understand differences amongst them. Five demographical categories will be discussed: age, race, gender, mother's occupation and father's occupation. These demographic categories are the independent variables within the sample. In other words, they explain any statistically significant relationships identified between them and the dependent variables. The dependent variables are those variables that need to be explained, such as scholars' perceptions of career choice and career information.

There may be significant differences within the sample in terms of scholars' perceptions of career choice and career information, which the study hopes to link to the independent variables of age, race, gender, and parents' occupations.

Respondents were asked to provide details about their age, race, gender and parents' occupations at the end of questionnaire. The researcher sorted these responses into appropriate categories, which were then coded and entered into the SPSS data analysis programme. These responses were then presented as frequency data, in the form of pie charts and bar graphs.

All percentages have been brought to the nearest decimal point. Hence the sum of the percentages of each chart may not consistently total to one hundred percent.

*Age range of the subjects

Figure 1 (refer to Appendix C) illustrates that forty-seven percent of the sample are seventeen years old, while forty-four are sixteen. Six respondents (five percent) are eighteen years old, while three respondents (three percent) did not answer the question. There was one respondent

who was extremely young for Grade Eleven, being fifteen years old, and one respondent who was, at nineteen, unusually old compared to the rest of the sample. Both respondents represented only two percent of the entire sample. The majority of the sample (ninety-one percent) is either sixteen or seventeen.

*Racial composition of subjects

When subjects were asked to report their race, forty-six percent of the sample indicated that they were white, while thirty percent reported they were black. Fourteen percent of the respondents indicated that they were Indian, while only five percent reported that they were coloured. A further five percent indicated that they did not wish to respond to this question, or merely left it blank. The two largest racial groups in the sample are whites and blacks consecutively, since almost half of the sample is white, and almost a third are black (refer to **Figure 2** in Appendix C).

*Gender composition of subjects

Subjects were also asked to indicate their gender. Fifty-three percent indicated that they were female, while forty-seven percent indicated that they were male. The sample was relatively controlled for gender, since the first forty responses were obtained exclusively from a sample of girls, and the second forty responses drawn exclusively from a sample of boys. The final forty responses were drawn from a mixed group of respondents from a co-educational high school, and thus it was assumed that this portion of the sample would bring about some degree of gender variability (refer to **Figure 3** in Appendix C).

*Occupational profile of subjects' mothers

The Occupations Finder, which has been revised by Holland (1985), and includes references to the Dictionary of Occupational Titles (D.O.T.), has been used to categorize the subjects' parents' occupations. Occupations are categorized according to Holland's RIASEC theory, which divides occupations along the following dimensions:

- **Realistic occupations** (skilled trades, technical, mechanical and some service

occupations, such as plumbing, fitting and turning, mechanical engineering)

- **Investigative occupations** (scientific and some technical occupations such as medicine, careers in biology and science, civil and chemical engineering)
- **Artistic occupations** (artistic, musical and literary occupations such as painting, acting, designing, decorating)
- **Social occupations** (educational and social welfare occupations such as teaching and counseling)
- **Enterprising occupations** (managerial and sales occupations such as law and accounting)
- **Conventional occupations** (office and clerical occupations such as data capturing, secretarial work and clerical bank work)

When subjects were asked to report their mothers' occupations, the following findings emerged from the data: **Figure 4** (refer to Appendix C) illustrates that forty-two percent of the subjects indicated that their mothers were in *social* occupations, such as teaching, nursing and homemaking, while twenty percent reported that their mothers were in *conventional* jobs such as secretarial or clerical work. Eighteen percent indicated that their mothers' were in managerial positions, categorized as *enterprising* occupations. Fourteen percent of the subjects did not respond to this question, reported that the question was not applicable to them, or indicated that their mother had died. Only three percent indicated that their mothers were pursuing *artistic* careers, while two percent reported that they held *realistic* occupations. A further two percent of the subjects indicated that their mothers were involved in *investigative* occupations, such as medicine.

*Occupational profile of subjects' fathers

Subjects were also asked to indicate their fathers' professions. Their responses revealed the following data: Forty-one percent indicated that their fathers were involved in *enterprising* occupations, such as management and sales, while twenty-three percent indicated that they had *realistic* jobs, such as electrical work, mechanical work or plumbing. Twenty-two percent of the respondents did not respond to the question, indicated that the question did not apply to them or reported that their fathers were retired or deceased. Ten percent indicated that their fathers were involved in *social* occupations, most commonly teaching or lecturing, while five percent cited

that they had *investigative* jobs, for example in medicine or science. Finally, none of the subjects reported that their fathers were involved in either *artistic* or *conventional* occupations (refer to **Figure 5** in Appendix C).

4.3.2.4. Methodological limitations

The use of purposive sampling in the study comprises a methodological limitation since the sample is less representative than if systematic probability sampling had been used. For example, if the researcher had obtained an alphabetical list of all the Grade Eleven pupils, randomly calculated a sampling interval, and from this point selected every second or third pupil on list for inclusion in the sample, the sample would have been highly representative of all the pupils in the grade. However, time constraints deemed this approach impractical.

The researcher considered coupling the use of these questionnaires with interviews conducted with vocational guidance teachers and / or focus groups with randomly selected Grade Eleven pupils. The purpose of these interviews and / or focus groups would have been to help the researcher gain further insight into some of the issues that were raised in the questionnaire items, and to gain the teachers' perspective regarding scholars' responses and perceptions of career-related issues.

While the purpose of the study was to obtain scholars' perceptions of career choice and career information specifically, obtaining the views of the vocational guidance teachers on this topic may have provided a more holistic perspective. If time and resources permitted, it would have been useful to consider the questionnaire data combined with data gathered via structured, directive interviews with the vocational guidance teachers of the participating schools.

The teachers' total control over the data collection procedure presented the researcher with both advantages and disadvantages. The major advantage was that the researcher did not have to take responsibility for personally administering the questionnaires, thereby saving on travel costs. However, the researcher yielded very little control over the data collection process, which was problematic for two reasons. Firstly, the researcher was unable to predict the exact date on which the questionnaires would be completed and returned for analysis, and secondly, the researcher could not personally respond to scholars' questions relating to the research, which may have served to motivate them to answer the questions more thoroughly and honestly.

4.3.3. Data collection procedure

This section deals with obtaining access to and cooperation with the schools, the structure of the questionnaire, the design of the questionnaire, and the advantages and disadvantages of using the questionnaire in the educational context

4.3.3.1. Obtaining access and cooperation

The researcher did not initially encounter much difficulty gaining access to the schools concerned. After telephoning the three schools and requesting an appointment with the principals, she was informed that it would be more appropriate to speak to the vocational guidance teachers directly. Co-operation was achieved in a number of ways:

- The researcher invited the teachers to thoroughly examine the questions alongside their colleagues and the principal before agreeing to participate. However, all stated that unless questions were not of a personal nature, this was not necessary.
- An effective means of ensuring the full involvement and commitment of the teachers was to point out some of the positive outcomes of the research, in terms of the way in which the school and the scholars would possibly benefit from it. The researcher agreed to provide the school with access to the information after analysis, and outlined some of the associated benefits of access to this type of information. Namely:
 - The information would provide teachers with a source of reference with regards to the different types of information sources to which students may be specifically receptive.
 - The information would offer teachers insight into the types of careers in which students show particular interest. The promise of feedback reinforced the give-and-take nature of the research, whereby those conducting the research and those participating in it both benefit in the long run. Furthermore, respondents' anonymity was assured, in the hope that scholars would respond honestly.

The researcher followed up the telephone calls with a formal letter, certified by the university, stating the purpose and nature of the study. The teachers suggested that it would be more efficient in terms of staff and student time if they, rather than the researcher administered the questionnaires to the pupils. Eighty questionnaires were delivered to each school, including clear instructions about the response format, and the approximate time it would take to complete. The researcher followed up on administration by telephoning the teachers every two weeks, since the vocational guidance teaching staff were in control of administering the questionnaires and ensuring that any queries relating to the questionnaires were dealt with. The researcher provided the teachers with the necessary instructions and access numbers to deal with any further data collection difficulties.

4.3.3.2. Questionnaire structure

A survey of scholar's perceptions of career choice and career information, which was administered in the form of a structured questionnaire, was conducted. The researcher developed the questionnaire independently; the reason being that the topic is centred on the exploration of perceptions, which is a relatively novel area of research within the educational context. Through information obtained from the literature review, specific variables, which aimed to tap into the existence of scholars' perceptions of career choice and career information, were established. These variables constituted the framework around which the questions were structured. In this way, the questionnaire was developed in accordance with the specific objectives of the research.

As was previously mentioned, the research methodology may be described as both quantitative and qualitative. The questionnaire comprised twelve questions in all. Nine were open-ended, fill-in type questions, and three were closed-ended questions, the responses of which were rated on a five-point scale. The purpose of the open-ended questions was to obtain a level of detail and depth into the scholars' perceptions, which would not otherwise be accessible through quantitative means. The content of the questions centred on the scholars' definition of 'a career', whether or not they had made a career choice, who or what influenced their decision, and so on (refer to Appendix B).

4.3.3.3. Questionnaire design

The questions were designed to help the researcher establish the different ways in which pupils perceive, understand, and therefore feel about deciding on a career and accessing career information. Hence, the researcher developed questions that reflected as accurately as possible the data to be gathered. Firstly then, the researcher needed to clearly establish the specific research questions. The relevant variables to be used were written down by name in order to clarify exactly what was to be measured (Tuckman, 1988).

The first step was to identify the variables that would offer some insight into the different ways in which scholars perceive, understand and feel about their career decision and accessing career information. These variables included:

- Scholars' conceptualisation of the term 'career'.
- Scholars' tentative career choices.
- Scholars' perceptions of career choice and career information (perceptions of when this choice should be made; reasons for their decision / indecision; influential factors that shape career choice; scholars perceptions with regards to the ideal age at which career guidance should begin).
- The behaviours that scholars had engaged in to learn more about their chosen career / careers of interest.
- The nature of the career information to which they had been exposed in terms of its usefulness and whether or not it is viewed as being gender and culture fair.
- Scholars' experiences of vocational guidance, including the role of teaching staff in their career exploration.

Once these variables were specified, the researcher chose a question format and response mode that would be most suitable in terms of answering the research question(s); thereby gathering only the relevant and essential information. The researcher was careful to avoid the types of questions that may have prompted boredom, irritation and confusion, and always attempted to predict the kinds of responses each question was most likely to elicit.

*Question format

Direct questions and indirect questions were used (refer to Appendix B). Direct questions were included to obtain specific, factual information, while the purpose of the indirect questions was to obtain information about the attitudes, opinions and perceptions of the scholars. Most of the questions were specific rather than non-specific, as the majority of information required was of a general and non-personal nature. Hence, the researcher did not perceive a necessity for cleverly worded questions in order to obtain honest responses from the scholars. The researcher also used a combination of fact-oriented questions, for example, whether or not scholars had chosen a career, as well as opinion-oriented questions to gather data, in order to gather their opinions and perceptions of the usefulness of the information, as well as the degree to which it was gender and culture fair.

The questionnaire was comprised of predetermined questions with one response-keyed or contingency question (Baker, 1988). The contingency question hinged on the scholars' response to the previous question, which asked whether or not they had decided on a career (refer to Appendix B). The researcher was careful to ensure that all questions were gender and culture fair. Hence, questions were equally applicable to both male and female respondents, none of which were underpinned by racial or cultural stereotypes.

*Response format

The questionnaire was comprised of open-ended, fill-in type responses and three closed-ended scaled response-type questions. While open-ended questions allow for attitudes, opinions and perceptions of the respondents to emerge from the data, they require more effort and thought than closed ended questions, and thus are often left unanswered. They are also difficult to code. While closed-ended questions were useful for gathering ordinal data, such as age, race, and gender, and factual data, such as whether or not scholars had made a career choice, open-ended questions were necessary in order to gather data about the individuals' perceptions and attitudes, which is the primary purpose of this study (Baker, 1988).

A structured five-scale response format, in the form of likert scale, was used to establish the degree to which scholars found career information to be useful generally; and useful in terms of it being

culturally and gender neutral. Scholars were asked to rate this degree of usefulness according to the following likert scale:

5 = Very useful

4 = Useful

3 = Unsure

2 = Not useful

1 = Not useful at all

A response format combining open-ended and closed-ended questions allowed the researcher to obtain honest answers while at the same time ensuring that they were succinct in order to facilitate sorting and coding at a later stage.

4.3.3.4. Advantages and disadvantages of the questionnaire

While the questionnaire possesses many advantages as a data-gathering tool, it is not without its limitations. It was important for the researcher to develop an awareness of the strengths and weaknesses of the questionnaire, in order to maximise its effectiveness with regards to gathering the relevant and specific data about scholars' perceptions for the purposes of meeting the research objectives.

The questionnaire helped the researcher gain access to the scholars' perceptions, by questioning them, as opposed to observing them and sampling their behaviour. The questionnaire enabled the researcher to measure "what a person knows (knowledge or information), what a person likes and dislikes (values and preferences), and what a person thinks (attitudes and beliefs)" (Tuckman, 213: 1988). The researcher was then able to translate this data into numbers or quantitative data by calculating the number of people who gave certain responses, thereby generating frequency data.

There were a number of specific advantages of using a questionnaire to gather data from school pupils. Firstly, large numbers could complete it with little or no assistance, and secondly, the questionnaire was the most economical way in which to collect information in terms of staff time. Thirdly, since the anonymity of the respondent was assured, the researcher was able to obtain personal data from the pupils without them having to divulge this information to their peer group. Fourth, the questionnaire may provide researchers and guidance counsellors with valuable cross-

sectional data that will enhance the effectiveness and efficiency of interview sessions at a later stage. Furthermore, if the questionnaire data is combined with other sources of information, certain data patterns may be reinforced and clarified, which is helpful in terms of assisting the ongoing developmental patterns of pupils (Peters and Farwell, 1968).

However, a number of problems were experienced when working with the questionnaire. The first problem was that respondents were given a choice as to whether or not to cooperate. As a result, many questionnaires were returned unanswered or incomplete. Secondly, respondents may have not consistently answered the questions honestly and truthfully, out of a desire to respond in ways they felt the researcher would want them to. Thirdly, since scholars may not always be certain of how they feel and think, their responses may have reflected this uncertainty in their inconsistency. In view of these disadvantages, the validity and reliability of the data may have been put to question.

When designing the questionnaire, the researcher had to keep in mind that the validity and reliability of the questionnaire was dependent on the extent to which questions may encourage respondents to show themselves in a positive light, the extent to which they may prompt respondents to try to anticipate the kind of knowledge the researcher is attempting to obtain, and the extent to which the questions may require information from the respondents that they may not know (Tuckman, 1988).

In view of the advantages and disadvantages of the questionnaire, the researcher considered its applicability to the study at hand, and concluded that in terms of time, money and magnitude of the study, it was the most appropriate method for the purposes of meeting the research aims. Goldman (1978) reinforces the effectiveness of the questionnaire as a data-gathering tool in schools. He proposes, "In studying such topics as vocational maturity, vocational interests and vocational values, job scales and questionnaires are particularly appropriate" (Goldman, 1978: 330).

4.4. Ethical considerations

Research ethics are the cornerstone of all good research, and hence the researcher ensured adherence to ethical practices at all times. Research intentions were communicated clearly and honestly in order to gain access to the schools and obtain teachers' and scholars' trust and cooperation. The researcher also ensured that the questionnaire was free of gender or racial

stereotypes, since questions were not based on racial or cultural assumptions and were equally applicable to both male and female respondents (refer to Appendix B).

4.5. Data analysis

Both quantitative and qualitative data analysis techniques were used. Initially, qualitative methods were used to sort and code the answers to the structured, open-ended questions into appropriate response categories. Thereafter, this information was analysed using quantitative data analysis. The researcher used a computer to analyse the data, with the application of the SPSS 9.0 for Windows data analysis programme.

4.5.1. Qualitative data analysis

Before the data could be entered into the computer, it had to be converted into a form that the computer would be able to read and process. For this reason, the raw data was organised and analysed in a specific manner for presentation in the form of charts and graphs to summarise its characteristics. Hence, the researcher was able to attribute theoretical meaning to the results obtained (Neuman, 1997).

The first step of quantitative data analysis undertaken was to code the raw data, or to "systematically reorganise raw data into a format that is machine readable" (Neuman, 1997: 295), and hence, coded responses were matched with specific numbers. Since most of the questions in the questionnaire were fill-in type questions and could not be pre-coded, a codebook was created on obtaining the completed questionnaires.

The researcher's coding strategy consisted of developing a set of categories based on the responses themselves. Responses for each of the fill-in questions were examined and listed, after which different themes were developed and appropriate categories constructed. An average of five to six categories were developed for each fill-in question, although some were further divided or collapsed as the categorisation process progressed.

4.5.2. Quantitative data analysis

After all responses were labelled, categorised according to themes and coded, they were ready for computer entry and analysis. Due to the moderate sample size of one hundred, descriptive statistics were used to analyse the data. While statistics are defined as "a tool concerned with the collection, organisation and analysis of numerical facts or observations, the major concern of descriptive statistics is to present information in a convenient, usable and understandable form" (Neuman, 1997: 294). The following statistical procedures were used:

- Frequency distributions in the form of bar graphs and pie charts to describe the sample.
- Cross-tabulations with Chi-square analysis. Chi-square analysis established whether or not there was a statistically significant relationship between the variables, thereby allowing the researcher to make inferences about relationships between variables.

Pie chart, bar graph and tabled percentages have been brought to the nearest decimal point. Thus the sum of the percentages may not consistently total to one hundred percent.

4.6. Summary

The chapter has examined the research approach and methodology used in the study. It has also outlined the relevant data collection and analysis procedures, as well as some of the ethical issues that require consideration when conducting research in the educational context. In order to ensure valid and reliable results, it was imperative for the researcher to select the most appropriate research methods and apply them meticulously.

CHAPTER 5

PRESENTATION AND INTERPRETATION OF RESULTS

5.1. Introduction

The next step of the research process requires that the concept of perceptions and their relationship to behaviour and decision-making be operationalised. This will be achieved by empirically testing the perceptions of the target group (the Grade Eleven pupils) with regards to career choice and career information.

The chapter presents and discusses the results of the fill-in questionnaire. The researcher used the SPSS 9.0 statistical analysis programme for Windows to describe and analyse the data. Pie charts and bar graphs were used to describe the data. The data was both nominal and ordinal, thus enabling the researcher to identify general trends as they emerged from the different responses reported by subjects. Inferences will be tentatively made since descriptive analysis does not allow firm conclusions to be drawn from the data.

In the second half of the chapter, cross-tabulations and Chi-square statistical analyses were employed for the purposes of establishing the existence of bi-variate, statistically significant relationships between the independent variables of age, race, gender and parents' occupations, and the dependent variables; which are the respondents' perceptions of career choice and career information. The theoretical framework of the dissertation underpins much of the analysis within this chapter.

As previously stated, all percentages have been brought to the nearest decimal point. Hence the sum of the percentages of each chart may not consistently total to one hundred percent.

5.2. Frequency data

The findings of the frequency data will be analysed under a number of main themes that are consistent with the research objectives. A number of these primary themes are sub-divided into secondary themes to facilitate a more rigorous exploration of certain areas of subject perceptions.

The primary themes are as follows:

- Subjects' conceptualisation of the term 'career'.
- Subjects' tentative career choices.
- The ways in which Grade Elevens' perceptions of career choice and career information affect their behaviour with regards to choosing a career and accessing career information.
- Subject's perceptions of the usefulness of career information and the extent to which it is free of gender-role and cultural stereotyping.
- The effectiveness of the schools' role in providing holistic vocational guidance.

This thematic structure will now be used to present and discuss the tentative findings of the frequency data.

5.2.1. Subjects' conceptualisation of the term 'career'

When subjects were asked to define the term 'career', twenty-eight percent of the sample reported that they perceived a career as 'the job you pursue after school', and twenty-seven percent viewed it as 'a life-long job, enjoyment and earnings'. Twenty percent perceived a career as 'responsibility, opportunities or as a lifestyle and goal', and for fifteen percent of the respondents, a career was viewed simply as a means to earn money. Eight percent of the respondents reported that a career meant 'happiness and success', while three percent either did not answer the question or offered other responses that did not fit into any of the afore-mentioned categories (refer to **Figure 6** in Appendix C).

The responses of twenty-eight percent of the sample who perceived a career as 'the job you pursue after school', indicate a rather vague and limited conceptualisation of the term 'career', while the twenty-seven percent who viewed it as 'a life-long job, enjoyment and earnings' reflect a more concrete and tangible perception of the concept; as a job for which one earns extrinsic rewards (earnings) coupled with intrinsic rewards (enjoyment).

