THE LEVELS OF CAREER MATURITY AMONGST FINAL YEAR UNDERGRADUATE STUDENTS, WITHIN A DEPARTMENT, AT A HIGHER EDUCATION INSTITUTION, IN THE WESTERN CAPE

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ABSTRACT

Tertiary education is becoming increasingly costly for many students. According to Pieterse (2005), young people can barely afford to make mistakes in their career decisions, as this could cost them too much in time and money. According to Coertse and Schepers (2004), one of the most important decisions adolescents will ever face is choosing what career to pursue. Coertse and Schepers (2004) propose that an adolescent's career has significant consequences on their identity, values and aspirations.

The most efficient way to develop young persons' abilities, and assist them in realising their true potential, is through the educational and vocational training offered in schools (Lens, Herrera & Lacante, 2004). Many students do not receive proper career guidance at secondary schooling and they find themselves in their final year graduating, and unsure in terms of the career they are going to pursue. Hence, there exists a great need in the South African context for career guidance and for additional research in the levels of career maturity amongst final year undergraduate students.

Career maturity has important implications for career development and decision-making practices (Schreuder & Coetzee, 2014). The term career maturity represents a readiness to engage in and the ability to master certain career developmental tasks appropriate to the age and level of an individual (Langley, Du Toit & Herbst, 1996). In previously disadvantaged communities in South Africa, career and educational planning was characterised by under-development, marginalisation, and under-resourcing (Pieterse, 2005). This could negatively impact students' motivation towards, and perspectives of, their future careers.

The present study aimed to assess the career maturity levels among final year students at a tertiary institution. Specifically, how students' age, gender, stated certainty of career and type of secondary school influenced their career maturity levels. The sample group (N=149) consisted of final year undergraduate students, who were conveniently drawn to voluntarily partake in the research. Participants completed a biographical questionnaire as well as the Career Development Questionnaire (CDQ). Anonymity was ensured and the students were informed that all the information would be treated with strict confidentiality and used only for the stated research purposes.

Statistical analyses involved descriptive and inferential statistics (Pearson correlation, T-test and Analysis of variance). The results indicated no significant relationship between the age, stated certainty of career, type of secondary school students attended and their career maturity. However, a significant relationship was found between gender and career maturity.

KEY WORDS: Careers, adolescents, students, career decisions, career development, career choices, secondary school, career maturity, gender, age.

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WESTERN CAPE

DECLARATION

I declare that "The levels of career maturity amongst final year undergraduate students, within a department, at a higher education institution, in the Western Cape" is my own work. All the sources I have used or quoted have been indicated and acknowledged by means of complete references.

Tasneem Barendse   May 2015

Signed: …………………………….

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Firstly, I need to give thanks to my Creator, who has granted me the opportunity to further my education, as well as the necessary strength and perseverance to complete my mini thesis.

To my parents, thank you for your endless love, support and prayers throughout my many years of studies. Your encouragement, understanding and continuous motivation has aided me in achieving my goals.

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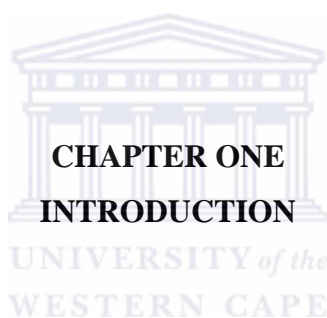
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CHAPTER ONE
INTRODUCTION

1.1 INTRODUCTION

The focus of the study will be explained in this introductory chapter. The chapter specifically presents the background of the study, its research problem and objectives.

One of the most important decisions adolescents will ever face is choosing what career to pursue (Coertse & Schepers, 2004). Career maturity is a vital aspect in terms of the readiness of students to choose a career and the career guidance students are offered. Therefore, this study examined the degree of career maturity amongst final year undergraduate students. The correlations between the aspects of career maturity and certain biographical variables such as age, gender, certainty of career focus and type of secondary school attended, are investigated.

An individual's career has significant consequences on their identity, values and aspirations (Coertse & Schepers, 2004). Individuals are considered to be ready to make appropriate career choices when they have engaged in carefully planned exploration, and have appropriate career information, self-information and decision making knowledge (Themba, Oosthuizen & Coetzee, 2012). Coertse and Schepers (2004) concur that for an individual to make the correct career choice, a certain level of career maturity should be displayed.

Career maturity has important implications for career development and decision making practices (Schreuder & Coetzee, 2014). According to Themba et al. (2012), career maturity is applicable to all age ranges, no matter the career stage in which an individual finds themselves. In career development practices, career maturity is regarded as one of the most commonly employed outcome measures (Themba et al., 2012). These authors also reported that career maturity infers that individuals are prepared to deal with the developmental tasks that are needed in their specific life stage and are ready to make decisions about their careers. Furthermore, the term career maturity represents a readiness to engage in, and the ability to master, certain career developmental tasks appropriate to the age and life stage of an individual (Langley et al., 1996; McDaniels & Gysgers, 1992). Various biographical variables have been shown to influence career maturity. Therefore, the present research study considers how students' age, gender, certainty of career focus and type of secondary school

attended influences their career maturity levels.

Career decision making is a significant aspect of career choice and career development. Hence, if students are not mature in terms of making decisions with regards to their careers, they will not be able to make proper career related decisions. Even though numerous authors have undertaken studies in the area of careers and career development, more focus is required in the area of career maturity amongst South African university students and its related factors (Mubiana, 2010). Available literature indicates that career maturity and academic satisfaction among students at universities, is a topic that has received limited attention in South Africa (Mudhovozi, 2011; Themba et al., 2012). Additionally, research studies on career maturity should be equally conducted, using samples from industry as well as students at Higher Education Institution's (HEI's).

Due to technological advances, the world of work has become increasingly competitive; hence students need to be adequately prepared upon graduating (Kuijpers & Scheerens, 2006). Pieterse (2005) states that career guidance is fast becoming increasingly important. The selection of an appropriate career is valuable for individual purposes, as well as a means of increasing work satisfaction and stability of employment. Therefore, students need to be equipped with the necessary knowledge and skills. Adjustment to a new environment, such as the world of work, is often a difficult process.

Career development is seen as a significant learning experience that characterises an individual's professional life, direction, competencies and accomplishments through various job roles (Themba et al., 2012). The career development of South Africans continues to be challenged by a lack of opportunity to explore and commit themselves to stable careers, due to unpredictable environmental factors (Watson, Brand, Stead & Ellis, 2001). Certain career development theories have stressed the role of the students' family as an essential influence on the career maturity of adolescents. However, the precise nature and degree of the family's impact on career decision making is not completely understood (Van Reenen, 2010). Hence, awareness should be brought to the fact that there are several aspects, including the family, which influence the levels of career maturity of students.

Students are often unable to decide which career to pursue, which is known as career indecision, and relates to the concept of career development (Gordon & Meyer, 2002).

Deciding on a career is an important aspect of an individual's development and satisfaction. Establishing what one is suited to do, and securing an opportunity to do it, is imperative to an individual's life goals. Ultimately, students need to be sufficiently prepared for the world of work, given the tremendous changes the work environment endures.

1.2 PROBLEM STATEMENT

Tertiary education is becoming increasingly costly for many students. According to Pieterse (2005), young people cannot afford to make mistakes in their career decisions, as this could cost them too much in time and money. It seems that young people too often choose the wrong career and either continue with it only to become unfulfilled and frustrated adults (Pieterse, 2005). Many students do not receive proper career guidance at secondary or tertiary level and find themselves in their final year graduating, and unsure of the career they are going to pursue. According to Pieterse (2005), the transition from secondary to tertiary education is a very important step for adolescents.