However, in addition to holding a concrete and tangible conceptualisation of the term 'career', it is evident that this twenty-seven percent have a naïve and distorted view of the concept. Technological changes will continue to shape and transform the majority of careers. These

technological changes may trigger a demand for new types of careers, while others are phased out (Castells, 1996; Zunker, 1998). Thus the concept of the career in the present and future must be realistically viewed as a series of different occupations or as an occupation wherein lifelong learning is a critical factor (Sharpes, 1994).

In view of the fact that twenty-seven percent of the subjects hold a distorted view of careers, vocational guidance programmes conducted by teachers as well as the content of career information that is produced for use in schools must focus on redefining the career as a dynamic and changing concept. This will ensure that scholars plan their careers with an emphasis on acquiring the skills of flexibility, adaptability and critical thinking.

With reference to the twenty percent who described a career as 'responsibility, opportunities or as a lifestyle and goal', their responses indicate a more sophisticated and complex understanding of the issues related to the concept, instead of a concrete perception as was reflected in the two aforementioned groups of responses. Responsibility, opportunities, lifestyles, and goals are abstract concepts that define the activities and roles of the individual involved in a career rather than a career itself. These responses indicate a level of career maturity, and career identity development, which enables adolescents begin to forge a realistic role and identity for themselves in the working world (Drummond and Ryan, 1995), as is evident in the following response: "*[A career means] independence from your parents, and working to support yourself. It is also a big step towards adulthood*".

For fifteen percent of the respondents, a career was perceived exclusively as a means to earn money. Once again, as in the first two groups of responses, the responses of this group indicates a superficial and simple understanding of the term; as a means to an end of earning extrinsic rewards (money). Alternatively, this response may be borne out of a fear of financial insecurity within the context of South Africa's turbulent economy. Drummond and Ryan (1995) and Zunker (1998) suggest that implicit values such as security are often at the forefront of adolescents' minds when considering career options, and at times, so much so that these values begin to define their personal understanding of the term 'career'.

Eight percent of the respondents perceived a career as 'happiness and success'. While this response focuses on intrinsic rather than the material rewards of a career, it seems to reflect an

optimistic and idealistic notion of the concept, while ignoring some of the more realistic and sometimes negative aspects related to most careers.

Three percent (four subjects) either did not answer the question or offered pessimistic responses such as “*don't know, don't care*”. Subjects who chose to dismiss the question in such a way may perceive the issue of career choice as a threat to their self-identity. Erikson (1965, in Drummond and Ryan, 1995) suggested that such individuals postpone this decision until a later stage, in order to allow extra time to explore career options and make an appropriate choice. However, if the inner conflict related to career choice is not resolved during this time, individuals may develop a negative career identity and begin to behave in destructive and defiant ways, such as theft and vandalism (Drummond and Ryan, 1995). These individuals require encouragement to become motivated to explore career options in which they show interest and ability, rather than being forced to pursue careers in which they have no interest or aptitude for.

5.2.2. Subjects' tentative career choices

The Occupations Finder, which has been revised by Holland (1985), and includes references to the Dictionary of Occupational Titles (D.O.T.), has been used to categorise the subjects' parents' occupations. The six occupational categories, detailed in Holland's RIASEC theory, have been discussed in the methodology (refer to Chapter 4).

When subjects were asked which career they wanted to pursue, twenty-seven percent reported that they had not yet chosen a career. Of the seventy-three percent who indicated that they had made a career choice, twenty-three percent reported that they had chosen a career within the *investigative* occupations, for example medicine, science or engineering. Sixteen percent reported an interest in artistic occupations, such as graphic design or interior decorating, while fourteen percent indicated that they wanted to pursue a *realistic* career, such as plumbing, mechanical or electrical work. Eleven percent of the subjects reported that they had selected a career within the *enterprising* occupations, which includes careers that require management or sales skills. Nine percent indicated that they chose a *social* occupation, for example teaching, counselling or psychology. Finally, none of the subjects reported a career choice within the *conventional* occupations, such as clerical or secretarial work (refer to **Figure 7** in Appendix C).

Since over one quarter of the subjects indicated that they had not yet chosen a career, this indicates that many students in the sample have not taken the step to match their abilities and interests with a suitable career choice.

The data obtained from the eighty-eight subjects who had decided on a career revealed that the most popular career choices were categorised within the *investigative* occupations. The careers reported ranged from chemical engineering, biochemistry, marine biology, eco-tourism, computer programming, to food technology, most of which, according to Holland (1985), require college or university training.

A relatively high interest in careers within this field may indicate a desire for status and wealth, which research has shown to be a significant factor influencing career choice. This tentative assumption may support the results of an American study which suggested that high school seniors were very conscious of the varying statuses of different jobs, and therefore that counsellors needed to consider integrating prestige and social status information with traditional occupational data (Parker et al, 1995). Since the majority of *investigative* occupations require advanced university qualifications, subjects must consider whether or not their choices are realistic, in terms of whether their scholastic ability and their interests match the requirements of their chosen career.

Besides the wealth and status attached to the *investigative* careers, the market demand for certain careers within this category, such as computer programming, may be a powerful factor shaping career choice, since market demand is related to job security. This assumption is supported by a South African study that examined students' motives with regards to career choice. The responses of 600 first-year university students to a questionnaire suggested that course and subject choices are based primarily on job opportunities, and thereafter interest and personal satisfaction (Behr, 1987).

Careers within the *artistic* category, which included acting, singing, graphic design and music, were the second most popular choice of subjects. A tentative assumption that emerges from this data is that for these students, interest and personal satisfaction are a primary motive directing career choice. Research conducted in the Soviet Union supports these assumptions, since the findings of one particular study suggest that student interests are the primary motivation directing career choice (Demidenko, 1990).

None of the subjects indicated a choice of career within *conventional* occupations, such as secretarial or clerical work. A lack of interest in these occupations may be a result of negative feedback from parents with regards to this type of work, since the frequency data referring to the subjects' mothers' occupations reveals that twenty percent are involved in *conventional* careers (refer to **Figure 4** in Appendix C). Subjects' choices, since they are still tentative, may be idealistic at this stage. In support of this assumption, research conducted amongst American adolescents revealed that they "often have unrealistic occupational ideals in that the job opportunities available to them do not match their expressed interests" (Conroy, 1997).

Overall though, the results indicate a wide range of career choices, with over one quarter of the subjects not having made a career choice, suggesting a lack of identification with a life-role, while just under one quarter have selected relatively idealistic careers of an investigative nature. Assumptions regarding the motivation of subjects with reference to their choice of particular types of careers are varied and inconclusive.

5.2.3. The ways in which Grade Elevens' perceptions of career choice and career information affect their behaviour with regards to choosing a career and accessing career information

The ways in which Grade Elevens' perceptions of career choice and career information affect their behaviour in terms of choosing a career and accessing career information is a primary theme which, for the purposes of conducting a rigorous exploration of subjects' perceptions, are divided into a number of sub-themes. They are as follows: subjects' perceptions of when a career choice should be made, the time at which a career choice was made, the behaviours engaged in by subjects as a follow-up to career choice, the perceived factors influencing career choice, the behaviours engaged in by subjects who had not yet made a career choice, and their perceived reasons for their indecision. The findings will be presented and discussed under the aforementioned sub-themes.

5.2.3.1. Subjects' perceptions of when a career choice should be made

When subjects were asked to indicate when they thought a career choice should be made, fifty-eight percent indicated that the most appropriate time to decide on a career was during high school, while eighteen percent reported that a decision should be made only when one 'knows oneself'. Ten percent of the subjects felt that a career choice should be made when one is finished high

school, and eight percent indicated that there is no specified time at which an individual should decide. While four percent indicated that the decision should be made during primary school, three percent reported that a career choice should be made when one decides whether or not to study further (refer to **Figure 8** in Appendix C).

Erikson (1968 in Drummond and Ryan 1995) suggested that between the ages of twelve and eighteen, adolescents are forced to make choices that will assist them in forging a personal identity, to avoid confusion mounting with regards to their future roles. Drummond and Ryan, (1995: 115) support this idea, emphasising that “it is vital that they develop skill in self-evaluation and tie it to knowledge of the world of work”. Since the majority of the respondents (fifty-eight percent) indicated that the most appropriate time to decide on a career was during high school, it is evident that formulating tentative but realistic career plans is a priority for them. The data also suggests that since the majority of the subjects have formulated tentative career plans (seventy-three percent), as documented under Section 5.2.2, they are attempting to shape some kind of identity for themselves, thereby avoiding the negative effects of role confusion.

Eighteen percent of the subjects reported that a career decision should be made only when one ‘knows oneself’. For example, one subject explained that a career choice should only be made “*when you can think for yourself and can see and acknowledge what really interests you*”. These responses echo Drummond and Ryan’s (1995: 115) advice to adolescents choosing a career: They need to “know themselves, their capabilities and limitations, develop a positive self-concept, and identify their interests, aptitudes, values, and achievement”. These abstract responses suggest that a significant amount of thought has been given to this issue, indicating a career maturity that is lacking in the rest of the sample. These responses may also have been informed via consultation with parents, teachers, or career information.

According to **Figure 8**, ten percent of the subjects reported that a career choice should be made when one is finished high school. Eight percent indicated that there is no specific time at which an individual should decide. For example, some subjects felt that this decision changes over time: “*It changes regularly, from primary school where you want to be a ballerina, through to matric*”. Others explained: “*at different times, people choose what they want to become. Some choose when they are young and stick to it, and others (like myself) don’t really know what they want to do until they get to about Grade 10 or 11*”. As with the previous group of responses, these suggest an abstract level of interpretation. It is also evident that the issue of *when* one chooses a career has

been viewed in a more holistic manner, since the responses reflect a consideration for the effects of the decision within the life context of the individual.

A lower percentage (four percent) felt that the decision should be made during primary school, which may indicate idealistic career expectations. Only three percent reported that a career choice should be made when one decides whether or not to study further. As one subject explained: "*You can make your decision when you begin high school, but when you further your studies, that's when you choose the best occupation suited to you*". The data suggests that this three percent are rationalising their indecision by citing this excuse, thereby avoiding the stress of having to confront the issue (Drummond and Ryan, 1995).

5.2.3.2. Time at which career choice was made

Subjects who indicated that they had made a career choice were asked when they had made this decision. Of the seventy-three percent who indicated that they had made a career choice, forty-seven percent reported that they made this decision in Grade Ten, while twenty-three percent reported that they had made this decision either in Grade Eight or Nine. Fourteen percent reported that they had made this decision in Primary School, while thirteen percent indicated that they had done so in Grade Eleven. Five percent reported other responses that did not fit into any of the afore-mentioned categories (refer to **Figure 9** in Appendix C).

Almost half of the subjects indicated that they had made a career choice in Grade Ten. The validity of these findings are reinforced by the responses documenting subjects' perceptions of when a career choice should be made (refer to Section 5.2.3.1.), whereby the majority (fifty-eight percent) indicated that a career choice should be made during high school. These responses may in part be due to the fact that most scholars are required to choose subjects to carry through to Grade Twelve at this stage. Having to decide on these subjects would obviously prompt them to consider their future career, and the way in which these subjects would complement it or supply the pre-requisite subjects needed for tertiary studies. Almost a quarter of the group (twenty-three percent) indicated that this decision had either been made in Grade Eight or Nine, while thirteen percent claimed they had made a career choice in Grade Eleven.

The data discussed thus far is consistent with the theory underpinning Super's Developmental Stages. According to this theory, the sample would be undertaking the *crystallisation* task (ages

fourteen to eighteen), where they would be engaged in a cognitive process of developing a career plan and considering the different ways of implementing this plan. Crystallisation also involves researching career information, with the aim of obtaining the relevant knowledge associated with their tentative choice (Drummond and Ryan, 1995).

Fourteen percent of the subjects indicated that they had reached a decision as early as primary school. It is likely that subjects claiming to have made a decision at such an early stage had in reality not finalised their decision at this point. Rather, it is more probable that they had expressed an interest in a particular career at a young age, and had thereafter sought a limited amount of career information that served to confirm their interest in this career. This assumption is supported by two decision-making theories. Firstly, the Satisficing Model suggests that certain individuals may “choose the first solution that is ‘good enough’; that is, satisfactory and sufficient” (Robbins, 1996: 150), while the Implicit Favourite Model describes the process “where the decision maker implicitly selects a preferred alternative early in the decision process and biases the evaluation of all other choices” (Robbins, 1996: 152).

Five percent of the responses were categorised as ‘other’ responses in order to avoid forcing them into an inappropriate category. This category included comments such as: “*I grew up with the influence of my father whose dream rubbed off on me*”; “*When I realised I could draw quite well*” and “*when I realised how much I enjoy working with people, solving their problems and listening to them with an open mind*”. It would seem that these subjects have associated the timing of their choice with the realisation of personal ability or interest in a particular activity, rather than with their chronological age.

5.2.3.3. Behaviours engaged in by subjects as a follow-up to career choice

Subjects who indicated that they had made a career choice were asked what they had done to follow up on this choice. Thirty percent reported that they had chosen career-related subjects in Grade Ten, while twenty four percent indicated that they had researched career information to further their knowledge of their chosen career. Twenty-one percent reported to have researched career information, chosen the appropriate subjects, or gained work experience in their chosen field. Ten percent reported to have gained work experience or organised apprenticeships to begin once they had finished high school, and seven percent indicated that they had set up the relevant

contacts that would help them to jump-start their careers. A final seven percent reported to have done nothing at all (refer to **Figure 10** in Appendix C).

Thirty percent claimed that their primary means of following up on their choice was through choosing career-related subjects in Grade Ten, and by ensuring that consistently high grades in these subjects were maintained. This activity does not seem to indicate an active attempt on the part of these subjects to increase their knowledge of career information. Rather, it suggests a more passive approach directed at ensuring that career options consistent with their interests and abilities remain open to them.

Almost one quarter (twenty-four percent) of the subjects indicated that they had researched career information to extend their knowledge of their chosen career. Galotti (1999) suggests that scholars who expose themselves to large amounts of career information often experience higher levels of anxiety related to their choice, while those who limit their choices experience lower levels. It is nevertheless imperative that students consider as many options as possible, and become comfortable with researching large amounts of career information, which over one quarter of the subjects have done.

The responses of the twenty-one percent who reported that they had researched career information, chosen the appropriate subjects, or gained work experience in their chosen career field, suggest that a considerable effort on the part of this group of subjects has been made to extend their knowledge of careers.

Ten percent of the subjects mentioned that they had followed through on their career decision through gaining work experience or organising apprenticeships to begin on completion of Grade Twelve. Scholars who have sought work experience in their chosen career field indicate that they have taken proactive steps to help them confirm or reject their tentative career choices. According to Drummond and Ryan (1995), the value of realistic job previews lies in the fact that they enable scholars to view the way in which people operate in their professions on a daily basis. Field trips and job shadowing allows scholars to catch a first-hand glimpse of this reality.

Seven percent indicated that they had set up the relevant contacts with influential people as a means of helping them to establish their careers. In support of this approach, Drummond and Ryan (1995) explain that while printed information is valuable in helping students to establish a career

choice, people who are familiar with the occupation of interest are one of the richest and most valuable sources of career information.

The final seven percent of the subjects admitted that they had done nothing in terms of taking practical steps to realise their career aspirations. It is possible that this seven percent selected a career based on others' expectations of them instead of on their own interests, or that they dishonestly claimed to have made a career choice in an attempt to avoid the pressure and anxiety associated with having to explain to peers, teachers and parents their reasons for not having made a career choice.

5.2.3.4. Perceived factors influencing career choice

When subjects were asked to identify who or what encouraged them to make this career choice, forty two percent reported that one or more family members had helped them to decide. Forty percent of the respondents indicated that they had made this decision entirely on their own, while thirteen percent reported that their decision was shaped either by work experience, or advice from friends and others, such as teachers. Six percent reported other responses that did not fit into any of the afore-mentioned categories (refer to **Figure 11** in Appendix C).

The results of a South African study conducted by van der Peel (1997) are relevant with regards to the forty-two percent of subjects who indicated that family members had helped them to decide on a career choice. The findings suggested that variables such as the educational level of the father, the occupational category of the father, parental attitudes towards the individual's studies, financing of study costs, the place of residence during the school-going period, family independence and personal freedom had a significant impact on career maturity. The results of the study suggest that parental involvement, or lack of involvement in the career choice of adolescents significantly impacts on the final decision taken (van der Peel, 1997).

While parental and family interest in an individual's career choice may be a positive factor in terms of encouraging them to further their career search, parents who strongly urge their children to pursue certain careers or who force their opinions may stifle their children's real interests and discourage them from choosing their preferred option. The issue of career choice may possibly become the cause of family conflict, as many parents may feel that since they will be paying for their children's

education, they have a right to assert their ideas in terms of what they feel the best career for their child would be.

Some responses indicated that subjects had accepted the advice of family members with the perception that the family's opinions and expectations take precedence over their own career aspirations, as is evident in the following responses: *A combination of family and relatives [helped me decide on my career choice] – I finally decided I would take their advice as they know what's best for me*"; and *"My parents, who believe that a trade is a good line of work and my uncle who will be employing me [helped me decide]"*.

These responses indicate that the subjects have not claimed ownership over their career choice, and instead have assumed a passive approach by allowing others to make the choice for them. In this way, the subjects are freed of the responsibility of thorough self-assessment of their strengths and weaknesses. This kind of response could also indicate low self-esteem and a need for familial affirmation for fear of rejection. Furthermore, by allowing others to take responsibility for life-shaping decisions, the practical difficulties of finding a job (interviews, applications) are eliminated. For example, one subject admitted that *"[His] uncle, the owner of the business"* had encouraged him to pursue a particular career.

Drummond and Ryan (1995) suggest that adolescents gain an awareness of their decision-making styles in order to understand the way their perceptions have shaped, or may shape their career choice. This particular group of responses indicates that the decision has been based on the expectation of parents or other significant adults. Hence, career choice is perceived as a decision that must be made in order to please others or avoid criticism and disapproval.

Other responses in this category suggest that subjects have made a career choice based on a desire to fulfil a deceased parent's wishes for them, as well as a nostalgic desire to maintain a sense of contact with their parent through their career, as the following responses indicate: *"My dad (now deceased) was a doctor and encouraged me to do the same, but better"*; and *"I want to do the things my father did when he lived. Being a pilot was one thing he loved about his career"*.

A final grouping of responses within this category involves subjects who seem to have made the career decision alone, although parents may have provided confirmation and encouragement. One subject explained: *"My parents have encouraged me all the way, and I am very glad about that."*

My family and friends support my decision as well", while another said: *"I decided mainly by myself but my family have always said I should be a teacher"*. These responses indicate that the career choice is based on an analysis of career options that are consistent with personal interests, thus indicating the perception of career choice as a logical decision (Robbins, 1996).

The responses of the forty percent who reported that they had made a career choice entirely on their own indicate that these subjects have claimed ownership over their career choice and hold a strong belief that the choice is theirs alone, at the cost of rejecting career information as well as input from others who may have encouraged them to explore further career options. For example, one subject explained: *"I encouraged myself – I will have the willpower and I will succeed to achieve my ultimate goal"*. Another responded in a similar vein: *"Nobody [helped me decide], I made this choice myself"*. These responses indicate that career choice is perceived in a logical way, although they also suggest that the process is perceived as being directed by intuition and inevitability; in other words, a 'feeling' of what is right, as documented by Robbins (1996). While this type of response may indicate a high level of career maturity, it may also indicate a fear to consider other people's ideas and advice that may cause adolescents to develop uncertainty toward their choice, and hence increased levels of anxiety (Drummond and Ryan, 1995).

Thirteen percent of the subjects indicated that other factors, in addition to people specifically, had encouraged them to pursue their career choice. These included a combination of work experience and / or friends and others, such as counsellors and teachers.

Finally, six percent offered responses that did not fit into any of the aforementioned categories. These responses did not exclusively refer to people as an influential factor that shaped their career choice. Influential factors that shaped their perceptions toward certain jobs and consequently their decision-making process included firstly, the increased earning power of some jobs compared to others. One subject explained that *"the money in it"* encouraged him to arrive at his career choice, and another explained that he wanted to enter the field of computers due to *"the fact that many people who do computers are multi-billionaires"*. These responses are consistent with Parker's (1995) research results that suggest that American high school seniors are very conscious of the varying statuses of different jobs. They also indicate the existence of the perception that career choice is an emotional decision, in that the choice is underpinned by desires and rewards (Drummond and Ryan, 1995).

Other subjects in this category indicated that they had chosen a career based on their perception of careers as constructed by the media. For example, one subject said that a decision to pursue acting was prompted by *"the comedy movies that [he] watch[es] and the way [he is] good at drama at school"*. Another explained that *"there was this TV show that spoke about career options and one of them was on food technology, and then [she] knew that this was the career for [her]"*.

5.2.3.5. Behaviours engaged in by subjects who had not yet made a career choice

Subjects who indicated that they had not yet made a career choice were asked to detail their efforts undertaken to explore possible career paths. Thirty-one percent indicated that they had made an effort to explore career information, while twenty-eight percent reported that they had made no real effort, or gave other responses that did not fit into any of the coded categories. Twenty-five percent indicated that they had undergone work experience and had conducted an exploration of career information, while thirteen percent said that they had listened to advice from parents, teachers or other significant people. Three percent indicated that they had attended University or Technikon Campus open days to further their exploration of careers (refer to **Figure 12** in Appendix C).

A variety of responses emerged from the thirty-one percent who indicated that they had explored career information in order to find out more about careers. For example, one subject explained that he had *"gotten information from a career guidance counsellor"*, while another said that he had *"been looking into computer programming and technology"*. While over one quarter (twenty-eight percent) explained that they had made no real effort to further their career search, or gave other vague responses, such as: *"I have tried to think of a career which will enable me to use my art talent"*, only seven percent of the subjects who had chosen a career, reported that they had made no effort to expand on their career search (as documented under Section 5.2.3.3).

These results highlight the differences in behaviour, and perhaps the motivation levels, between those subjects who had made a career choice and those who had not. They may also reinforce the value of making tentative career plans at high school, thereby ensuring the formulation of a positive self-concept. This positive self-concept is instrumental in shaping subjects' perceptions of career choice and career information. Consequently, these perceptions shape their motivation and their behaviour with regards to career exploration (Drummond and Ryan, 1995).

Lee and Ekstrom (1987) evaluated student access to guidance counselling and career information in American high schools, and found that guidance counselling is not equally available to all high school students, especially students from families of low socio-economic status. While one cannot automatically assume the continuation of these trends in South Africa, the data suggests that over one quarter of the sample have not taken any steps to further explore their career of choice. These results may possibly be due either to a lack of motivation or difficulty in obtaining information. However, all the schools sampled included career guidance as part of their curriculum (refer to Section 5.2.5.1.), which suggests that information is readily available to scholars who wish to use it.

Since twenty-five percent indicated that they had explored career information and become involved in work experience opportunities organised by the school, one may conclude from the data that one quarter of the students have developed a healthy level of career maturity, as well as formulating a positive career identity, in that they have assumed an active role in developing their knowledge of careers as well as exposing themselves to the day-to-day reality of a job. Work experience also adds a practical dimension to their career knowledge (Drummond and Ryan, 1995).

Thirteen percent claimed that they had sought the advice of parents, teachers or other people involved in their career of interest. For example, one subject explained: *"I have been asking people about what they do and whether they enjoy it, and have been trying to piece together what I would really like to do when I grow up"*. While seeking the advice of others who have had first-hand career experience is an extremely valuable source of career information, Drummond and Ryan (1995) suggest that subjects do not obtain as accurate a view as they do through work experience opportunities.

For those students who have not yet made a career choice or who are considering a number of options, Galotti (1999) suggests that educators need to reassure and encourage them to continue to engage in effective decision-making processes that reflect critical thinking.

5.2.3.6. Subjects' perceived reasons for their indecision

Subjects who indicated that they had not yet made a career choice were asked to give the main reasons for their indecision. Thirty-one percent cited the main reason as being that they were unsure about which career they would excel in or enjoy, while twenty-eight percent reported that there were too many choices which made it difficult to select a single career. Twenty-two percent

indicated that they had not made a decision primarily because they were not thinking of the future yet or because they felt that they were too young to make such a life-shaping decision. Six percent reported that they lacked motivation, while a further six percent indicated that they had not yet made a career choice because they wanted to be an entrepreneur. The final six percent either did not respond to the question, or cited that they were unsure of a response (refer to **Figure 13** in Appendix C).

Of the thirty-one percent who cited the main reason for their indecision as uncertainty with regards to the career in which they would excel in / enjoy, typical responses were as follows: *"I don't know what I'll really be good at and what I would love to do for the rest of my life;* and *"It's a choice I'll have to live with for the rest of my life – this is a bit scary. It's a bit difficult if you don't know what you are capable of doing".*

A dominant, yet erroneous assumption underpinning the responses discussed thus far is that of a career as a life-long, stable occupation, that necessitates a single decision during adolescence (refer to Section 5.2.1.). Sharpes (1994) emphasises that the youth need to dramatically change their attitudes toward career choice if they are to cope with the changing and dynamic world of work. Furthermore, these responses may be interpreted in terms of the decision-making styles employed and the ways in which certain perceptions have shaped the decision (or lack thereof). The responses, especially those indicated in the examples, suggest that the process of career choice is perceived as an emotional decision, with a focus on one's feelings in terms of the fear surrounding it, or in terms of what is perceived to be personally desirable and rewarding (Drummond and Ryan, 1995).

A further twenty-eight percent indicated that there were too many career choices available to them, which made it difficult to decide, as one respondent explained: *"There are too many choices out there and I'm not sure about my abilities and interests"*. Galotti (1999) found that students who use rational decision-making processes are those who consider the widest range of options open to them. However, this often causes them to feel confused and overwhelmed. It is possible that this group of respondents, due to their indecisiveness, perceive themselves as poor decision-makers since they equate effective decision making with fast decision making. The rationale underpinning these findings are that the more a person thinks about a life-shaping decision, the more discomfort and anxiety they are likely to experience (Galotti, 1999). According to Drummond and Ryan

(1995), this group of respondents are basing their career choice on their comparisons and analyses of different careers, but are hesitant to commit themselves to a single career at this stage.

Almost the same number of respondents (twenty-three percent) explained that they had not yet decided on a career because they felt that they were still too young to have to start thinking seriously about their futures. One student explained: "*At the moment I am just trying to get through life and am not really thinking of my future*", while another reported: "*I still feel I am too young to make a decision that will affect my whole life and my parents', as they will be paying for my tertiary education*".

This group of responses indicate a perception of career choice as an issue that generates anxiety and should thus be avoided. The responses also indicate that many of these subjects may have experienced difficulty in formulating a positive self-concept, which is a crucial step for developing the coping skills that are needed in order to achieve independence from others and tackle daily challenges (Drummond and Ryan, 1995). The data suggests that the struggle to formulate a self-concept has taken precedence over any desire to explore a future career.

Educators need to help undecided scholars to narrow their career focus to those careers that include their interests and utilise their abilities. Galotti (1999: 386) suggests that educators also need to assure scholars that it is "normal to change one's thinking, perhaps even drastically, during the period before the final choice".

5.2.4. Subjects' perceptions of the usefulness of career information and the extent to which it is free of gender-role and cultural stereotyping

Subjects' perceptions of the usefulness of career information and the extent to which it is free from gender-role and cultural stereotyping, is a primary theme divided into the following sub-themes for the purposes of a detailed exploration: Subjects' perceptions regarding the usefulness of the career information to which they have been exposed, their perceptions regarding the usefulness of career information, in terms of its role in encouraging them to consider all possible careers, regardless of gender, and their perceptions regarding the usefulness of career information in terms of its role encouraging them to consider all possible careers, regardless of culture or race. The findings will be discussed within these sub-themes.

5.2.4.1. Subjects' perceptions regarding the usefulness of the career information to which they have been exposed

When respondents were asked about the usefulness of the career information to which they had been exposed, thirty-eight percent indicated that the information received in vocational guidance classes was useful, while twenty-eight percent reported that they were unsure with regards to the usefulness of the information. Twenty-four percent cited that the information had been very useful to them in terms of helping them to decide on a career. Six percent reported that it had not been useful at all, while three percent indicated that it had not been useful (refer to **Figure 14** in Appendix C).

According to data, the majority (sixty-two percent) of the students offered positive responses with regards to the usefulness of career information, since they indicated that the information had either been very useful or useful. These results contradict United States research findings, which suggest that high school students in general may not be receiving sufficient career information (Herring, 1990).

Over one quarter of the respondents (twenty-eight percent) were unsure as to whether the information had been useful to them or not. A possible reason for this confusion may be due to the fact that although subjects have received career information, and interpret the information as being relevant to them, they do not know how to apply the information to the decision-making process. A small percentage of the respondents indicated that they held negative perceptions with regards to the usefulness of the career information, since six percent of the subjects expressed that it had not been useful at all, while three percent indicated that it had merely not been useful.

When subjects were asked to explain why they responded as they did with regards to the usefulness of the information, the following information was revealed: Of the subjects who found the information received in vocational guidance classes to be very useful or useful, twenty-two percent felt that applicable subject matter had been dealt with, while twenty percent of the subjects claimed that it had resulted in exposure to career choices and / or work experience. Sixteen percent indicated that the information helped them to reconsider or reconfirm their career choice, while four percent attributed this response to undergoing work experience facilitated by the school system.

Of the subjects who were unsure with regards to the usefulness of the information received in vocational guidance classes, seventeen percent explained that the information was not useful in terms of making a final decision, or offered other reasons. Twelve percent offered mixed responses, since they had either found the information to be useful, were unsure about the usefulness of the information or felt that it was not useful at all. This group of respondents felt that the information was insufficient or not specific enough.

Six percent of the subjects were either unsure with regards to the usefulness of the information, felt that it was not helpful, or not helpful at all. These subjects explained that the information was confusing, contradictory or that it caused them to feel pressured into making a career choice. Three percent of the subjects did not respond to this question, while two percent reported that the information was not useful at all except for the exposure to work experience, which was believed to be useful.

Subjects were then asked to give reasons for their responses regarding the usefulness of the career information to which they had been exposed. Of the subjects who found the information that they had received in vocational guidance classes to be very useful or useful, twenty-two percent indicated that applicable subject matter had been dealt with, while twenty percent of the subjects reported that it had exposed them to career choices and / or work experience, as one respondent explained: *"It's useful because it opens your eyes to all the different careers and it tells you that you don't always have to work for someone else but that you can be your own boss, eg: Bill Gates"*. Another reported: *"It seems to me that some people have never thought about what they want to become, so by them giving us this information, it makes us want to go ahead in life"*.

Sixteen percent, who indicated that the information was either very useful or useful, reported that the information helped them to reconsider or reconfirm their career choice. Of the four percent who attributed this response to undergoing work experience facilitated by the school system, their comments on work experience were very positive, as is evident in the following responses: *"I would not have gone on work experience and realised the career I had chosen was not for me. Now I can get hold of university pamphlets etcetera, and read all about other job opportunities"*, and *"We got to do work experience which I really loved. It's a way to see first hand what your intended career choice is like before you study for it for seven years! I'm grateful because I now know what I want to do – more than what my brothers of twenty-four and twenty-one know!"* These two responses illustrate the benefits of work experience in enabling students to experience

the daily reality of a job, thereby either confirming their original decision or prompting them to explore other careers (Drummond and Ryan, 1995).

Although controversy ensues over the types of career information considered to be most useful to scholars, work experience has been found to have a greater impact on directing career choice as opposed to literature sources alone (Drummond and Ryan, 1995), which may explain the consistent references by subjects to work experience as a useful source of career information.

Of the subjects who were unsure with regards to the usefulness of the information that they had received in vocational guidance classes, seventeen percent explained that the information was not useful in terms of making a final decision. Alternatively, they gave other reasons, such as: *"I'm unsure because I've had the counselling classes but I still know very little about the different careers, and I'm still undecided about the career I must follow. But I don't blame that on the teacher – maybe I don't ask enough questions to help me decide"*. Another respondent explained that *"to some extent we are not given the necessary encouragement, and at times we are told that we can't be what we want to be"*.

These comments indicate that the respondents attribute their uncertainty to a lack of personal responsibility as well as to teachers' lack of encouragement. Maddy-Bernstein and Cunanan (1995) suggest that for vocational guidance programmes to be effective, both school and community resources must be pooled and coordinated to ensure that all students are exposed to career guidance which is effective in helping them to decide on a career. A national survey in the United States conducted by Chapman and Martin (1983) revealed that while many sources of career information and assessment instruments are available, they either do not deal with interests, aptitudes, temperaments and values consistently, or these factors are not dealt with at all. The subjects' confusion may stem from the fact that although they are exposed to career information, they have not been able to apply it to the decision-making process. As a result, they may have attributed their indecision to their own lack of involvement in career guidance, to teachers' lack of encouragement, or to some other factor not directly linked to the career information itself.

Of the twelve percent who offered mixed responses in that they had either found the information to be useful, were unsure about the usefulness of the information or felt that it was not useful at all, subjects indicated that the information was either insufficient or not specific enough. The data suggests that they may be experiencing frustration due to two main reasons. Firstly, subjects might

not feel that vocational guidance classes are meeting their needs, since they may have already made a choice, and do not feel that information related to other careers is personally relevant (the information is not specific enough), as is evident in the following responses: *"It was too generalised and did not have all the information I needed"*; and *"I don't find it directed at what I want, and it is more directed towards what we need to know about our career in school"*.

Secondly, they may be experiencing frustration because the career information has not addressed the careers in which they are directly interested (the information is not sufficient). The following responses illustrate this frustration: *"They have only informed me about matters which I have more than enough knowledge about and they are presented in a boring manner which creates disinterest"*; and *"Although it has helped I still don't have all the information I need. I've got a lot (80%) maybe, but haven't got to a 100% clear"*.

Six percent of the subjects were either unsure with regards to the usefulness of the information, felt that it was not helpful, or not helpful at all. These subjects explained that the information was confusing, contradictory or that it caused them to feel pressured into making a career choice. One respondent expressed the nature of this pressure: *"We get taught different things that are very useful, especially dealing with careers, but I still feel really pressurised, as I don't know what I want to do, and everyone is saying: 'You must decide!!' It's really pressurising!"*.

Another respondent explained that the information he had received was causing him and his classmates to feel stressed because *"teachers [are] telling [them] that there are no jobs out there and [that they] have to make [their] own, which is scaring [them] and is making [them] find easier ways to get money"*. While the intention of these teachers was probably to encourage entrepreneurship as a viable career option within the context South Africa's insecure employment tenure, the subject's response indicates that he feels overwhelmed, and as a result has developed a bleak and fatalistic view of the prospects of finding socially acceptable and legal types of work. While it is necessary for teachers to provide adolescents with a realistic view of South Africa's economy, they need to guard against pessimism that will only serve to discourage students and foster despondency, thus severely hindering their career search.

One respondent reported some of the contradictions that were being communicated through the career information: *"The information has made me unsure because what is usually spoken about is the money you earn in certain careers, but at the same time, they say that your career choice*

should be about what you want for yourself – for the love and joy of it, and that you shouldn't worry about the money". While counsellors need to place equal emphasis on the importance of basing one's career choice on personal interests and abilities, as well as informing students of different salary levels, the data suggests that they need to avoid communicating this information in a manner where a single element of the career (money or enjoyment) contradicts, or overrides another. These elements require equal emphasis in the search for a career that will provide earning power, and draw on the abilities and interests of the individual.

Two percent of the subjects reported that the information was not useful at all except for the exposure to work experience, which was believed to be useful; as one subject explained: *"I don't take it seriously at all. The only good thing was work experience!!"* If this response is anything to go by, it reinforces the value of work experience. Even students who seem to show little interest in exploring career information admit that they have benefited from work experience.

Where subjects were confused or expressed negativity with regards to the usefulness of career information, their responses indicate a need for career guidance on a more personal and direct level. These students do not feel that their career-related needs are being met and may require one-to-one career counselling with either the career guidance teacher or a career counsellor in order to clarify issues that are causing them frustration and confusion. At this point, the trends that Lee (1993) discovered in her research with American high schools should be noted in order to illustrate that confusion and indecision on the part of adolescents is a problem that extends beyond this particular sample. Through the use of questionnaires with a selected school in South Carolina, she found that counsellors did not have enough time to work comprehensively with students, and that inadequate teacher involvement stunted career development.

Finally, a trend that emerges throughout the data is that students seem to assess the usefulness of career information on the basis of whether or not it has helped them to decide on a career. The value of work experience is also consistently reinforced by the data.

5.2.4.2. Subjects' perceptions regarding the usefulness of career information, in terms of its role in encouraging them to consider all possible careers, regardless of gender

When subjects were asked to report the degree of usefulness of the career information to which they had been exposed, with regards to its role in encouraging them to consider all possible

careers, regardless of their gender, forty-three percent of the respondents indicated that it had been useful to them. Twenty-three percent reported that they were unsure about the usefulness of the information in this regard. Five percent indicated that the information had not been useful at all, while four percent cited that it had not been useful (refer to **Figure 15** in Appendix C).

With regards to the forty-three percent of respondents who indicated that the career information to which they had been exposed had been useful, the data suggests that the majority of information received from teachers or texts has emphasised the issue of gender equality. As a result, this group of subjects do not feel that their career choice has been or will be shaped by gender role stereotypes. Twenty-six percent reported that the information had been very useful in this regard, which serves to further reinforce this assumption. The validity of these findings are supported by the responses of subjects documented under Section 5.2.4.1, where the majority indicated that in general, the career information to which they had been exposed had either been useful or very useful.

With reference to the twenty-three percent of subjects who expressed uncertainty with regards to the usefulness of the information in this regard, it is assumed that they did not fully understand the expectations of the question, possibly because the question was longer and more complicated than earlier ones. Alternatively, subjects may have not given this issue much thought previously, thus contributing to their uncertainty of the type of response required.

Subjects were then asked to explain the responses they gave with regards to the usefulness of the information, in terms of its role in encouraging them to consider all possible careers, regardless of their gender. The following results emerged from the data: Thirty-three percent of the subjects indicated that the information to which they had been exposed was either very useful or useful; the reason being that they were told everything they needed to know about careers. Twenty-eight percent of the subjects who reported that the career information was very useful, useful or were unsure with regards to the usefulness of the information (only three out of thirty-four subjects in this response category were unsure), explained that the information had encouraged them to consider all careers, regardless of whether they were male or female.

Twenty-four percent of the subjects offered a wide range of answers in response to this question. While some indicated that the information was either generally very useful, or useful, others were unsure about whether or not the information encouraged them to consider all possible careers

regardless of their gender, or indicated it was not useful at all. These subjects did not give a reason for their response, were unsure of the reason for their response or reported other reasons that did not fit into any of the coded categories.

Eight percent of the subjects who were either unsure with regards to the usefulness of the information, or reported that it was not useful or not useful at all, explained that the information was repetitive or insufficient.

Five percent of the subjects who indicated that the information they were exposed to was either very useful, useful, or were unsure about its degree of usefulness, explained that the information encouraged one to select a career that suits one's gender and personality. Three percent of the subjects who were either unsure or felt that it was not useful, claimed that the information does not tell you how gender will affect your job.

Of the thirty-three percent who found the information to be either very useful or useful for the reason that they were told everything they needed to know about careers, responses were typical of the following example: "*Our guidance class encourages us to explore all the options / possibilities open to us*". As this rather indirect, yet positive response illustrates, it is possible that this group of subjects did not fully understand the requirements of the question, yet nevertheless wanted to express that they had found the career information to be useful.

Of the twenty-eight percent who reported that the career information was very useful, useful or were unsure with regards to the usefulness of the information, and who explained that the information had encouraged them to consider all careers, regardless of whether they were male or female, one respondent stated that the information "*ha[d] shown [her] that with the choice of subjects [she has, she] can go into various careers and wouldn't have to consider [her] gender a stumbling block*". Subjects who indicated that they were unsure, but who offered reasons similar to this may have been unsure with regards to their interpretation of the question initially, even though their uncertainty was unfounded.

In the past, career information and assessment instruments have often been criticised for perpetuating gender stereotypes. For example, critics have argued that Holland's Self-Directed Search (S.D.S.) is simplistic and rigid since it does not encourage women to enter skilled trades, but confines them to careers that emphasise social roles. An American high school study

conducted by Dorn and Welch in 1985 confirmed the existence of various career-related myths, which were defined as the ideals which individuals project onto certain jobs such as 'the perfect job' and 'sex roles' (Dorn and Welch, 1985). However, ten years later, Drummond and Ryan (1995) suggest that conventional gender roles have become blurred, and that adolescents are less likely to attach gender labels to certain jobs. The responses obtained in the two categories discussed thus far seem to support this assumption.