An efficient way to develop a young persons' abilities, and assist them in realising their true potential, is through offering educational and vocational training at schools (Pieterse, 2005). However, there currently exists a gap between secondary and tertiary level education in South Africa (Pieterse, 2005). According to Davidowitz and Schreiber (2008), there are masses of school leavers who are not sufficiently equipped for tertiary education. Furthermore, many of these students have not received career guidance before entering tertiary education (Davidowitz & Schreiber, 2008). Therefore, many of the youth are not aware of the range of careers offered by HEI's and thus choose to study a programme which may not be applicable to their interests and abilities.

The media has constantly drawn attention to various instances where university students fail to effectively deal with the demanding nature of the academic environment (Mudhovozi, 2011). Graduation rates are affected by school leavers being ill-prepared for the higher education environment (Davidowitz & Schreiber, 2008). Moreover, with the proper information, a student could be able to better analyse the change process which occurs during the transition from an educational environment to the work environment (Schein, 1993). Hence, students require knowledge about their career path, as gathering information about the

stakeholders concerned, is required. Additionally, Mudhovozi (2011) highlights that high levels of distress, associated with inadequate coping resources render students less able to meet academic demands. This affects their results, which impacts the prospect of attracting good companies when they graduate.

In previously disadvantaged communities in South Africa, educational and career planning has been characterised by under-development, marginalisation, and under-resourcing (Pieterse, 2005). According to Schein (1993), it is important for individuals to effectively participate in job and role planning. He further explains that this can assist in enriching an individual's understanding of the social network in which their prospective job is entrenched. Hence, individuals' motivation towards, and perspectives of, their future careers could have been impacted negatively. Various studies in South Africa have emphasised the need for young people to enjoy career education (Pieterse, 2005). Additionally, the process of growing up involves a series of important choices regarding education, work, career choices, and so forth. Hence, career-related decisions are a developmental process, unfolding over time (Pieterse, 2005).

Improved career guidance is also necessary for individuals to make rational choices regarding prospective careers. This seems to be especially relevant to the post-apartheid situation in South Africa, since previously disadvantaged individuals and groups have expanded career choices, for which they seem inadequately prepared (Pieterse, 2005). According to Hargrove, Inman and Crane (2005), students need to advance their levels of self-information, whilst developing sound career planning and decision making skills. Hence, there is a great need in the South African context for career guidance and for additional research into students' readiness to make career choices.

Most students lack acceptable levels of career maturity, due to a lack of adequate preparation and career guidance during both secondary schooling and tertiary education (Pieterse, 2005). Moreover, the world of work is continuously changing and involves more complex relationships. Therefore, the analysis of job roles has become increasingly vital. It is against this backdrop that the current research is undertaken to investigate final year undergraduate students' readiness to make the necessary decisions regarding their careers, at this crucial stage in their lives.

1.3 RESEARCH OBJECTIVES

The academic environment is characterised by many pressures which are problematic at tertiary institutions and many students suffer, without the necessary support. This study intended to assess the career maturity levels among final year undergraduate students at a tertiary institution. The study further aimed to establish the relationship between age, gender, type of secondary school attended and career maturity of final year undergraduate students.

The research intended to evaluate the relationship between career maturity and the various elements thereof, which impact final year undergraduate students. This research study however expected to determine and highlight the nature of career maturity amongst final year undergraduate students and how levels of career maturity can be increased.

University students face several challenges, which often prove difficult to overcome. Therefore, students' prospects of graduating decrease, which is reflected by the high failure and drop-out rates nationwide (Pillay & Ngcobo, 2010). Furthermore, the study aimed to evaluate whether there is a relationship between participants' scores on the measuring instrument and their stated certainty of career.

1.4 HYPOTHESES

According to Sekaran and Bougie (2010), a hypothesis is a rationally estimated relationship between two or more variables stated in the form of a testable statement. It is anticipated that solutions can be found to correct the problem, by testing the hypothesis and verifying the estimated relationships (Sekaran & Bougie, 2010).