Twenty-four percent of the subjects offered a wide range of answers in response to this question. While some indicated that the information was either generally very useful, or useful, others were unsure about whether or not the information encouraged them to consider all possible careers regardless of their gender, or indicated it was not useful at all. These subjects did not give a reason for their response, were unsure of the reason for their response or expressed other reasons. The uncertainty experienced by these subjects is reflected in the following response: "*We have not discussed in detail what the chances are of getting a job in terms of our gender*". Within this category of responses, it is likely that many respondents were unsure of what the question required of them, or did not read it properly, since it was longer than the rest and required more effort and concentration on their part. Other reasons included the following: "*I have not really had time to speak to a person who is in the field that I want to go into*"; and "*I'm unsure because I haven't really discussed careers with my counsellor*".

Eight percent of the subjects who were either unsure with regards to the usefulness of the information, or who found that it was not useful or not useful at all, explained that the information was repetitive or insufficient. One scholar who had not found the information useful in this regard explained that he was "*anxious to learn more about [his] career, but [that there was] not enough information in places like the library*". Once again, these responses refer to career information in general and indicate a shift away from answering the specific question at hand.

Five percent of the subjects, who reported that the information was either very useful, useful, or were unsure about its degree of usefulness, explained that the information encourages one to select a career that suits one's gender and personality. Three percent who were either unsure or felt that it was *not useful* claimed that the information does not tell you how gender will affect your job. The data thus suggests that three percent hold the perception that gender does affect one's job in some way, and that scholars need to be better informed with regards to the role gender plays in career choice.

The majority of the sample (sixty-one percent) reported that either they were told everything that they needed to know about careers, or that the information encouraged them to consider all careers regardless of their gender. This large percentage of positive responses indicates that firstly, many of the subjects have been exposed to career information that is gender-fair, and secondly, that they have accepted this information and positively incorporated it as a part of their perceptual framework of career choice and career information. The incorporation of this perception (that one's career choice is not restricted by gender) serves to empower individuals to pursue careers that match their true interests and abilities, rather than selecting one that might compromise personal ability for the sake of adherence to traditional gender roles. Furthermore, subjects' explanations of the usefulness of the information in this regard serve to reinforce their earlier responses relating to its general usefulness (refer to Section 5.2.4.1.) Thus the validity and reliability of the findings are reinforced.

5.2.4.3. Subjects' perceptions regarding the usefulness of career information in terms of its role in encouraging them to consider all possible careers, regardless of culture or race

When respondents were asked to indicate the degree of usefulness of the career information to which they had been exposed, in terms of its role in encouraging them to consider all possible careers, regardless of their culture or race, the following data emerged: While thirty-eight percent of the subjects indicated that the information had been useful in this regard, twenty-three percent indicated that they were unsure about its degree of usefulness. Twenty percent reported that the information had been very useful with regards to its role in encouraging them to consider all possible careers, regardless of culture or race, while eleven percent indicated that it had not been useful in this sense. Five percent reported that it had not been useful at all. (refer to **Figure 16** in Appendix C).

The data in **Figure 16** reveals a generally positive trend with regards to the perceptions of Grade Eleven students toward career information, in that the majority of responses are clustered around the 'useful' category on the bar graph. This suggests the exposure of a large proportion of the sample to culture-fair information. Thirty-eight percent of the respondents indicated that the information had been useful with regards to its role in encouraging them to consider all careers, regardless of their culture or race. The validity of these findings are supported by the responses documented under Section 5.2.4.1. and Section 5.2.4.2, indicating that the majority of respondents

reported the career information to be either useful or very useful generally, as well as with regards to being gender-neutral.

The findings documented under Sections 5.2.4.1. through 5.2.4.3. suggests that the majority of subjects' perceive the career information to which they have been exposed to be useful in all aspects. The data suggests that it has been useful in terms of informing them of all the possible career options open to them, as well as providing them with information that is free of gender-role and racial or cultural stereotypes. Due to the pervasive nature of the respondents' positive perceptions of career information, the researcher aimed to establish whether these perceptions were related to the independent variables of race, gender or parents' occupations, as documented under Section 5.3.

When subjects were asked to explain their reasons for responding as they did with regards to the usefulness of the information, in terms of its role in encouraging them to consider all careers, regardless of their culture or race, the following data emerged: Forty-two percent of the subjects' responses covered the full spectrum of responses offered, from very, useful, useful, unsure, not useful (only three subjects), to not useful at all (two subjects).

These forty-two percent explained that the career information to which they been exposed had helped them to consider all careers, regardless of their culture. Thirty-one percent of the respondents who indicated that the information had been very useful, useful, were unsure with regards to the usefulness of the information or felt that it was not useful, were unsure of why they felt the way they did, gave no reason for their response, or offered other reasons that did not fit into any of the coded categories.

Thirteen percent reported that they were told everything they needed to know about careers, while ten percent of the subjects who were either unsure with regards to the usefulness of the information, felt that it was not useful or not useful at all, explained that the reason for their responses was that the information was not helpful in any way. Four percent, who were either unsure with regards to the usefulness of the information, or who indicated that it was not useful, explained that the information was biased. One percent reported that the information was very useful in the sense that it encourages subjects to choose a career that is compatible with individual culture and personality.

Of the forty-two percent who explained that the career information had helped them to consider all careers, regardless of their culture, the following comments were typical: *"We haven't been restricted to thinking that you should do a certain career because of your race. You are accepted as you are"*; and *"There has been no racial discrimination. There has been encouragement to strive for your goals no matter what your race"*. These responses indicate exposure to career information that has encouraged scholars to pursue any career they choose, regardless of their culture or race, and suggests the development of a healthy perception that culture should not restrict career choice. It is evident that these students are certain of their responses, which may be an indication that their perceptions have been positively re-enforced by significant others in addition to their vocational guidance teacher(s), such as family members.

Although forty-two percent of the respondents indicated that the career information itself was not biased, one subject raised the following concern: *"None of the applications or pamphlets specify that you be of a particular race. You can study anything you want. Whether you will get a job because of Affirmative Action is a totally different question"*. This response suggests that while career information encourages students to consider all possible career choices, finding employment due to Affirmative Action policies is perceived to be an obstacle that cannot be ignored. Hence, the data suggests that career information does not seem to take into consideration the limitations imposed on career choice through Affirmative Action policies, by lessening the likelihood of employment in certain occupations for many adolescents, on the basis of their race.

With reference to the thirty-one percent who had indicated that the information had been very useful, useful, were unsure with regards to the usefulness of the information or felt that it was not useful, and were either unsure of why they felt the way they did, gave no reason for their response or offered other reasons, typical explanations included the following: *"I never really thought about that"*; *"I don't really know what the right job for me is so I will do one I like"* and *"I haven't really got an answer to this question. I am unsure really"*. These responses reflect a high degree of uncertainty. They also indicate a level of passivity on the part of the subjects.

Thirteen percent of the subjects indicated that they were told everything they needed to know about careers. For example, one respondent reported: *"They have explained the different options and why you should go out and get the job you will be happy with"*. These subjects indicated that they had found the information to be either very useful, useful, or not useful at all. One respondent was unsure with regards to the usefulness of the information. These responses referred to career

information in general, but did not provide a direct answer. Students possibly did not read the question thoroughly and therefore did not answer the question at hand, or, possibly because it was longer than the others, were not willing to put in the effort to provide a comprehensive response.

Ten percent of the subjects who were either unsure with regards to the usefulness of the information, reported that it was not useful or not useful at all, explained that the information was not helpful in any way. For example, subjects explained: *"They tell us things we already know"* and *"I am not sure which career I will be happy with. I need more career information to help me decide what to do"*. Once again, these responses do not address the question at hand but refer to career information in general, indicating a lack of understanding or effort on their part.

Four percent of the subjects, who were either unsure with regards to the usefulness of the information, or who indicated that it was not useful, explained that the information was biased. This attitude is evident in the following responses: *"I am still unsure because there's this affirmative action thing going on so you might choose a career and not get a job because of your culture or race"*; and *"There will always be black and white"*. The data suggests that these respondents are cynical about the practical viability of being able to select one's career of choice, and feel that the political climate and policies of South Africa are a major defining factor in terms of whether one will find employment or not. These negative perceptions of employment practices in South Africa may have been shaped by personal experiences, such as the retrenchment of a parent or other family member.

Furthermore, these four percent expressed a general negativity and despondency which was not directly linked to the question at hand, but which reflected their feelings toward their inability to choose a career, as is evident in the following responses: *"It has not been useful as I have not chosen another career option"*; and *"Counselling is useless and is wasting our time"*. Three percent of the respondents did not answer the question.

One subject (one percent of the sample) explained that the information was very useful in the sense that it helps one to choose a career that is compatible with one's culture and personality. This respondent explained: *"It helps show what career may suit your culture"* Judging from this response, it may be assumed that this subject believes that different cultures are better suited to particular careers. Very few subjects within the sample (under Section 5.2.4.2.) revealed perceptions possibly shaped by gender-role stereotypes, thus confirming the validity and reliability

of the findings that indicate the prevalence of cultural and gender-role stereotypes amongst a small minority of the sample.

In light of the fact that a large proportion of the sample (forty-two percent) reported that the information encouraged them to consider all careers regardless of their culture or race, the following assumptions may be tentatively made: Firstly, many of the subjects have been exposed to career information that is culture-fair, and secondly, they have accepted this information and positively incorporated it as a part of their perceptions of career choice and career information. The incorporation of this perception (that one's career choice is not limited by culture or race) serves to empower individuals to pursue careers that match their true interests and abilities.

5.2.5. The effectiveness of the schools' role in providing holistic vocational guidance

The findings related to the effectiveness of the schools' role in providing holistic vocational guidance are presented and discussed under the sub-themes as follows: Subjects' responses to whether or not they received career guidance at school, their perceptions regarding the nature of subject matter dealt with in career guidance classes, the grade at which subjects began career guidance classes, their perceptions regarding the most suitable period at which career guidance should begin, and their perceptions of general staff involvement in career guidance.

5.2.5.1. Subjects' responses as to whether or not they received career guidance at school

One hundred percent of the subjects responded 'yes' to this question, which indicates that all the subjects in the sample have been formally exposed to career guidance principles and information sources.

5.2.5.2. Subjects' perceptions regarding the nature of subject matter dealt with in career guidance classes

When respondents were asked about the nature of the subject matter covered in their career guidance classes, forty-five percent indicated that they dealt with career issues specifically. Forty-three percent reported that the classes covered both career issues and life skills. Twelve percent either did not answer the question or reported responses that did not fit into the afore-mentioned categories (refer to **Figure 17** in Appendix C).

Of the forty-five percent who indicated that their vocational guidance classes dealt mainly with career issues, typical responses were as follows: *"We have talked about different careers, gone on work experience and learned about job interviews and CV's"*. Almost the same number of subjects (forty-three percent) indicated that they had covered both career issues and life skills in their vocational guidance classes. One of the respondents reported that they dealt with *"experiences in the working world, communication with other people and discipline"*. This data suggests that the majority of the sample has been exposed to either career information and career-related issues specifically, or have dealt with the practical aspects of career planning in the wider context of adopting general coping and life skills. These findings serve to support those documented under Section 5.2.1, where the majority of subjects conceptualised the term 'career' in a simplistic and tangible manner, and failed to highlight the complexities and ambiguities of the term in the context of a rapidly changing world of work.

Finally, twelve percent either did not answer the question or offered vague responses, such as: *"There are lots of questions we have to answer"*. It is likely that this portion of the sample do not feel that they have benefited from the classes, or have not attended them, since their responses suggests a lack of understanding of the relationship between the subject matter and its practical applicability to their lives personally.

5.2.5.3. Grade at which subjects began career guidance classes

Subjects were asked to report when they first started to receive guidance classes. In response to this question, an equal number of respondents (twenty-eight percent in three of the categories) indicated that they had begun vocational guidance classes in Grade Eight, Grade Ten or Grade Eleven. A much smaller percentage (eight percent in two of the categories) indicated that they had started to receive vocational guidance classes either in Primary School (between Grades Four to Seven) or in Grade Nine. Only three percent did not respond to the question or offered other responses (refer to **Figure 18** in Appendix C).

A possible reason for the wide range of responses is the likelihood that respondents hold different interpretations of the term 'vocational guidance'. It is likely that those who indicated that they started vocational guidance classes later on in high school (Grade Ten or Eleven) interpreted the term as referring to career issues specifically. Similarly, those who indicated that they had begun these classes as early as primary school may have been referring to classes such as Religious Education, which also addresses general life and coping skills.

5.2.5.4. Subjects' perceptions regarding the most suitable period at which career guidance should begin

When subjects were asked to indicate time at which they thought career guidance classes should begin, thirty-six percent reported that they should begin in Grade Eight. Twenty-four percent indicated that vocational guidance should begin in Grade Ten, while eighteen percent cited primary school as the best time to start. Seventeen percent of the respondents indicated that classes should ideally begin in Grade Nine, while five percent reported that they scholars should start receiving vocational guidance in Grade Eleven or Twelve (refer to **Figure 19** in Appendix C).

A possible reason for the responses of those who reported that vocational guidance classes should begin in Grade Eight, is that a great deal of personal anxiety and peer pressure is experienced by adolescents on entering high school, in view of the fact that they are entering a new and foreign environment. It is also at this stage that individuals are entering the phase in which they must deal with identity versus role confusion, and where they are forced to make choices about their future and to carve out an identity for themselves (Drummond and Ryan, 1995). This is a stage at which students are likely to benefit from seeking guidance to develop life skills and coping tactics for the purposes of facilitating the development of a healthy self-concept.

With regards to the twenty-four percent who reported that vocational guidance classes should begin in Grade Ten, a possible reason for their responses is that it is at this grade that adolescents are required to select curriculum subjects to see through to completion in Grade Twelve. These subjects are usually chosen for their compatibility with future career interests and are often a prerequisite for acceptance into post-secondary school study or training.

According to Maddy-Bernstein and Cunanan (1995), vocational services should not only be provided in the final years of secondary school, but throughout its different stages. These stages are as follows: before enrolment in secondary school (through assessment, orientation and career awareness), during enrolment (through academic advising, career planning, tutoring, mentoring and job placement), and post enrolment (through job placement and follow-up).

5.2.5.5. Subjects' perceptions of general staff involvement in career guidance

Respondents were asked to indicate the number of teachers, excluding their vocational guidance teacher, who had offered them career guidance. Forty-nine percent reported that that none of their teachers besides their vocational guidance teacher had done so. Nineteen percent indicated that only one additional teacher had spoken to them and / or offered them advice about their future career, and fourteen percent reported that between two and three teachers had offered them career guidance. Twelve percent cited that three or more teachers had done so, while six percent of the respondents did not answer the question at all (refer to **Figure 20** in Appendix C).

Figure 20 illustrates that a large number of respondents have not received any career guidance from other teachers besides their vocational guidance teacher, possibly indicating a general need for a more holistic approach towards career choice and planning in public schools. Moreover, the graph illustrates a steady decline in the number of students receiving career guidance from more than one teacher. In other words, a minority of the students are exposed to a holistic view of career guidance through consultation with a variety of teachers, compared to the majority of the sample who reported receiving guidance only from the vocational guidance teacher or from one additional teacher besides their vocational guidance teacher.

The adoption of a more holistic approach toward career guidance in public schools would necessitate that school staff re-conceptualise their roles through redefining and broadening their responsibilities as teachers, in order to contribute to the growth and development of scholars on a broader level. Rosenblatt and Inbal (1999) emphasise the benefits to both staff and students of developing teachers' role and functional flexibility. These benefits will be elaborated on in the final chapter.

5.2.6. Implications of results for career guidance

These findings have a number of implications for career guidance. They are as follows:

- Scholars who have not made a tentative career choice by Grade Eleven require continued encouragement to explore career information, and to identify careers that match their individual abilities and interests. Guidance counsellors and teachers need to ensure that they are available for individual counselling and consultation in order to help them make

tentative career choices. Personal identification with a career will help scholars to establish a career identity, and thereby avoid the negative consequences of role confusion, as documented by Drummond and Ryan (1995) and Zunker (1998).

- Since parental and family involvement has been found to play a significant role in directing career choice, programmes geared toward up-dating and informing parents of the new challenges and stressors confronting their teenagers in the context of the changing world of work, should be developed. The content of these programmes would need to focus on outlining constructive ways in which parents can encourage their teenagers to explore careers without placing them under unnecessary pressure. The value of parental involvement in career choice is supported by related research findings (Mullis et al, 1996).
- Scholars' positive responses to career information indicate that they perceive it to be generally useful in terms of facilitating career choice. Furthermore, the valuable role of work experience for the purposes of confirmation or re-consideration of career choice is supported consistently throughout the findings. However, those involved in career guidance need to ensure that career information offered to scholars is up-to-date with the changing demands of the job market. The availability of different sources and types of information, and easy access to work experience organised through the school, will also ensure continued interest in career choice, as documented by Drummond and Ryan (1995).
- Programmes need to be developed and run to build staff functional flexibility and to equip teachers to highlight the career opportunities related to their teaching subject, thereby ensuring the provision of holistic vocational guidance, as suggested by theorists and researchers (Zunker, 1998; Rosenblatt and Inbal, 1999). Furthermore, while there is a need for teachers to assume responsibility for integrating theoretical learning with career opportunities, and to make themselves available for counselling and consultation, students need to take a pro-active role in their career exploration by approaching teachers for career guidance.

The results of the frequency data, the tentative conclusions drawn from them as well as their implications for career guidance are followed by the presentation and analysis of cross-tabulations.

5.3. Cross-tabulations

In their simplest form, cross-tabulations are pairs of measures with a condensed format. Since “tabulated relationships can readily be subjected to statistical analysis to test the significance of a pattern” (Youngman, 1975: 65), the researcher was able to identify the existence or absence of a statistically significant relationship between the cross-tabulated variables selected. According to Youngman (1975), studies that are reliant on a questionnaire survey as the primary data gathering technique are often analysed exclusively by means of cross-tabulations, hence validating the use of this statistical method.

5.3.1. Statistical process

The first step in the statistical process was for the researcher to establish the appropriate variables for cross-tabulation. The researcher cross-tabulated most of the dependent variables with the independent ones so as not to bypass any potentially statistically significant relationships that may have served to shape the outcome of the research. However, the findings documented under Sections 5.2.4.1. through 5.2.4.3. suggest that the majority of subjects’ perceive the career information to which they have been exposed to be useful in all aspects. Consequently, the researcher focused on establishing the existence of statistically significant relationships between the dependent variable of subjects’ perceptions of the usefulness of the career information and the independent variables of race, gender and parents’ occupations.

Chi-square analysis was used to test the significance of the relationship between the cross-tabulated variables. Although a number of statistically significant bi-variate relationships were identified, the distribution of frequencies for the majority was such that more than twenty percent of the cell expected frequencies were less than five, and minimum cell expected frequencies less than one. Hence, a number of the results were not acceptable for analysis, in that there were too many categories within each variable for the sample size of one hundred and twenty. In fact, except for cross-tabulations conducted with gender as the independent variable, all results revealed minimum cell expected frequencies of less than one, and cell expected frequencies of less than five, over twenty percent. Since these results were consequently not statistically acceptable, they could not be reported.

The researcher was able to combine categories within certain variables in order to increase their frequencies. The ordinal response categories entitled *very useful* and *useful* were combined into one category entitled *useful*; the unsure category remained the same, while the *not useful* and *not useful at all* categories were combined into a single *not useful* category. As a result, the following statistically significant relationships were identified:

- Subjects' tentative career choices; and Gender
- Subjects' perceptions regarding the usefulness of the career information to which they have been exposed; and Gender
- Subjects' perceptions regarding the usefulness of career information in terms of its role in encouraging them to consider all possible careers, regardless of culture or race; and Gender
- Subjects' explanations of their responses regarding the usefulness of the career information in terms of it being free of racial or cultural stereotyping; and Gender
- General staff involvement in career guidance; and Gender

These cross-tabulations will now be presented, discussed and interpreted.

5.3.2 Subjects' tentative career choices; by gender

Table 1 (refer to Appendix D) examines whether there is a statistically significant relationship between the tentative career choices made by subjects, and gender. There were eight (six percent) more girls than boys in the sample, with a total number of fifty-six boys and sixty-four girls. When the subjects were asked what they wanted to become, slightly more girls than boys (point two percent), had not made a career choice. These findings seem to suggest that gender does not affect subjects' indecision about their careers.

Five times more males (twenty-five percent) than females (five percent) reported a choice of career within the *realistic* occupations, while a much higher percentage of females (sixteen percent) than males (two percent) chose a career within the *social* occupations. These results are consistent with theory and research on gender-typed occupations (Dorn and Welch, 1985; Ragins, 1989; Zunker, 1998), in which *realistic* occupations, including skilled trades, technical and service occupations are perceived as male-typed careers, and *social* occupations, including educational and social welfare occupations are perceived to be female-typed.

While the findings discussed thus far seem to suggest that subjects' choices are influenced by perceived gender-roles, more than twice as many girls (thirty-one percent) than boys (fourteen percent) selected *investigative* careers, which include both scientific and technical occupations. Furthermore, more than twice as many boys (twenty-three percent) than girls (nine percent) chose *artistic* occupations, which include artistic, literary and musical careers. These results suggest that both young men and women are prepared to make career choices that are free of gender-role stereotypes, which is supported by related theory and research (Conroy, 1997; Zunker, 1998).

Zunker (1998) also suggests that formal education reinforces the development of gender-typed work roles. In part, the findings agree with this theory, although they also suggest that many subjects no longer view gender as an obstacle in the process of career choice. The findings documented under Sections 5.2.4.1. through 5.2.4.3. suggest that the majority of subjects' perceive the career information to which they have been exposed to be useful in all aspects. However, a high female interest in *investigative* occupations may also indicate idealistic career perceptions and expectations, which also seems to be a problem amongst American adolescents (Conroy, 1997).

The ninety-five percent significance level of Chi-square is 0.000, thus confirming the existence of statistically significant relationship between subjects' career choices and gender. Therefore, the null hypothesis may be rejected and one may conclude that gender has an effect on career choice.

5.3.3. Subjects' perceptions regarding the usefulness of the career information to which they have been exposed; by gender

As **Table 2** illustrates (refer to Appendix D), when the subjects were asked to report their perceptions of the degree to which the career information had been useful, the majority (sixty-three percent) reported that it had been useful. However, of these, there were twenty-three percent more females (seventy-three percent) than males (fifty percent). In addition, a higher percentage of males (forty-one percent) than females (seventeen percent) were unsure with regards to the usefulness of the information. The same number of boys (nine percent) and girls (nine percent) reported that the information had not been useful to them.

These results seem to indicate that in general, the girls have found the career information to which they have been exposed, to be more useful compared to the boys in the sample. The

findings also indicate that the boys are uncertain of the usefulness of the information in terms of its role in helping them to make a career choice.

The null hypothesis was rejected at the Chi-Square significance level of 0.013. Thus, one may conclude that there is a statistically significant relationship between the subjects' perceived usefulness of the career information and gender.

Research conducted by Wallace-Broschius (1994) revealed that self-esteem and identity achievement were positively related to career exploration and planning, and that female students spend more time exploring possible careers and planning for their futures compared to their male counterparts. Positive female attitudes toward career exploration may be a result of exposure to career information and career counselling that is not only free of gender-role stereotyping, but places an added emphasis on encouraging females especially, in light of past gender inequalities, to consider all possible career paths.

Since forty-two percent of the subjects indicated that their family had assisted them in their career choice (refer to **Figure 11** in Appendix C), it is possible that the female subjects' have received encouragement from their parents, and especially their mothers, to consider career opportunities that were not available to women in the previous generation. This assumption is reinforced by the findings as illustrated in **Figure 7** in Appendix C, which reveal that twenty three percent of the female subjects, compared to only two percent of their mothers (refer to **Figure 4** in Appendix C) selected careers categorised within the investigative occupations.

5.3.4. Subjects' perceptions regarding the usefulness of career information in terms of its role in encouraging them to consider all possible careers, regardless of culture or race; by gender

When subjects were asked to indicate the degree to which the information had been useful, in terms of its role in encouraging them to consider all careers, regardless of their culture or race, the majority (sixty-eight percent) reported that the information had been useful. A higher percentage of females (seventy five percent) than males (sixty-one percent) reported that the information had been useful, although a similar percentage of males (twenty-one percent) and females (twenty-three percent) expressed uncertainty about the usefulness of the information with regards to its cultural neutrality. A much higher percentage of males (eighteen percent) than females (two

percent) indicated that the information had not been useful in this regard (refer to **Table 3** in Appendix D).

In view of the fact that fourteen percent more girls than boys indicated that the career information had been useful, the results reveal that generally, the girls in the sample have found the career information to be more useful compared to the boys. Furthermore, sixteen percent more boys than girls indicated that the information had not been useful in terms of being culturally fair.

The ninety-five percent significance level of Chi-square is 0.008, which indicates that there is a statistically significant relationship between subjects' perceptions regarding the usefulness of the information in terms of its role in encouraging them to consider all possible careers, regardless of culture or race, and gender. Therefore, gender is related to subjects' perceptions of the career information in this regard.

A tentative assumption emerging from the findings is that more girls than boys are exposed to career information that encourages them to consider all possible careers, regardless of their culture or race, than boys. Consequently, girls may have incorporated this information into their perceptual schema, which has encouraged them to make choices that are free of racial or cultural stereotypes, with increased levels of confidence. On the other hand, the boys may have not developed these levels of confidence as a result of limited exposure to culturally neutral information. As a result, they may be more prone to making choices that are influenced by racial or cultural stereotypes.

5.3.5. Subjects' explanations of their responses regarding the usefulness of career information in terms of its role in encouraging them to consider all possible careers, regardless of culture or race; by gender

Table 4 (refer to Appendix D) illustrates that when subjects were asked to give an explanation for their responses regarding the usefulness of career information to which they had been exposed, in terms of it being free of racial or cultural stereotyping, a higher percentage of males (thirty-nine percent) than females (twenty-five percent) offered vague explanations that were not directly related to the question. Their explanations were considered to be vague in that they reported that one is told everything one needs to know about careers.

The females' explanations of the usefulness of the information in this regard were on the whole more positive compared to the responses reported by the males in the sample. Forty-one percent of the females explained that the information was useful in that it helped one to consider all careers, regardless of culture or race, while fewer males (fourteen percent) reported this response. A slightly higher percentage of males (twenty-five percent) than females (twenty-three percent) indicated that they were unsure with regards to the usefulness of the information in terms of it being culturally neutral, did not give a reason for their response or gave other responses, resulting in a relatively even gender distribution of responses within this category.

A much higher percentage of males (twenty percent) than females (three percent) reported that the information was vague, repetitive, insufficient or not useful, which indicates that many boys and very few girls are dissatisfied and frustrated with the information in this regard. More girls (eight percent) than boys (two percent) explained that the information helped one to choose a career that is suited to one's culture. These results may suggest that a small female portion of the sample hold traditional and restrictive views of gender roles.

A Chi-Square significance level of 0.001 allows one to assume the existence of a statistically significant relationship between subjects' explanations for their responses regarding the usefulness of career information to which they had been exposed, in terms of it being free of racial or cultural stereotyping; and gender. In other words, subjects' explanations are related to gender in this regard.

Of the respondents who reported that the career information to which they had been exposed was useful in that it was culturally and racially neutral, the majority were girls. In addition, more girls than boys explained that it helped them to consider all careers, regardless of their culture. Of those subjects who indicated that the information had not been useful in this regard, the majority were boys. Furthermore, a higher percentage of boys than girls explained that the information was vague, repetitive, insufficient, or simply not useful. Responses reflecting uncertainty about the usefulness of the information in this regard were evenly distributed amongst boys and girls, as were the responses of those who explained that they were unsure or gave no reason for their response.

The subjects' explanations of their responses regarding the usefulness of the information in terms of it being culturally neutral (refer to **Table 4** in Appendix D) are consistent with their

perceptions regarding its degree of usefulness (refer to **Table 3** in Appendix D). This consistent pattern amongst responses reinforces the validity and reliability of the findings.

5.3.6. Subjects' perceptions of general staff involvement in career guidance; by gender

Subjects were asked to indicate the number of teachers, besides their vocational guidance teacher, who had given them career guidance (refer to **Table 5** in Appendix D). A higher percentage of girls (fifty-five percent) than boys (forty-three percent) indicated that they had not received career guidance from any of their teachers besides their vocational guidance teacher. More than twice as many boys (twenty-seven percent) than girls (thirteen percent) reported that they had received career guidance from one additional teacher. However, a higher percentage of females (sixteen percent) than males (thirteen percent) indicated that between two and three teachers had offered them guidance, while more than three times more girls (seventeen percent) than boys (five percent) reported that they had received career guidance from more than three teachers. Thirteen percent of the boys did not answer the question at all.

The ninety-five significance level of Chi-square is 0.003, thus one may conclude that there is a statistically significant relationship between general staff involvement in career guidance and gender.

An interesting trend with regards to the relationship between gender and staff involvement in career guidance, emerged from the data. While there were generally fewer girls (twelve percent less) than boys who received additional guidance from only one teacher besides their vocational guidance teacher, the data revealed that fourteen percent more boys than girls received help from one additional teacher. While only three percent more girls than boys admitted to receiving advice from between two to three teachers, the percentage of girls who reported receiving guidance from more than three teachers was twelve percent higher than the boys' in this category.

Prior to further analysis of these findings, it should be noted that staff involvement in career guidance be perceived as the joint responsibility of both staff and scholars. While it is the responsibility of staff to inform scholars of careers that are related to the subjects they teach, scholars need to pro-actively seek guidance from staff if they require specific career-related information.

These results may offer some insight into the decision-making approaches of the subjects, as documented in the Theoretical Framework (Robbins, 1996). These insights are tentative since the results do not clarify whether it was teachers who took the initiative to offer career guidance to subjects, or subjects who pro-actively sought out their advice. The following analysis rests on the assumption that scholars played an active part in seeking out career guidance from teachers.

As the results of **Table 5** suggest, a higher percentage of boys than girls reported receiving career guidance from only one additional teacher, which may indicate that the boys in the sample have adopted the Satisficing Model of decision-making with regards to their career choice. The model proposes that the “decision maker chooses the first solution that is ‘good enough’; that is, satisfactory and sufficient” (Robbins, 1996: 150), and that the decision is made on the basis of limited information and simple criteria. Therefore, it may be assumed that the boys in the sample, since they are satisfied with a limited amount of career information from one additional teacher, are less likely than the girls to seek further career information to extend their search or to establish more complex criteria on which to base their decision.

On the other hand, the data suggests that a higher percentage of girls than boys have reported receiving career information from more than two additional teachers, which may indicate that the girls in the sample have adopted the Optimising Model of decision-making, which, according to Robbins (1996) involves logical, linear decision-making behaviour that serves to maximise outcomes. Important steps within this model include developing, evaluating and selecting the best alternative choices. In seeking out more information from a greater number of sources (via consultation on career options with teachers besides their vocational guidance teacher), the girls’ are able to develop and evaluate a wide range of career options, and therefore select the best alternative. Thus, their behaviour seems to suggest a logical and systematic approach to career choice compared to the boys’ ad-hoc approach.

This assumption is consistent with career counselling theory, as documented by Zunker (1998: 365), who proposes, “Currently, career counsellors find that women are rearranging their priorities – planning for a life-long career in a wide range of occupations has become the highest priority”. A realisation of the career opportunities available to them may explain the female subjects’ high interest in non-traditional careers (refer to **Table 1** in Appendix D), their positive perceptions regarding the usefulness of career information (refer to **Table 2, 3 and 4** in Appendix D), and their

perseverance in acquiring career information from multiple sources (refer to **Table 5** in Appendix D), which follows a linear and systematic approach to career choice.

5.3.7. Implications of results for career guidance

From the presentation and analysis of the cross-tabulation results, a number of implications for career guidance emerge:

- Subjects' career choices indicate a general shift away from gender-typed occupations, indicating the success of career guidance with regards to encouraging scholars to make choices free of gender-role stereotypes (Zunker, 1998). However, the results indicate a possible need within career guidance for an emphasis on helping scholars to make realistic and practical choices that are consistent with individual interests and abilities.
- Career information requires reassessment in terms of its usefulness and applicability to boys, in light of some of the negative perceptions that emerged from the data regarding the usefulness of the information in general, and with regards to its cultural and racial neutrality. Schools need to ensure that career information is easily accessible to both girls and boys through well-stocked resource centres, as well as by ensuring that boys specifically have access to information that is racially and culturally neutral. Teachers also need to ensure that they are readily available for consultation and general career guidance, as suggested by Drummond and Ryan (1995).

The data suggests a need within career guidance for an assessment of whether there are different forms and types of career information to which boys are more responsive, for example, computer-based career exploration, which has been found to be extremely effective in encouraging career exploration and developing higher levels of career maturity amongst scholars (Hoskins and Rosenthal, 1983; Sangster, 1986; Cianni and Growney, 1987; Chapman and Bianco, 1996). Access to a variety of different and stimulating career information sources, such as computers and videos, may help boys as well as girls to develop a more positive and constructive approach to career choice and career information. Coordination of services and information, drawn from school and community resources may also ensure greater access to various types of career information, as suggested by Maddy-Bernstein and Cunanan (1995).

- Career guidance programmes need to focus on helping scholars to gain an awareness of the behaviours engaged in during their career search, and to identify types of behaviour that are not constructive, for example, restricting their career search to a specific occupational category or limiting the number of information sources they consult. They also need to establish their personal decision-making styles and understand the way in which certain perceptions have shaped these, as suggested by Lee (1993); Robbins (1996) and Galotti (1999).

Developing an awareness of personal decision-making styles may help scholars to realise the limitations of their own style. On the basis of this knowledge, they may choose to adopt a combination of styles in order to make more productive and satisfying decisions (Robbins, 1996). In light of the data results, boys specifically need to be encouraged to consult a wider variety of information sources before making a decision.

5.4. Summary

The purpose of the first part of Chapter 5 was to describe the data in the form of pie charts and bar graphs, thereby enabling the researcher to interpret the frequency data and develop tentative conclusions about it. The implications of these results and conclusions for career guidance were then discussed. In the final part of the chapter, cross-tabulations established the existence of statistically significant relationships between subjects' perceptions and gender, after which the implications of the results for career guidance were drawn. Importantly, statistical analysis served to confirm tentative findings revealed in the frequency data.

CHAPTER 6

GENERAL SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

6.1. Introduction

The purpose of this chapter is to summarise the objectives, methods used and primary findings of the research. Conclusions will also be drawn and some recommendations for further research be made. The study investigated the perceptions of Grade Eleven pupils from public schools in the Coastal region of the Durban Metropolitan area, with regards to career choice and career information.

The objectives of the research were:

- To explore the psychological theory underpinning the subject of people's perceptions.
- To explore the ways in which people's perceptions influence their behaviour.
- To define the term 'career' and to ascertain the ways in which it is conceptualised by Grade Elevens'.
- To establish whether or not Grade Elevens' have a made a career choice, and to explore the types of careers they have chosen.
- To establish the ways in which Grade Elevens' perceptions of career choice and career information affect their behaviour with regards to choosing a career and accessing career information.
- To establish whether the career information available to Grade Eleven's is perceived by the subjects to be useful, as well as gender and culturally sensitive.
- To explore the effectiveness of the schools' role in providing holistic vocational guidance.

The information required to meet the research objectives was obtained through a literature review and a self-administered, structured questionnaire, developed independently by the researcher. The questionnaire was comprised of a combination of open-ended and closed-ended questions. These questions were structured around specific variables located in the theoretical framework, and aimed to tap into the existence of scholars' perceptions of career choice and career information. In this way, the questionnaire was developed in accordance with the research aims.

The perceptions of one hundred and twenty scholars, from three randomly sampled public high schools in the Coastal region of the Durban Metropolitan area, were obtained through the means of a structured questionnaire. The three schools comprised a boys' high school, a girls' high school and a co-educational or mixed gender high school.

The majority of subjects in the sample were in the mid-adolescent age range (sixteen to seventeen years), and were female. Forty-six percent were white, and thirty percent black. Only fourteen percent were Indian and five percent coloured. Subjects' parents' occupations were consistent with theory on gender-typed occupations (Ragins, 1989), since forty-one percent of the respondents indicated that their fathers had careers within *enterprising* occupations, for example sales or management, while forty-two percent reported that their mothers were involved in *social* professions, such as teaching, nursing or counselling. All occupations were categorised according to Holland's Occupational Finder (1985).

6.2. Summary of the main results

6.2.1. Frequency data results

Descriptive statistics revealed the following data:

Fifty five percent conceptualised the term 'career' in a concrete and tangible way; as the job you pursue after school, or as a life-long job, enjoyment and earnings. These findings indicate that scholars have a simplistic understanding of the term and need to re-conceptualise it as a changing and dynamic entity. Twenty-percent offered a more sophisticated interpretation of the concept. They explained that a career was a lifestyle and goal, involving responsibility and opportunities.

The majority of the subjects (seventy-three percent) reported that they had already made a career choice, and have hence established a personal career-identity, while twenty-seven percent indicated that they had not. Subjects' choice of careers covered five categories, the most popular falling within *investigative* occupations, where choices were idealistic, consisting mostly of high status, high paying jobs requiring college or university education. Other choices were categorised within *artistic*, *realistic*, *enterprising*, or *social* occupations. None of the subjects selected a *conventional*-type career, which suggests that many of their choices have been based on idealistic and naïve notions of careers, thus indicating a need for an emphasis within career guidance on the value of making realistic and practical choices that are consistent with individual interests and abilities.

Fifty-eight percent of the subjects indicated that a career choice should be made during high school, which suggests that career planning is a priority for the majority. Of these, forty-seven percent indicated that they had made this choice in Grade Ten. Subjects reported that they had selected the relevant subjects for their chosen career and assured high grades in these subjects as a means of following-up on their career choice. The involvement of family members in the subjects' career choice seemed to be common, as reported by forty-two percent of the subjects. Family involvement seemed to be either:

- Positive, in the form of encouragement and confirmation from parents, or
- Negative, in the form of pressure from family, for example, to become involved in the family business.

Evidence of family involvement in career choice points to a need for the development of programmes to assist parents in adopting appropriate ways to encourage their children to conduct an effective career exploration and make informed career choices.

Subjects held perceptions that were generally positive with regards to the emphasis of career information on gender and culture neutrality. Sixty-nine percent reported that the career information to which they had been exposed encouraged them to consider all possible careers, regardless of their gender. Along a similar vein, fifty-eight percent indicated that the information was culturally neutral, in that it was free of racial and cultural stereotyping. These results suggest that in the classroom, career guidance has successfully reinforced the idea that race or gender should not influence career choice in any way. These important findings prompted the

researcher to further investigate the possible existence of statistically significant relationships between subjects' positive perceptions of career information and gender, race and parents' occupations.

All the subjects in the sample indicated that career guidance classes were part of their school curriculum. Forty-five percent reported that these classes dealt with career issues specifically, while forty-three percent cited that both career issues and general life skills were discussed. These findings suggest that respondents have been exposed to either career information and career-related issues specifically, or have dealt with the practical aspects of career planning in the wider context of adopting general coping and life skills. Finally, forty-nine percent indicated that none of their teachers besides their vocational teacher had offered them career guidance, which highlights a need for an emphasis on a more holistic and integrated approach to career guidance, requiring increased interest and involvement from all school staff.

6.2.2. Cross-tabulation results

Relationships between variables were generally weak, although a few were statistically significant. The following findings emerged from the cross-tabulations:

- **There is a statistically significant relationship between career choice and gender:**

Cross-tabulations served to confirm a choice of careers within traditional gender-roles with a portion of the subjects, but also revealed a major shift in perceptions toward career choices that do not conform to these roles.

The majority of subjects who reported a choice within the realistic occupations were boys, while careers categorised within the social occupations were chosen almost entirely by girls. These findings are consistent with theory on gender-roles (Ragins, 1989). Interestingly, more than twice as many girls than boys selected investigative careers, and twice as many boys as girls chose artistic occupations. These findings may suggest that both boys and girls are starting to make choices that are not shaped by gender-role stereotypes. However, a high female interest in investigative occupations may also reflect idealistic career perceptions and expectations.

- **There is a statistically significant relationship between subjects' perceptions of the usefulness of career information; and gender:**

Most of the subjects who reported that the career information to which they had been exposed had been useful, were girls, while the majority of subjects who reported that they were unsure with regards to the usefulness of the information, were boys. These results highlight the need for research into different types and forms of information (other than text books) to which boys might more readily respond. For example, access to computer-aided career exploration and videos, may encourage boys to develop a more positive and active approach to career choice and career information.

- **There is a statistically significant relationship between subjects' perceptions of the usefulness of career information in terms of its role in encouraging them to consider all careers, regardless of culture or race; and gender:**

Of the respondents who reported that the career information to which they had been exposed was useful, the majority were girls, and of those who indicated that it had not been useful in this regard, the majority were boys. These results possibly indicate that girls are more confident about their career choices and are more likely to make choices that are free of racial or cultural stereotypes. The findings suggest that boys may have had less exposure to culturally neutral information, and hence may be prone to making choices that are shaped by racial or cultural stereotypes.