The following research hypotheses were formulated for application in a South African environment:

H1: There is a statistically significant difference between male and female final year undergraduate students, with regards to the dimensions of the Career Development Questionnaire (Self-information, Decision making, Career information, Integration of Self-information and Career information, and Career Planning).

H2: There is a statistically significant difference between final year undergraduate students based on their age, with regards to the dimensions of the Career Development Questionnaire (Self-information, Decision making, Career information, Integration of Self-information and Career information, and Career Planning).

H3: There is a statistically significant relationship between participants' scores on the Career Development Questionnaire, and their stated certainty of career focus.

H4: There is a statistically significant difference between final year undergraduate students based on their type of secondary school, with regards to the dimensions of the Career Development Questionnaire (Self-information, Decision making, Career information, Integration of Self-information and Career information, and Career Planning).

1.5 DEFINITIONS AND TERMS

Career Maturity implies the readiness of an individual to make a career decision (Themba et al., 2012). Career maturity suggests that an individual is capable of making informed career choices and possess the skills and specific identifiable characteristics and traits essential to career development (Zunker, 2012). A high level of career maturity refers to the readiness of a person to make a career choice appropriate to their particular life stage (Schreuder & Coetzee, 2014).

Career Development is the continuing process by which individual's progress through a sequence of stages, which are each characterised by a distinctive set of tasks (Schreuder & Coetzee, 2014). According to Super, individuals' careers develop as the tasks or challenges faced in the particular life stage, are mastered (Huang, 2006; Prideaux & Creed, 2001).

Career stages are occupational stages which individuals move through, and each stage is characterised by different features (Greenhaus, Callanan & Godshalk, 2007).

Tertiary education refers to the learning process that takes place after the completion of secondary education and provides academic credits and competencies (Herr, Cramer & Niles, 2004). Students receive certificates, diplomas and degrees from tertiary institutions.

Tertiary students refer to students who have completed secondary education and who are pursuing tertiary education.

Career Planning refers to a continuous process of discovery by which individuals develop their own occupational concept (Schreuder & Coetzee, 2014). Career planning is seen as a systematic and comprehensive process, which involves the responsibility of both the organisation and the individual (Schreuder & Coetzee, 2014).

Career decisions refer to career-related decisions, which individuals need to decide upon. Certain individuals can be indecisive in this regard. Career indecision, in the context of university students, refers to not being able to choose a university major or a career (Borgen & Hiebert, 2006; Jordaan, Smithard & Burger, 2009). Indecisiveness refers to the inability or refusal to make career-related decisions (Greenhaus et al., 2007).

Adolescents have been referred to as the transitional phase of growth and development between childhood and adulthood (Geldenhuys & de Lange, 2007), when the individual is typically between the ages of 12 and 20 (Van Reenen, 2010).

Career choice refers to the process of selecting a career (Brown, 2003). Career choice is regarded as a continuing learning process in a person's career and remains a key element of career management (Rousseau & Venter, 2009).

1.6 ORGANISATION OF THE STUDY

Chapter one consists of the background of the study, research problem, research questions, and research objectives.

Chapter two provides a comprehensive discussion of career maturity and its prevalence. Specific reference is made to the aspects influencing career maturity and the impact it has on the career maturity levels of undergraduate final year students. Definitions of career development, as well as its related features and key theories are provided. Furthermore, career maturity and its components, are discussed.

Chapter three provides an overview of the research design utilised to execute the research. In particular, the chapter outlines the selection of the sample, data collection methods, the psychometric properties of the relevant instrument, as well as the statistical techniques that were used.

Chapter four reports on the results found from the empirical analysis.

Chapter five discusses the results and encompasses the conclusions drawn, which originates from the most salient results obtained. Moreover, recommendations are outlined which could benefit future researchers and relevant stakeholders.

The subsequent chapter provides an overview of relevant literature relating to the present study.

CHAPTER TWO
LITERATURE REVIEW

2.1 INTRODUCTION

Theorists within career psychology are beset with discrepant views regarding career maturity. The concept of 'career' has been explored in terms of various aspects such as career indecisiveness (Van Reenen, 2010), career maturity (Crites), stages of career development (Super, 1990), career anchors (Schein, 1990), self-efficacy (Bandura, 1986), and so forth.