- **There is a statistically significant relationship between the explanations offered by subjects with regards to their perceptions of the usefulness of the information in terms of its cultural neutrality; and gender:**

Of those subjects who offered direct and specific responses, by explaining that the information was useful in that it encouraged them to consider all careers, regardless of their culture, the majority were girls. Of those who offered an indirect explanation, for example, that all the necessary information was made available to them, the majority were boys. Since the data reveals a consistent pattern between subjects' responses regarding the usefulness of the information in terms of it being culturally neutral, and

subjects' reasons for their responses, the validity and reliability of the findings are reinforced.

- **There is a statistically significant relationship between subjects' perceptions of general staff involvement in career guidance; and gender:**

Of those subjects who indicated that they had not received career guidance from any of their teachers besides their vocational teacher, the majority were girls, although more boys than girls reported that one additional teacher had offered them guidance. However, of those respondents who indicated that they had received guidance from between two to three additional teachers, the majority were girls.

The findings indicate different approaches to career exploration and possibly, decision-making, relative to gender. The girls' approach to career choice seems to be consistent with the Optimising Model of decision-making, while the boys' behaviour seems to follow that of the Satisficing Model (Robbins, 1996). Consequently, boys need to be encouraged to consult a wider variety of information sources before making a decision.

- **A statistically significant relationship does not exist between subjects' perceptions of career choice and career information; and race:**

Race was not found to affect subjects' perceptions of career choice and career information, since subjects' reported that the career information to which they had been exposed encourages them to consider all careers, regardless of their culture or race. Hence, the results indicate that their career aspirations and choices have been not restricted by race or culture.

6.3. Problems encountered

6.3.1. Methodological problems

Methodological problems are detailed in Chapter 4. In summary, these problems were as follows:

- The use of purposive sampling to select the respondents for participation in the research undermines the level of representivity of the sample. The consistent use of systematic probability sampling throughout the research process would have resulted in a sample that was more highly representative of the entire population of schools in the Coastal region of the Durban Metropolitan region. However, time constraints rendered this sampling method impractical.

Purposive sampling is acceptable in special situations where it "uses the judgement of an expert in selecting cases or it selects cases with a specific purpose in mind" (Neuman, 1997: 206). In this study, the vocational guidance teachers may be perceived as the 'experts' who selected certain classes for the purpose of ensuring that the sample was representative of the entire grade. For these reasons, the results are reliable and valid.

- There was an exclusive reliance on a structured questionnaire for data collection. Directive interviews with the vocational guidance teachers of the schools concerned may have served to clarify the validity of data obtained via the structured questionnaire, and provide some further insight into the statistically significant relationships identified between gender and some of the variables. However, since the researcher made extensive use of the subjects' comments, the results are justified. Furthermore, the findings are considered to be reliable and valid in view of the fact that the investigation was confined to scholar perceptions.
- The teachers' pivotal role in the research process was a disadvantage in that the researcher yielded very little control over data collection in terms of the time taken for the questionnaires to be completed and returned. However, the teachers' control over the process enabled them to purposively select classes for participation, hence ensuring a higher level of representivity of the sample.

6.3.2. Analysis problems

Analysis problems are discussed at length in Chapter 4. In summary, these problems were as follows:

- In the first stage of analysis, the use of descriptive statistics meant that all conclusions were tentatively, but not firmly drawn.
- While a number of statistically significant bi-variate relationships were identified in the second stage of analysis through cross-tabulations, many could not be reported, since there were too many categories within each variable for the sample size of one hundred and twenty. This problem necessitated the combination of categories within certain variables via recoding.

However, since analysis was rigorous and thorough in that both qualitative and quantitative methods were employed, which complemented each other, and all conclusions (except those confirmed via Chi-square analysis) were tentatively drawn, the results are considered to be valid and reliable.

6.4. Conclusions

The study investigated the psychological theory underpinning peoples' perceptions within the theoretical framework, thereby laying the foundation to explore the nature of Grade Elevens' perceptions of career issues, and to establish the ways in which these perceptions shape their behaviour.

A number of tentative conclusions were drawn from the findings of the study.

*** Scholars generally have a narrow and simplistic conceptualisation of the term 'career'.**

The findings suggest that subjects' understanding of the concept is shaped by the tangible behaviours that are linked to the term, such as pursuing a life-long job, as well as the associated rewards of enjoyment and earnings. A minority of the sample offered a sophisticated interpretation of the concept as a lifestyle and goal, involving responsibility and opportunities.

These findings are consistent with theories on adolescent conceptualisation of career choice and the results that have emerged from numerous studies (Gysbers and Moore, 1979; Henen, 1991; Gouws, 1993; Sharpes, 1994 and Zunker, 1998).

The results also suggest that subjects' understanding of the term 'career' as a life-long job is inaccurate and distorted. Consequently, teachers need to help scholars to re-conceptualise the notion of the career as a dynamic entity that is shaped by current economic, political, social and technological changes, as suggested by Gysbers and Moore, 1979; Henen, 1991; Gouws, 1993; Sharpes, 1994 and Zunker, 1998. If the youth are to be prepared for the changing world of work, "preparing for schooling in the twenty-first century will require dramatic changes in programmes and attitudes" (Sharpes, 1994: 74). Vocational guidance programmes conducted by teachers as well as the content of career information that is produced for use in schools must be consistent with this new understanding of the career. This will ensure that scholars plan their careers with an emphasis on acquiring the skills of flexibility, adaptability and critical thinking

*** The majority of scholars have made a career choice and have therefore established a personal identity.**

Since the majority of the respondents indicated that the most appropriate time at which to decide on a career was during high school, it is evident that formulating tentative but realistic career plans is a priority for them. In addition, the data suggests that the majority of the subjects have formulated tentative career plans. Hence, they are attempting to shape a personal career-related identity, thereby avoiding the negative effects of role confusion, as documented by Bester (1990) and Drummond and Ryan (1995). In view of the findings that highlight parents' considerable influence over career choice, programmes designed to equip parents with the necessary tools for positive involvement in their teenagers' career choices may result in wiser and more informed decisions, as suggested by Lee (1993).

*** Scholars perceive the career information to which they have been exposed to be useful overall, in addition to being useful regarding its role in encouraging them to consider all possible careers, regardless of their gender or culture.**

The majority of subjects perceive the career information to which they have been exposed to be useful, as well as gender and culture fair. These findings are not consistent with those of

international research. Lee and Ekstrom (1987) documented that guidance counselling is not equally available to all high school students, while Herring (1990) found that students were not receiving sufficient career information in order to make an informed career choice, and concluded that there are differences in career guidance and counselling delivery relative to ethnicity.

Subjects' positive perceptions regarding the overall usefulness of career information may be a result of the political democratisation of the country that was formally instituted in 1994. The racial integration of public schools may have alerted many guidance teachers to the importance of ensuring that the concept of democracy extend to the classroom. Career guidance is an area of teaching wherein the subject matter is exposed to context flux. Hence, teachers may have realised that scholars' career guidance needs are shaped by societal and political change. As a result, they may have begun to emphasise that career choice should not be shaped, as it was in South Africa's past, by gender or cultural role stereotypes, but should, in the new spirit of democracy, and in line with legislation that aims to promote equity and do away with discrimination, be based on individual abilities and interests.

South Africa's political transformation and legislative overhaul is relatively unique within the global context, and these changes affect the perceptions of those exposed to them. As a result of these changes, it is to be expected that teachers', and consequently scholars' perceptions and behaviour with regards to career choice and career information will be shaped by this new democratic ideology.

*** Scholars have been formally exposed to career guidance, although there is a need for a more holistic and informal approach that is integrated within the school curriculum**

All respondents within the sample reported that career guidance classes form part of their school curriculum, which indicates an exposure to career guidance principles and information sources. However, nearly half of the subjects have not received career guidance from any of their teachers besides their vocational guidance teacher. These results highlight the general need for a more holistic approach toward career choice and planning in public schools.

The adoption of a holistic approach toward career guidance in public schools would necessitate that school staff re-conceptualise their roles by redefining and broadening their responsibilities as teachers, for the purposes of contributing to the growth and development of scholars on a

broader level. According to Rosenblatt and Inbal (1999), the development of teachers' role and functional flexibility through organised programmes would be beneficial to staff through producing increased work performance, greater levels of job satisfaction, organisational commitment, and empowerment. Students would benefit since role-flexible teachers would be equipped to help them adapt to changes in the learning environment (for example, changes in the curricula), and develop broad and integrated learning frameworks (for example, explaining the way in which subject combinations may complement career choices).

The development of this flexibility is especially important to consider in South African schools, where changes in curriculum and demographic distribution are occurring constantly. Moreover, in an unstable economic climate, where scholars are anxious about not getting a job, teachers need to unite in an effort to provide vocational guidance to scholars within the context of the subjects they teach. In short, teachers need to assume the role of teacher, mentor, guide and counsellor so that scholars come to understand the way in which different subjects may complement one another, and are directly or indirectly linked to particular careers. Scholars and teachers should not perceive vocational guidance as a separate subject, wherein career choice is addressed in a weekly half hour or forty-five minute period. Rather, the issues dealt with must be reinforced by all teachers and integrated within all classes, so that career choice is conceptualised and practiced in a holistic way.

***Girls perceive the exploration of careers and career information in a positive light, while boys hold a comparatively negative view**

Cross-tabulations reveal that girls are more open-minded, motivated and confident in their career exploration, compared to the majority of boys, who either do not find the information to be useful or are uncertain with regards to its usefulness. Furthermore, a higher percentage of girls than boys reported that the career information to which they had been exposed was racially and culturally sensitive.

The girls in the study generally seem to have obtained a greater amount of career-related information, compared to the boys whose exploration was limited. These findings are consistent with related theory and research (Wallace-Brocious, 1994). The identification of unproductive decision-making styles and the distorted perceptions underpinning them, as well as the introduction of new and stimulating forms of career information through computer-aided career

exploration, are interventions suggested to motivate boys to become actively involved in constructive career exploration and planning.

***Girls' career choices are not restricted by gender-role stereotypes**

While subjects' career choices are generally consistent with theories on the gender roles and career choice (Ragins, 1989), cross-tabulations revealed that of those subjects who chose a career within the *investigative* occupations, the majority were girls. Furthermore, none selected a career within the *conventional* occupations. These findings indicate an important shift in girls' perceptions toward career choice. Their perceptions reflect a growing pursuit of male-typed careers, which is consistent with theory and research on women's changing career priorities (Conroy, 1997; Zunker, 1998).

***Race and career choice are not related**

Statistical analysis reveals that race does not affect the career choices of subjects. These findings, since they indicate that race is not viewed as a factor that restricts career choice, contradict related South African research which proposes that the career aspirations and choices of black students are hampered by social and political constraints (Thaw, 1984; Nel, 1987; Haines, 1995; Miller, 1999). Furthermore, the results serve to reinforce the validity of earlier tentative findings, which suggest that the majority of scholars found the career information to which they had been exposed, to be useful, in the sense that it encouraged them to consider all careers, regardless of their culture or race (refer to **Figure16** in Appendix C).

6.5. Recommendations for further research

Further research into the field of scholar perceptions might facilitate a deeper understanding of the issues that either hinder or help them in their efforts to make informed career choices. The following are recommendations for future research:

- In light of the findings of this study, the researcher recommends that further in-depth research be conducted into scholar perceptions of career choice and career information. Data gathered through focus groups would be qualitatively analysed to gain further insight into these perceptions, and the reasons as to why they exist.

- The researcher recommends further exploration into the changing career aspirations of adolescent girls. Once again, this data would be qualitatively gathered through focus groups, with the purpose of gaining insight into the ways in which adolescent girls' perceptions of career choice and career information are changing, as well as identifying the reasons for these perceptual and attitudinal changes.
- Feedback from these studies should be communicated to staff and scholars, thereby informing scholars of their faulty perceptions of career choice and career information, as well as exposing unproductive decision-making strategies.
- Finally, in response to this feedback, schools need to organise and run educational programmes and workshops to ensure that this new information is holistically integrated within the school curriculum. Once scholars gain an awareness of their distorted perceptions of career choice and career information, they will be empowered to make better-informed career choices.

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Appendix A

Listing of the population of schools for sampling purposes

A listing of the public high schools in the Coastal region of the Durban Metropolitan area: bordering on Amanzimtoti, Overport, West Ridge and Durban North.

Girls' high schools:

Code: 25635
Name of school: Danville Park Girls' High School
21 Middlebrook Ave, Durban North 4051
Tel: (031) 83-8224; Fax: 83-7371

Principal: Mrs C. Maddams
Superintendent of education: M.J.P. Maher
Afrikaans: 0
English: 603
Total: 603

SECOND ON THE LIST ALPHABETICALLY

Code: 25718
Name of school: Durban Girls' High School
Penzance Rd, Durban
Private Bag 14, Congella 4013
Tel: (031) 205 2275; Fax: 25-6123

Principal: Mrs A. Martin
Superintendent of education: M.J.P. Maher
Afrikaans: 0
English: 1284
Total: 1284

Code: 25791
Name of school: Grosvenor Girls' High School
20 Bideford Road, Bluff, Durban;
Private Bag X04, Bluff 4036
Tel: (031) 47 3614; Fax: 47 3685

Principal: Mrs K.A. Welgemoed
Superintendent of education: C.F. Pachonick
Afrikaans: 0
English: 786
Total: 786

Code: 25858
Name of school: Mowat Park High School
180 Anlemo Road, Montclair;
PO Box 33028
Tel: (031) 469 0425; Fax: 469 1901
Principal: Mrs E.M. Lea
Superintendent of
education: J.P. Kedian
Afrikaans: 0
English: 750
Total: 750

Code: 25916
Name of school: Northlands Girls' High School
Cadogan Drive, Durban North;
PO Box 20006, Durban North 4016
Tel: (031) 83-827?; Fax: 84-5844
Principal: Mrs J. Walters
Superintendent of
education: M.J.P. Maher
Afrikaans: 0
English: 1003
Total: 1003

Code: 25593
Name of school: Ridge Park College
399 Ridge Rd, Overport;
Private Bag X003, Overport 4067
Tel: (031) 207-3337; Fax: 28-6947
Principal: Mrs J.A.J. O'Connor
Superintendent of
education: M.J.P. Maher
Afrikaans: 0
English: 825
Total: 825

Boys' high schools:

Code: 25700
Name of school: Durban High School
255 St. Thomas Rd, Durban;
PO Box 5001, Musgrave 4062
Tel: (031) 202-7934; Fax: 22-2860
Principal: R.D. Forde
Superintendent of
education: M.J.P. Maher
Afrikaans: 0
English: 1176

Total: 1176

SECOND ON THE LIST ALPHABETICALLY

Code: 25734
Name of school: George Cambell Technical High School
261 Brickhill Rd, Durban;
Private Bag, Snell Parade, Durban 4074
Tel: (031) 332 2792 Fax: 368-2610/332-2792
Principal: G.P. Kedian (N/A)
Superintendent of
education: M.J.P. Maher
Afrikaans: 127
English: 892
Total: 1019

Code: 25759
Name of school: Glenwood High School
1 Nicholson Rd, Glenwood, Durban 4001
Tel: (031) 25-5241; Fax: (031) 25-5838
Principal: M.J.P. Maher
Superintendent of
education: G.P. Kedian
Afrikaans: 0
English: 1165
Total: 1165

Code: 25775
Name of school: Grosvenor Boys' High School
4 Moss Road, Fynnland, Bluff;
PO Box 21012, Fynnland, Durban 4020
Tel: (031) 466 3241; Fax: 466 3243
Principal: P.W. Schultz
Superintendent of
education: C.F. Pachonick
Afrikaans: 0
English: 530
Total: 530

Code: 25890
Name of school: Northwood Boys' High School
Kensington Drive, Durban North;
PO Box 20079, Durban North 4016
Tel: (031) 83-6501/2; Fax: 84-1898
Principal: I. Corbishley
Superintendent of

education: M.J.P. Maher
Afrikaans: 0
English: 1280
Total: 1280

Co – educational / mixed gender high schools

Code: 26278
Name of school: Amanzimtoti High School
30 Dartnell Road, Amanzimtoti
Private Bag X20, Amanzimtoti 4125
Tel: (031) 903 2374/5; Fax: 903 7313
Principal: P.C. Maleham
Superintendent of
education: G.P. Kedian
Afrikaans: 0
English: 602
Total: 60

SECOND ON THE LIST ALPHABETICALLY

Code: 25619
Name of school: Brettenwood High School
399 Olivier Lea Drive, Umbilo;
PO Box 41635, Rosburgh 4072
Tel: (031) 465 4288; Fax: 465 6546
Principal: J.D. Drysdale
Superintendent of
education: J.P. Kedian
Afrikaans: 0
English: 631
Total: 631

Code: 26450
Name of school: Kingsway High School
Umdoni Road, Amanzimtoti;
Private Bag X20007, Amanzimtoti, 4125
Tel: (031) 903 2353; Fax: 903 6811
Principal: W.J. Jarvis
Superintendent of
education: J.P. Kedian
Afrikaans: 0
English: 1054
Total: 1054

Code: 25882
Name of school: New Forest High School
Alamein Avenue, Woodlands, Durban;
PO Box 53194, Yellowwood Park 4001
Tel: (031) 46 26206; Fax: 469 1816
Principal: I.C. Smith
Superintendent of education: J.P. Kedian
Afrikaans: 0
English: 504
Total: 504

Code: 26013
Name of school: West Ridge High School
89 Jan Smuts Highway, Mayville 4058.
Tel: (031) 26 11332; Fax: 261 8125
Principal: C.J. Bester
Superintendent of education: J.P. Kedian
Afrikaans: 185
English: 469
Total: 654

Appendix B

Questionnaire

Thank you for taking the time to complete the following questionnaire. As a Masters students in Industrial Psychology, I am interested in researching Grade Elevens' / Standard Nines' perceptions and attitudes toward career choice in general. There are no right or wrong answers, and you will remain anonymous, so please respond to the questions as honestly as you can. Your participation is greatly appreciated!

1. What, in your mind, does the term 'career' mean to you?

2. Generally speaking, when does one make a decision about a career?

3. What would you like to become?

If you have not yet decided on a career, skip Question 4 and proceed with Question 5.

4a) If you already know what you want to become, what have you done about this decision?

4b) When did you start to make this career choice?

4c) Who encouraged you to arrive at this decision?

If you answered Questions 4a, b and c, skip Question 5 and proceed with Question 6.

5a) What efforts (if any) have you made to explore some possible career paths?

5b) What do you think are the main reasons for your indecision at this stage?

6. Do you have career counselling / vocational guidance classes at school?

7. If so, what is covered in these classes? In other words, what kind of subject matter is dealt with?

8a) At what grade / standard did you start to receive career counselling / vocational guidance classes?

8b) Consider the information that you've received from career counselling / vocational guidance classes. How useful have you found it? (Mark the appropriate answer with a cross in the space provided on the right of the options).

- 5 = Very useful
- 4 = Useful
- 3 = Unsure
- 4 = Not useful
- 5 = Not useful at all

8c) Explain why you chose this answer.

9. At what grade / standard do you think career counselling / vocational guidance should begin?
Why?

10a) Think about the career information that you've been exposed to. How useful have you found it in encouraging and helping you to consider all possible careers, despite your gender? In other words, how useful has the information been in terms of conveying the message that you need to consider a full range of career options, regardless of whether you are male or female? (Mark the appropriate answer with a cross in the space provided on the right of the options).

- 5 = Very useful
- 4 = Useful
- 3 = Unsure
- 2 = Not useful
- 1 = Not useful at all

10b) Explain why you chose this answer.

11a) Once again, think about the career information that you've been exposed to. How useful have you found it in encouraging and helping you to consider all possible careers, despite your cultural background? In other words, how useful has the information been in terms of conveying the message that you need to consider a full range of career options, regardless of your culture or race? (Mark the appropriate answer with a cross in the space provided on the right of the options).

- 5 = Very useful _____
- 4 = Useful _____
- 3 = Unsure _____
- 4 = Not useful _____
- 5 = Not useful at all _____

11b) Explain why you chose this answer.

12. Are there any teachers in your school (besides your vocational guidance teacher(s)), who have offered you career guidance? If so, how many, and in what way have they demonstrated or showed this? (It is not necessary to mention teachers' names).

Thank you for assisting me with my research. For the purposes of sorting and coding your responses, please complete the following section before handing in the questionnaire.