Career decision making is a vital task for adolescents (Creed, Patton & Prideaux, 2006). The current generation of young people are faced with vastly different career choices then generations before. Hence, many of them are unable to make career decisions easily, as they may experience many periods of indecision before being certain about a career path (Creed et al., 2006). The range of skills required for a particular job generally varies and often appears inconsistent with the academic requirements of tertiary institutions. At a tertiary level students are expected to possess adequate knowledge about themselves and their prospective careers. Consequently, it is vital for both occupational and academic efficacy expectations to be considered as potential determinants of students' career choices (Muldoon & Reilly, 2003).

Bandura's (1986) concept of self-efficacy describes self-efficacy expectations as the belief and self-confidence individuals have in their ability to perform given tasks or behaviours successfully. Watson et al. (2001) accentuates the usefulness of the self-efficacy concept in understanding career behaviour. These authors theorise that career indecisiveness reflects low self-efficacy expectations in terms of the tasks and behaviours necessary to make career decisions. Bandura (1986) further suggests that self-efficacy expectations are key mediators of how long behaviour is retained in the face of challenging circumstances.

Career maturity is the extent to which individuals are able to make career-related choices independently (Prideaux & Creed, 2001). Hence, final year undergraduate students should ideally possess acceptable levels of career maturity, to ensure effective career decision making. Students need to advance their self-information, acquire greater career information,

develop sound decision making skills, and invest time in planning their career (Hargrove et al., 2005). According to Prideaux and Creed (2001), career maturity is commonly recognised as encompassing cognitive as well as affective elements. Additionally, career decision making self-efficacy has been cited as a better predictor of career exploratory behaviour than goal-directedness by Blustein (1989) and a better predictor of career maturity than locus of control by Luzzo (1995b), in students pursuing tertiary education.

The career aspirations of students are formed by job-related aspects and individual differences, such as gender role orientation (Muldoon & Reilly, 2003). Muldoon and Reilly (2003) argue that an individual's gender role orientation will affect a number of related behaviours, including their career choice. As individuals are required to make choices related to their self-development, family or career, they may become more aware of the values and motives involved in the choices they make (Coetzee, Bergh & Schreuder, 2010). It is indeed likely that gender role orientation may be more central to career choice than gender itself. In effect, stereotypical gender-typing of careers exerts a limiting influence on the career choices of young individuals, due to the characteristics of the individual and their preferred career (Muldoon & Reilly, 2003). Moreover, an individual's career self-concept acts as a stabilising force. Hence, when an important life choice needs to be made, there are certain concerns, needs or values which guide the individual (Coetzee et al., 2010).

The following discussion focuses on the changing nature of the world of work, and the adjustment students go through when transitioning from secondary school to tertiary education. The various elements of career development, factors influencing career identities and career choices, the need for career guidance, as well as the role of career counsellors are explored. Furthermore, career maturity is defined and discussed, and the elements of career maturity are outlined. Consideration is also given to the relationship between career indecision and career maturity.

2.2 THE CHANGING NATURE OF CAREERS IN THE WORLD OF WORK

According to Savickas, Esbroeck and Herr (2005), the way in which the world works has transformed through globalisation of the world's economies. This transformation has led to varied cultures becoming increasingly similar through trade, immigration, and the exchange

of information and concepts. Post-apartheid South Africa led to key transformations emerging, with the democratic elections and the adoption of a new Constitution in 1996 (Geldenhuys & de Lange, 2007).

In the past the word 'work' meant "drudgery and fatigue for some and joy and pleasure for others" (Shertzer, 1981, p. 177), whereas the term 'career' is considered as the sequence of professions an individual occupies (Greenhaus et al., 2007). The shifting of organisations and careers over an individual's span of life has escalated (Huang, 2006), which offers students a more enticing landscape upon their graduation. The increased fluctuations have reduced the prospects of predominant upward career movement within one organisation (Huang, 2006). Newer careers are established and older ones become extinct, whilst it becomes more challenging for students to forecast the fluctuating employment trend (Greenhaus et al., 2007). Career development patterns may therefore encompass more differentiated career pathways such as recurrent and horizontal movement (Huang, 2006).

Generally, work appears to hold great significance with individuals, hence assisting in the cultivation of meaningful and satisfying work relations, is most desirable (Greenhaus et al., 2007). According to Greenhaus et al. (2007), discovering contentment and fulfilment in one's work is dependent on selecting a good career. Individuals are increasingly acknowledging the significance of work and non-work roles in the construction of their personal identity (Huang, 2006). Hence, a greater degree of individuals are taking onus of their personal career advancement (Huang, 2006). McMahon and Patton (2002) add that the relationship between work and the individual frequently necessitates adjustment, due to its multifaceted and vibrant nature. Students need to be well prepared when entering the world of work, to effectively cope with the various demands. Avent (1975) states that students can draw great value from individuals they admire in various areas of expertise. Greenhaus et al. (2007) further state that human beings are naturally equipped with certain skills and abilities, which are used to specialise in particular tasks.

Coetzee et al. (2010) state that career orientations have been coined by Schein (1978) as career anchors. These career anchors denote a pattern of self-perceived talents and abilities, basic values and the evolved sense of motives and needs that influence a young person's career decisions (Coetzee & Schreuder, 2011). The conceptual model associated with Schein's career anchors theory is best understood in terms of the individuals' career self-

concept, which develops as one gains life experience (Coetzee et al., 2010). Hence, students' levels of career self-concept may be limited, due to their age range. Research has shown that individuals commonly strive for similarities between their career anchors and their particular work environment (Schein 1990). According to Schein (1993), it is important for individuals to be able to effectively partake in career and role planning, which has not been the case for previously disadvantaged groups, in South Africa's past. He further explains that this can assist in enriching a student's understanding of the social network in which their prospective career is embedded. Students' certainty regarding which particular career path to follow could also increase. Furthermore, students would be able to analyse the change process from an educational environment to the work environment (Schein, 1993).

Globally, young people have experienced a change in the types of careers available, how society perceives various careers, as well as their personal experiences of careers (Herr et al., 2004). New concepts have developed in the post-industrial era to demonstrate the new features of careers (Huang, 2006). Careers are no longer based on a steady and life-long engagement in a selected profession; instead students should be prepared to envision their careers as a continually unfolding journey (Coetzee & Schreuder, 2008). According to Geldenhuys and de Lange (2007), the role of women in society has been altering globally over recent decades and South Africa has not been immune to this development. Furthermore, the change in technological or economic factors, which are addressed in the next section, may create difficult predicaments for the work relationship which entail significant readjustment of careers (Greenhaus et al., 2007).

2.2.1 Technological Advancements

Schein (1993) forecasted that technological advances would bring about a flourishing high-tech society. Many researchers agreed with him, and rightfully so. The changes in work practices have been fast-tracked by the advent of knowledge societies and rapid advancements in information technology (Savickas et al., 2005). Organisations today are more automated and advanced. Fortunately, students currently form part of a generation of 'tech-savvy' individuals, who readily have information available. Due to technological advances, the world of work has further become increasingly competitive; hence students need to engage in adequate career planning (Greenhaus et al., 2007).

Economic and technological developments have led to careers being volatile, due to the change in work opportunities and shifts in the labour market (Kuijpers & Scheerens, 2006). According to Themba et al. (2012), globalisation, demographic change and the more diverse cultural contexts in which organisations conduct their business, have made the retention challenge more complex. As competitive pressures and levels of responsibility in all jobs increase, and as jobs become more conceptual; levels of stress and anxiety increases at all levels of the organisation (Schein, 2003). Consequently, educational and career guidance practices in numerous nations are changing to provide enhanced assistance (Savickas et al., 2005).