Age: _____

Race: _____

Gender: _____

Mothers' occupation: _____

Fathers' occupation: _____

Appendix C

Figures

Figure 1: Age range of subjects

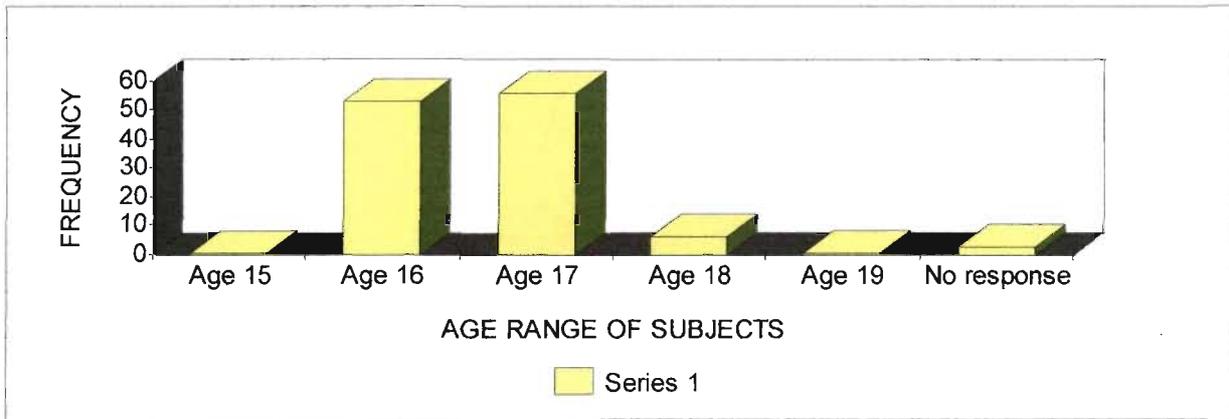


Figure 2: Racial composition of subjects

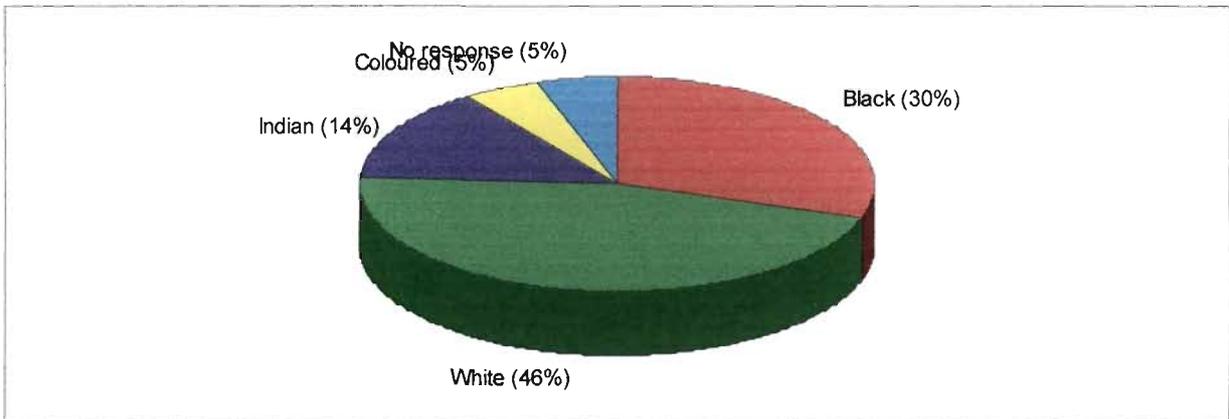


Figure 3: Gender composition of subjects

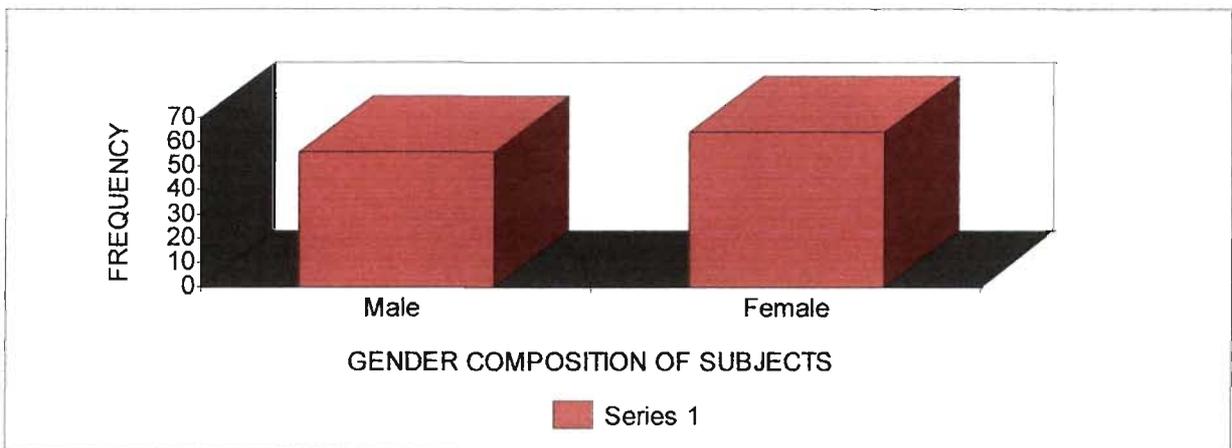


Figure 4: Occupational profile of subjects' mothers

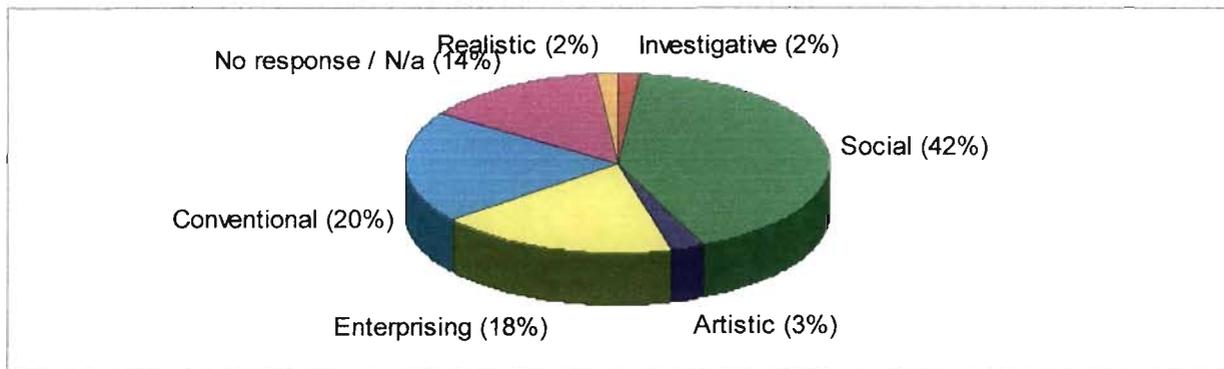


Figure 5: Occupational profile of subjects' fathers

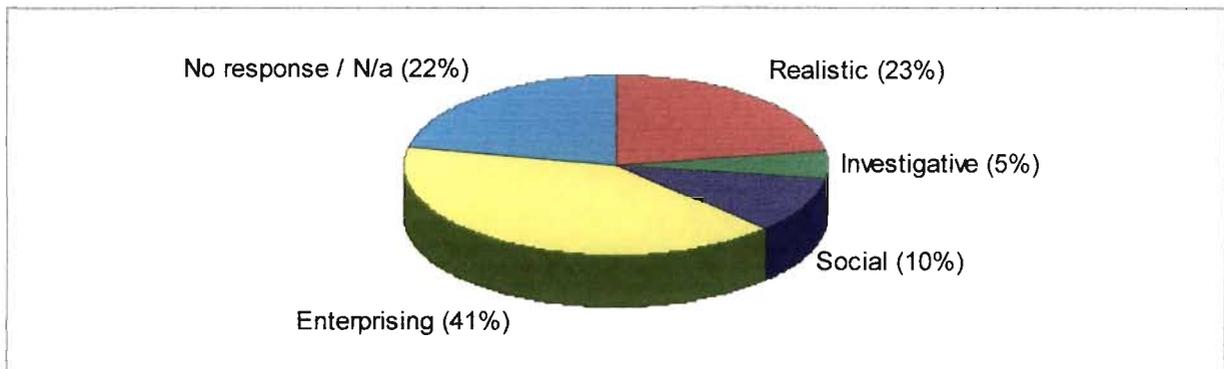


Figure 6: Subjects' conceptualisation of the term 'career'

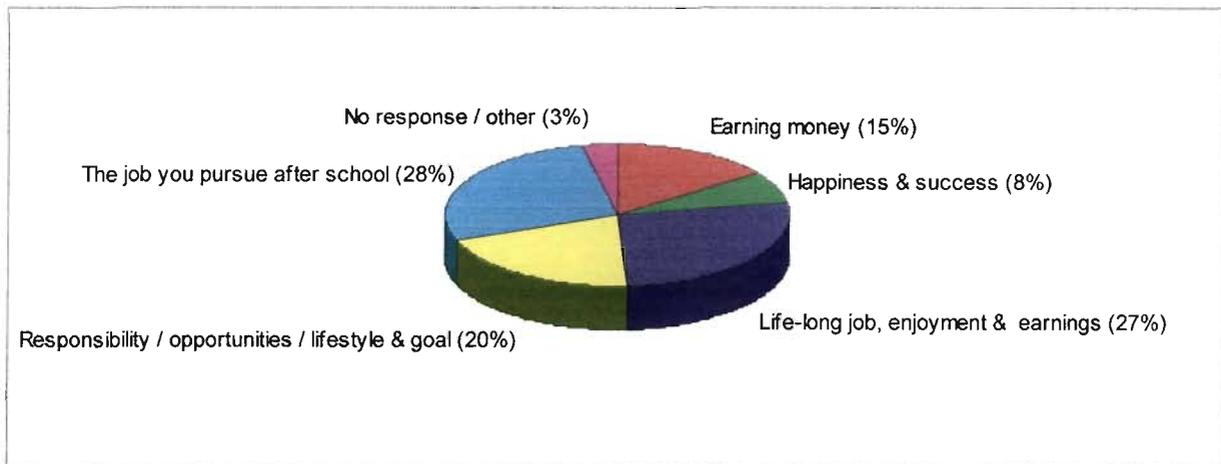


Figure 7: Subjects' tentative career choices

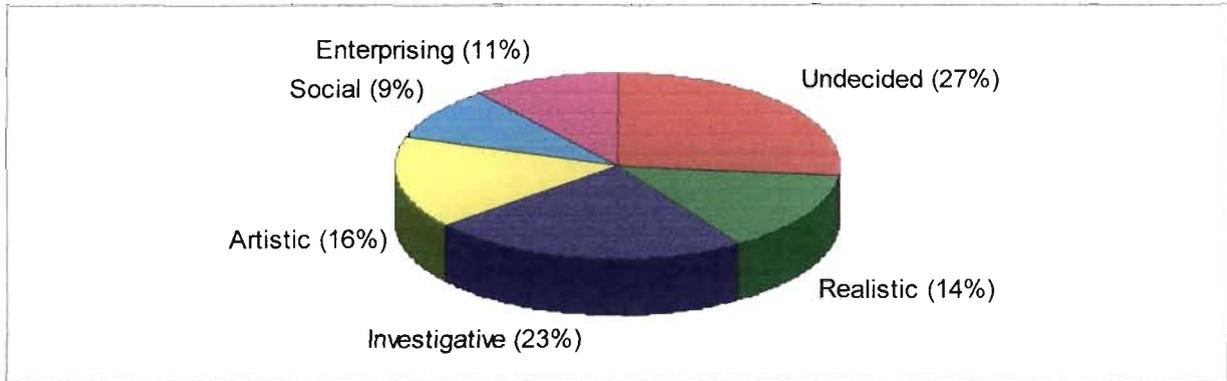


Figure 8: Subjects' perceptions of when a career choice should be made

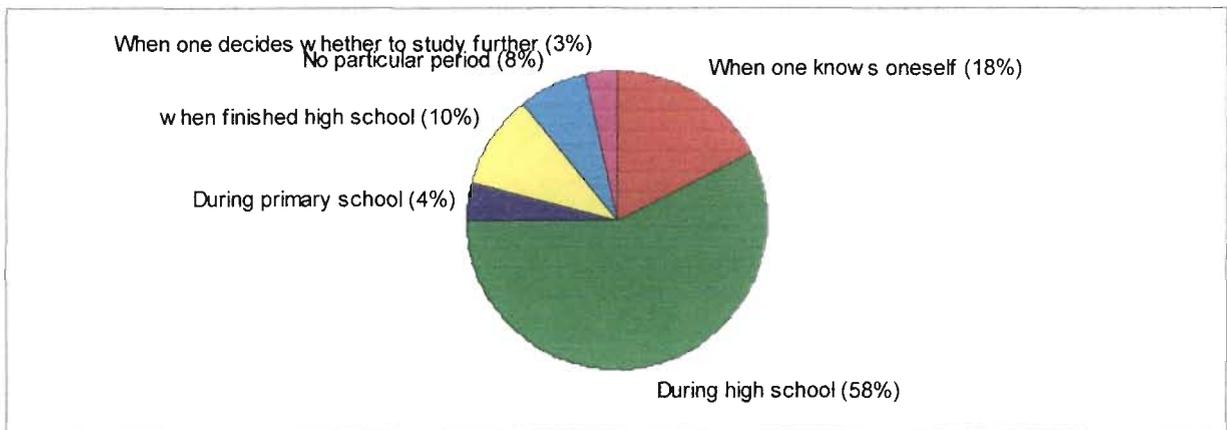


Figure 9: Time at which career choice was made

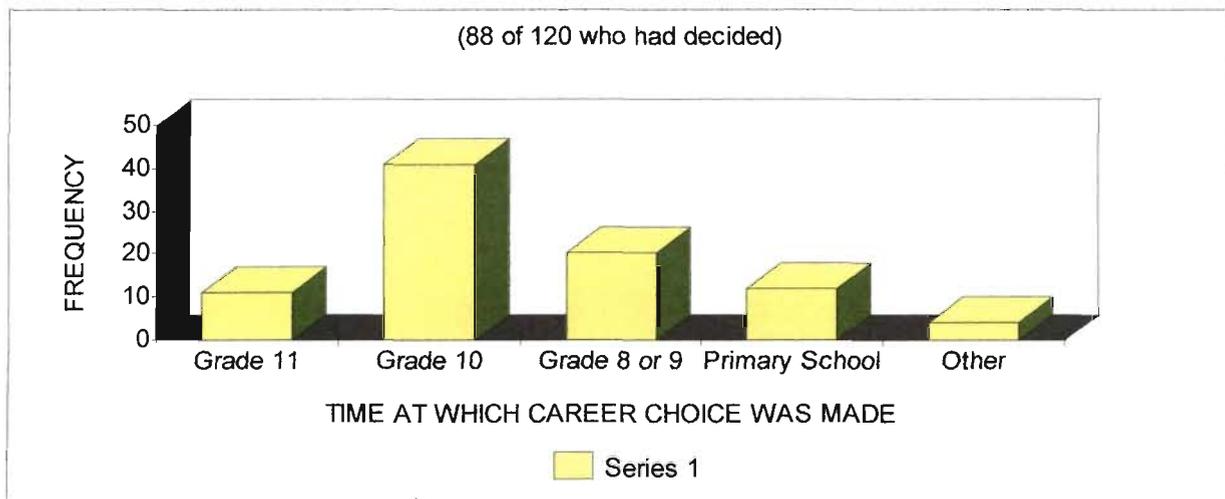


Figure 10: Behaviours engaged in by subjects as a follow-up to career choice

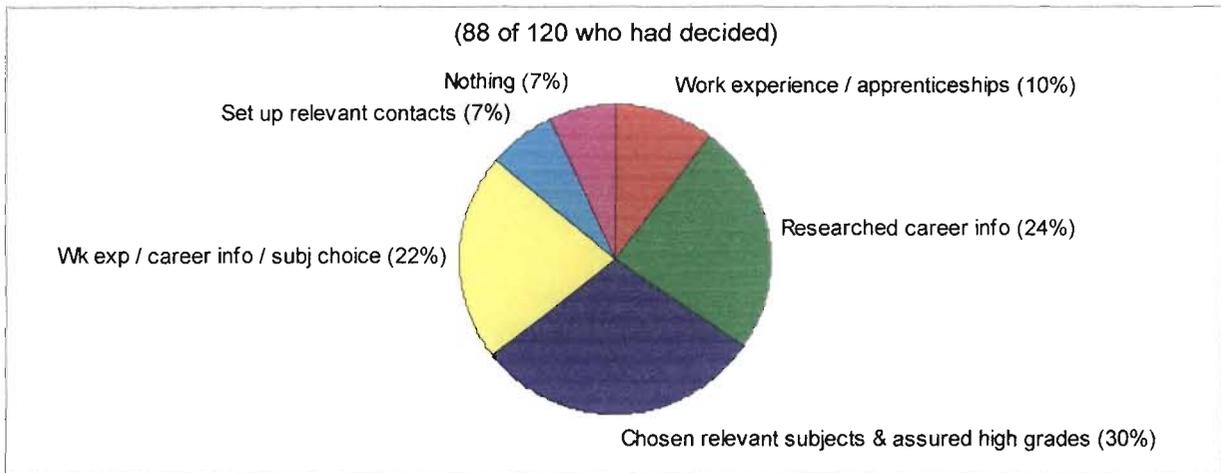


Figure 11: Perceived factors influencing career choice

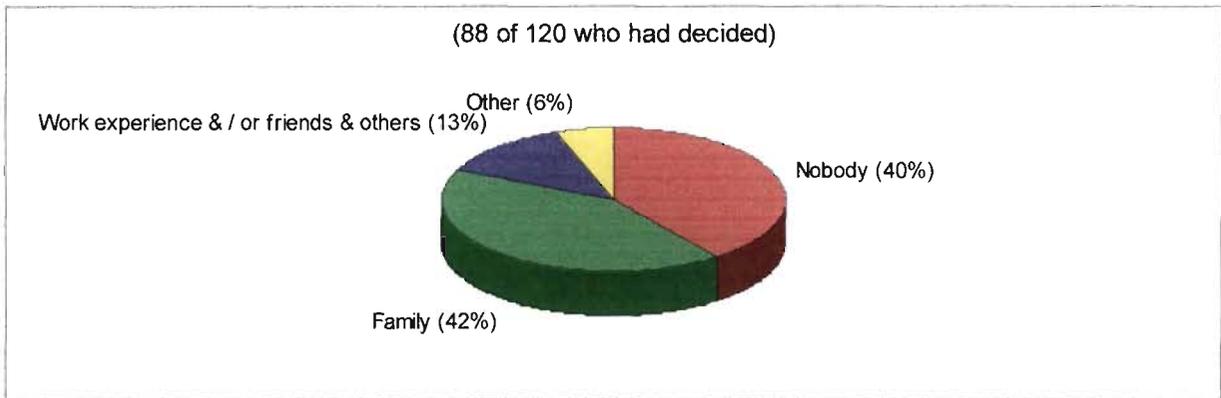


Figure 12: Behaviours engaged in by subjects who had not yet made a career choice

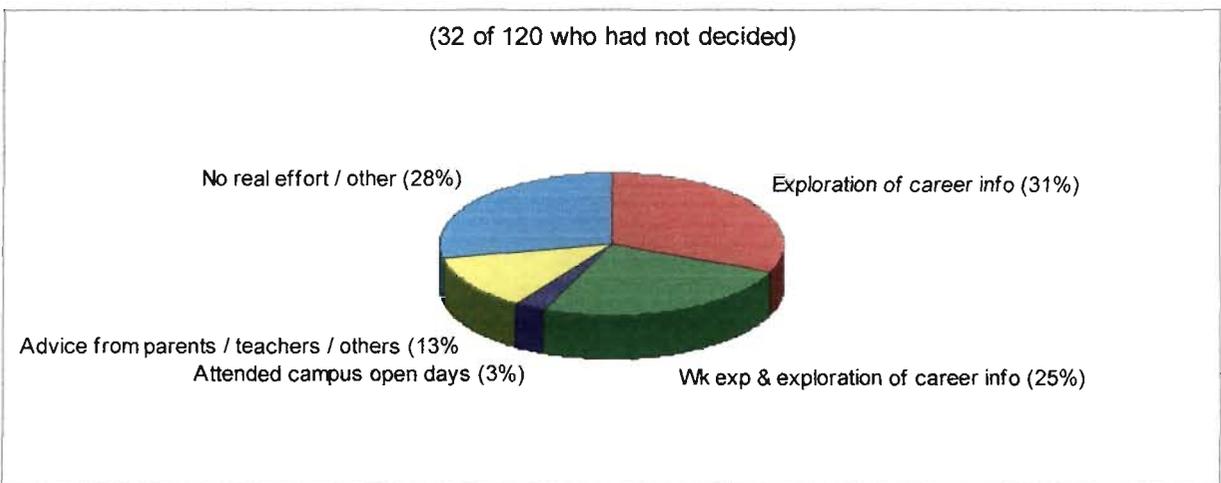


Figure 13: Subjects' perceived reasons for their indecision

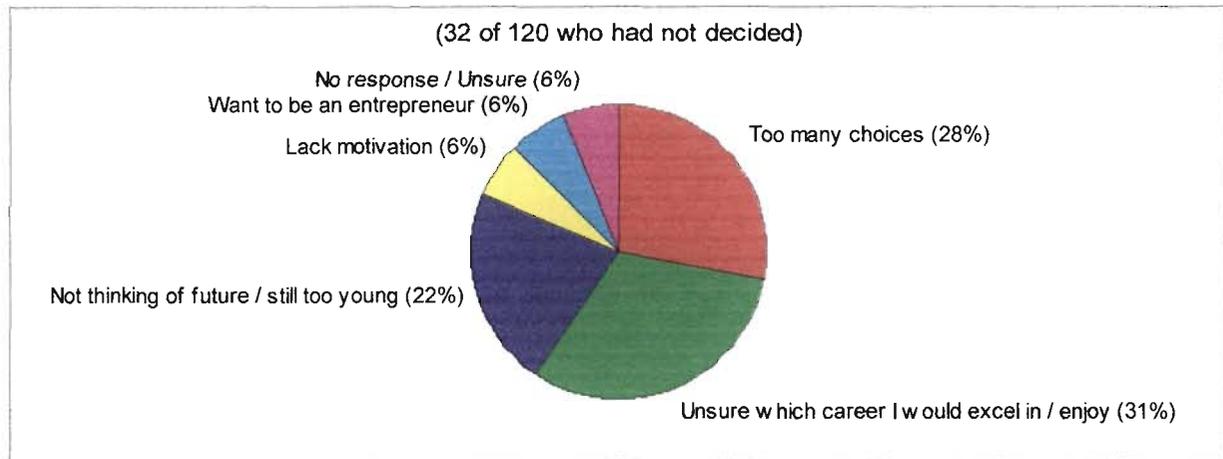


Figure 14: Subjects' perceptions regarding the usefulness of the career information to which they have been exposed

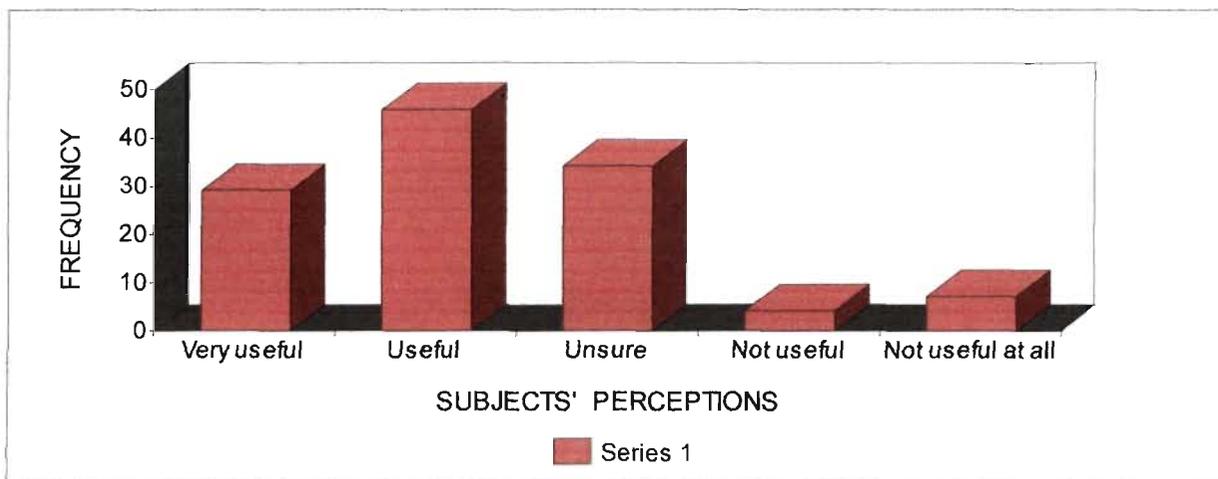


Figure 15: Subjects' perceptions regarding the usefulness of career information, in terms of its role in encouraging them to consider all possible careers, regardless of gender

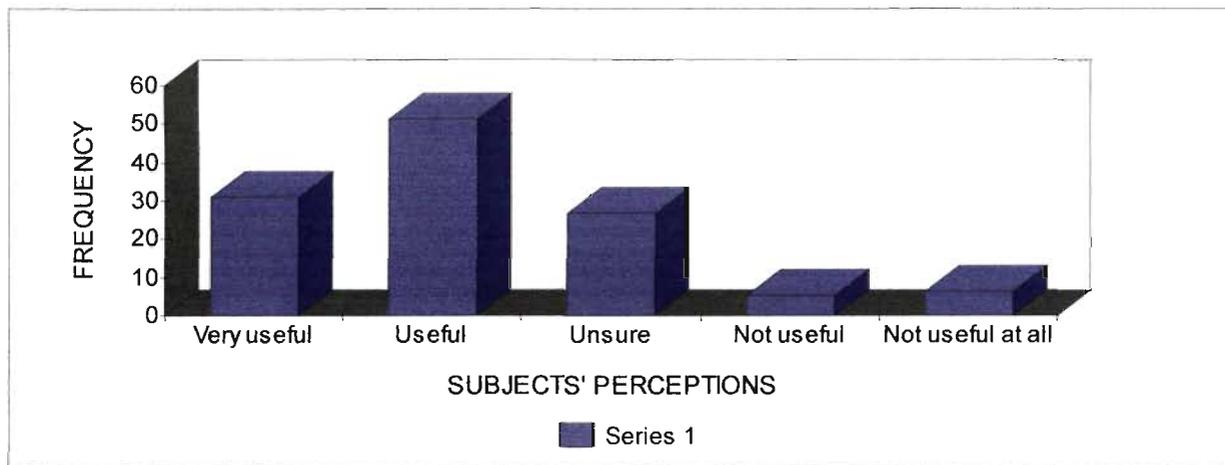


Figure 16: Subjects' perceptions regarding the usefulness of career information in terms of whether or not it has encouraged them to consider all possible careers, regardless of culture or race

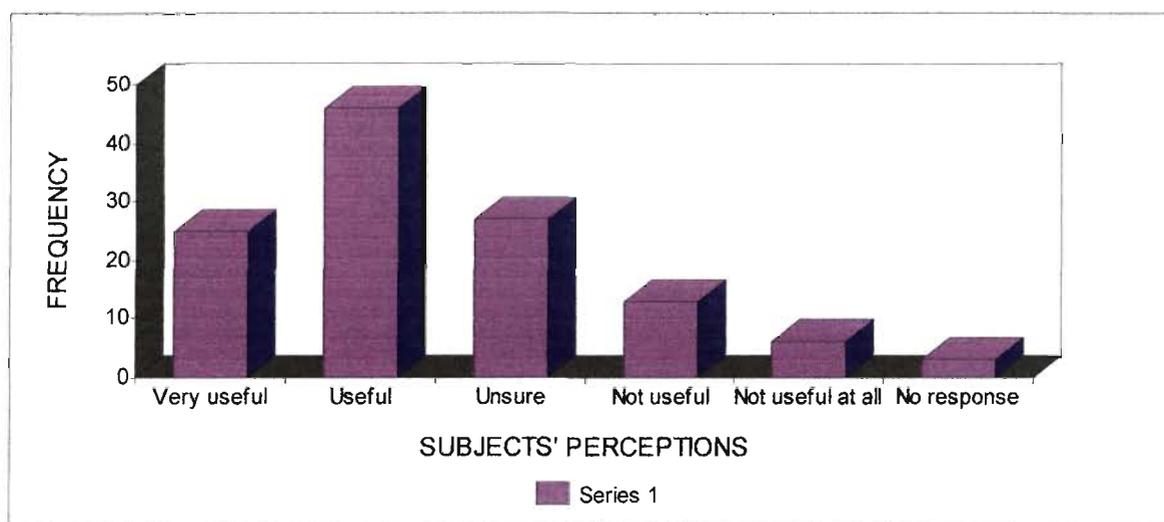


Figure 17: Subjects' perceptions regarding the nature of subject matter dealt with in career guidance classes

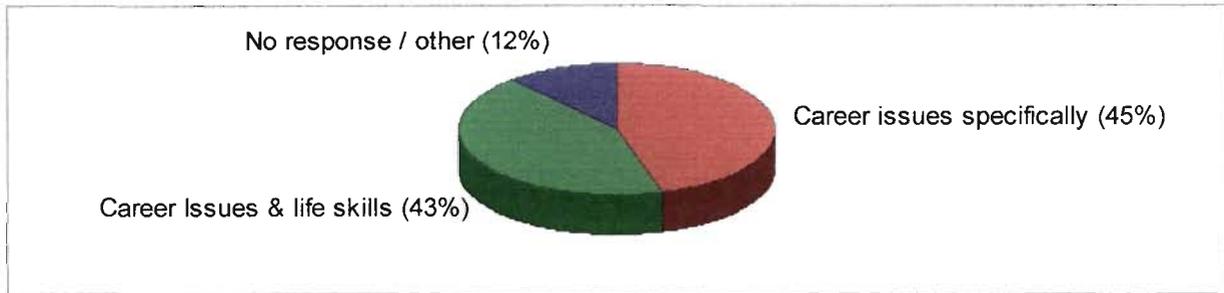


Figure 18: Grade at which subjects began career guidance classes

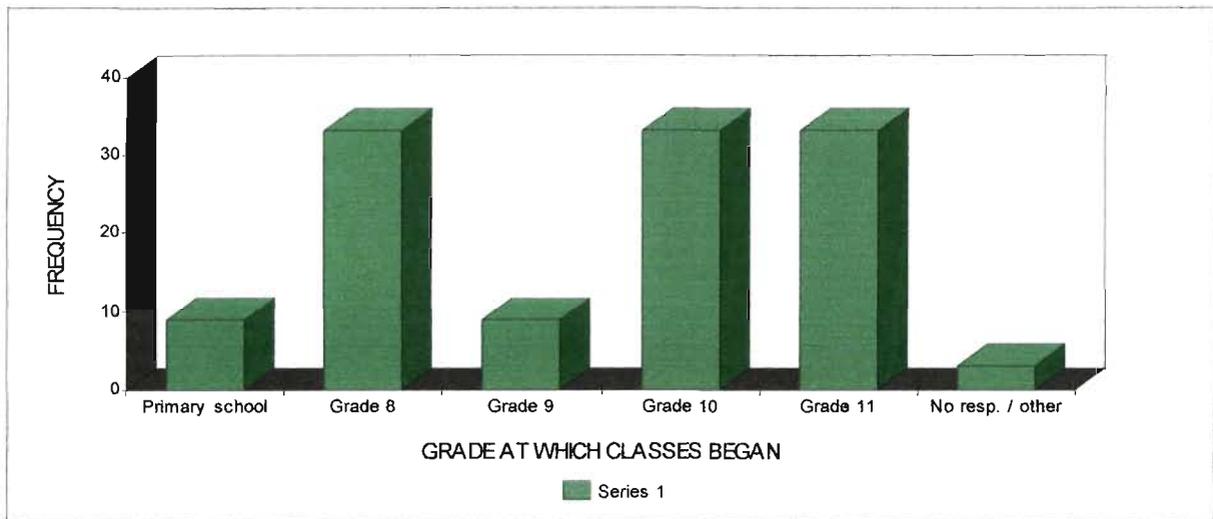


Figure 19: Subjects' perceptions regarding the most suitable period at which career guidance should begin

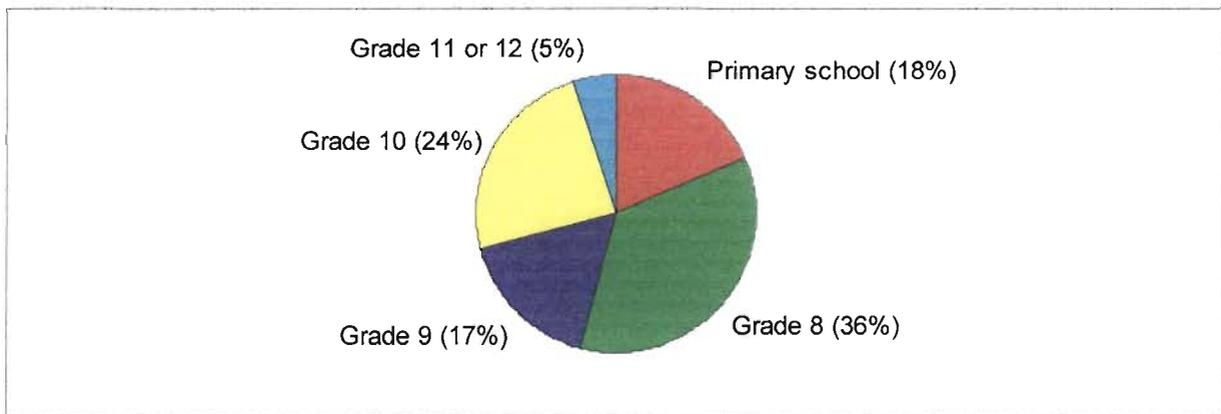
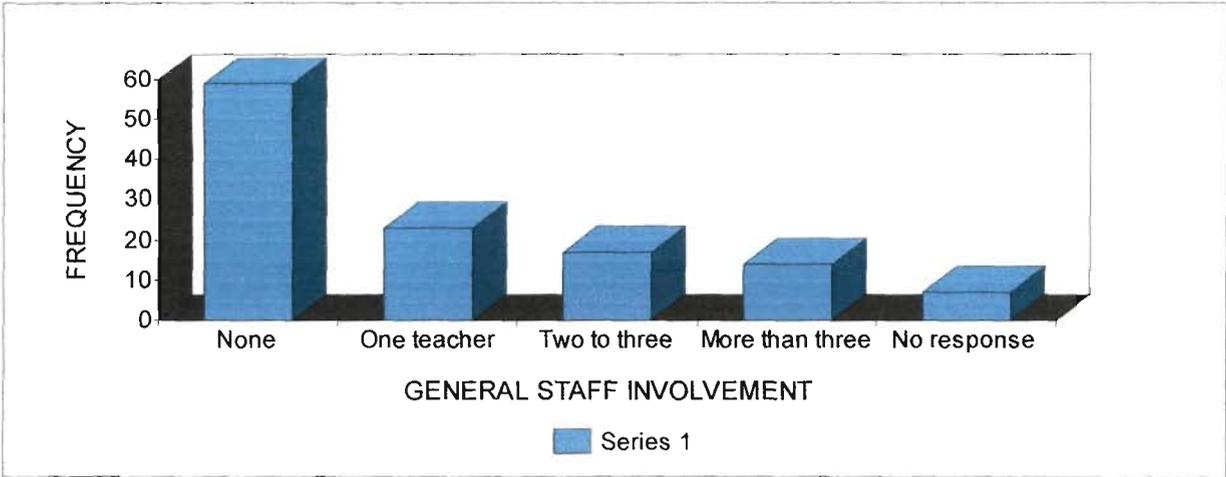


Figure 20: Subjects' perceptions of general staff involvement in career guidance



Appendix D

Tables

Table 1: Career choice by Gender (percentages)

Occupational choices * Gender composition of subjects Crosstabulation

			Gender composition of subjects		Total
			Male	Female	
Occupational choices	Undecided	Count	15	17	32
		% within Gender composition of subjects	26.8%	26.6%	26.7%
	Realistic	Count	14	3	17
		% within Gender composition of subjects	25.0%	4.7%	14.2%
	Investigative	Count	8	20	28
		% within Gender composition of subjects	14.3%	31.3%	23.3%
	Artistic	Count	13	6	19
% within Gender composition of subjects		23.2%	9.4%	15.8%	
Social	Count	1	10	11	
	% within Gender composition of subjects	1.8%	15.6%	9.2%	
Enterprising	Count	5	8	13	
	% within Gender composition of subjects	8.9%	12.5%	10.8%	
Total		Count	56	64	120
		% within Gender composition of subjects	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	22.587 ^a	5	.000
Likelihood Ratio	24.514	5	.000
Linear-by-Linear Association	2.245	1	.134
N of Valid Cases	120		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 5.13.

Table 2: Subjects' perceptions regarding the usefulness of the career information to which they have been exposed; by Gender (percentages)

Subjects' perceptions regarding the usefulness of the career information to which they have been exposed (recoded) * Gender composition of subjects Crosstabulation

			Gender composition of subjects		Total
			Male	Female	
Subjects' perceptions regarding the usefulness of the career information to which they have been exposed (recoded)	Not useful	Count	5	6	11
		% within Gender composition of subjects	8.9%	9.4%	9.2%
	Unsure	Count	23	11	34
		% within Gender composition of subjects	41.1%	17.2%	28.3%
	Useful	Count	28	47	75
		% within Gender composition of subjects	50.0%	73.4%	62.5%
Total	Count	56	64	120	
	% within Gender composition of subjects	100.0%	100.0%	100.0%	

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	8.645 ^a	2	.013
Likelihood Ratio	8.751	2	.013
Linear-by-Linear Association	3.622	1	.057
N of Valid Cases	120		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 5.13.

Table 3: Subjects' perceptions regarding the usefulness of the career information in terms of its role in encouraging them to consider all possible careers, regardless of culture or race; by Gender (percentages)

Subjects' perceptions regarding the usefulness of the career info in terms of its role in encouraging them to consider all possible careers, regardless of culture or race * Gender composition of subjects Crosstabulation

			Gender composition of subjects		Total
			Male	Female	
Subjects' perceptions regarding the usefulness of the career info in terms of its role in encouraging them to consider all possible careers, regardless of culture or race	Not useful	Count % within Gender composition of subjects	10 17.9%	1 1.6%	11 9.2%
	Unsure	Count % within Gender composition of subjects	12 21.4%	15 23.4%	27 22.5%
	Useful	Count % within Gender composition of subjects	34 60.7%	48 75.0%	82 68.3%
Total	Count % within Gender composition of subjects	56 100.0%	64 100.0%	120 100.0%	

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	9.597 ^a	2	.008
Likelihood Ratio	10.750	2	.005
Linear-by-Linear Association	6.518	1	.011
N of Valid Cases	120		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 5.13.

Table 4: Subjects' explanations of their responses regarding the usefulness of career information, in terms of its role in encouraging them to consider all possible careers, regardless of culture or race; by Gender (percentages)

Subjects' reasons for their responses with regards to the usefulness of career information, in terms of it being free of cultural or racial stereotyping * Gender composition of subjects Crosstabulation

			Gender composition of subjects		Total
			Male	Female	
Subjects' reasons for their responses with regards to the usefulness of career information, in terms of it being free of cultural or racial stereotyping	Helps you consider all careers, regardless of your gender	Count % within Gender composition of subjects	8 14.3%	26 40.6%	34 28.3%
	You are told everything you need to know about careers	Count % within Gender composition of subjects	22 39.3%	16 25.0%	38 31.7%
	Helps you choose a career that suits your gender	Count % within Gender composition of subjects	1 1.8%	5 7.8%	6 5.0%
	Is vague / repetitive / insufficient / not useful	Count % within Gender composition of subjects	11 19.6%	2 3.1%	13 10.8%
	Unsure / no reason / other	Count % within Gender composition of subjects	14 25.0%	15 23.4%	29 24.2%
Total	Count % within Gender composition of subjects	56 100.0%	64 100.0%	120 100.0%	

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	18.960 ^a	4	.001
Likelihood Ratio	20.256	4	.000
Linear-by-Linear Association	4.089	1	.043
N of Valid Cases	120		

a. 2 cells (20.0%) have expected count less than 5. The minimum expected count is 2.80.

Table 5: Subjects' perceptions of general staff involvement in career guidance; by Gender (percentages)

General staff involvement in career guidance * Gender composition of subjects Crosstabulation

			Gender composition of subjects		Total
			Male	Female	
General staff involvement in career guidance	None	Count	24	35	59
		% within Gender composition of subjects	42.9%	54.7%	49.2%
	1 teacher	Count	15	8	23
		% within Gender composition of subjects	26.8%	12.5%	19.2%
	2 to 3	Count	7	10	17
% within Gender composition of subjects		12.5%	15.6%	14.2%	
More than 3	Count	3	11	14	
	% within Gender composition of subjects	5.4%	17.2%	11.7%	
No response	Count	7		7	
	% within Gender composition of subjects	12.5%		5.8%	
Total	Count	56	64	120	
	% within Gender composition of subjects	100.0%	100.0%	100.0%	

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	15.819 ^a	4	.003
Likelihood Ratio	18.790	4	.001
Linear-by-Linear Association	.928	1	.335
N of Valid Cases	120		

a. 2 cells (20.0%) have expected count less than 5. The minimum expected count is 3.27.