The nature of work has changed rapidly and work is increasingly entrenched in an intricate set of relationships (Brown, 2003; Greenhaus et al., 2007). Students require knowledge about the career path they wish to follow as they have to gather information about the stakeholders concerned. In order to improve workforce performance and consequently promote their competitive position, organisations are increasingly recognising the value of attracting and retaining staff from all demographic groups (Themba et al., 2012). Themba (2010) postulates that global issues such as technological advancement and economic and political developments also have an increasing influence on the approach to the management of military careers. As work-related roles become increasingly similar, guidance practices have congruently become increasingly similar (Savickas et al., 2005). Jobs and organisations are continuously changing, thus job and role analysis has become more vital for young people.

2.2.2 World of Work Today

Tremendous expansions in the number and nature of careers have taken place in recent decades (Brown, 2003). The rate of transformation in the work environment has been intensified by the new economic era, giving way to increased competition, outsourcing, temporary employment and downsizing (Huang, 2006). With this in mind, students have to partake in career education or career guidance programmes being offered at their tertiary institutions, to equip themselves with the necessary knowledge.

Stable career pathways have been challenged and it has promoted careers that are characterised by numerous changes (Huang, 2006). The current generation of students seem to be well suited for such transformations. Traditionally careers were primarily determined by an employee's preliminary training and investments by employers. However, there has been a

shift toward a modern career essentially guided by the employee (Kuijpers & Scheerens, 2006). Characteristics of modern careers would include the following aspects: increased mobility, increased dynamics in the work environment, as well as employees' ability to develop their own careers (Kuijpers & Scheerens, 2006). The formulation of a career entails regularly making career choices (Miller & Marvin, 2006), as young people are less dependent on organisational career arrangements, in the increasingly turbulent business context (Coetzee et al., 2010). Hence, there exists the need for career readiness on the part of students, which essentially has to be a vital part of any substantial educational system (Hoorn, 2013).

Organisations pay more attention to attracting and retaining key employees; due to individuals experiencing more frequent career transitions, as they have greater agency in career decisions (Coetzee et al., 2010). Therefore, the career path of the individual has become more differentiated (Huang, 2006). Thorough career planning by students has become increasingly vital in the competitive labour market (Coetzee & Shreuder, 2011). Furthermore, the national drive to achieve employment equity has heightened the competition for talent and managerial potential amongst people from designated groups (Kotzé & Roodt, 2005). Students have to continuously construct and shape their prospective careers. The increasing significance of good career and labour market information is thus highlighted, as it assists in avoiding educational false starts (Miller & Marvin, 2006).

Students are provided with a variety of different career opportunities in the present business context. Due to the uncertain career context, young people appear to be more pre-emptive in terms of their careers, by taking personal ownership for their career development (Coetzee & Schreuder, 2011). In the newer kinds of careers, individuals' way of life is enhanced with the organisation of work being entrenched in their overall lives (Huang, 2006). In a study conducted by Geldenhuys and de Lange (2007) participants supposed that females are largely in a better career position, as their monetary contributions to the household garners females more bargaining power.

A prominent concept developed, is the 'boundaryless career' (Huang, 2006; Schreuder & Coetzee, 2012). The term proposes that boundaries regarding organisations and between work and non-work roles are absorbent (Huang, 2006), as individuals have self-ownership of their careers (Schreuder & Coetzee, 2014). Similarly, the term 'protean career' has been

utilised to describe the loosening links between the individual career and a particular organisation (Schreuder & Coetzee, 2014). The individual manages their own career, which is driven by their personal values (Hall, 2004). The concept highlights the recurrently altering nature of careers instead of concentrating on established career paths (Huang, 2006).

As individuals start to take ownership of their careers, the focus on the inner career becomes more important than that of the more objective, organisationally defined career (Coetzee et al., 2010). According to Themba et al. (2012), concerns about high levels of staff turnover in the military have led to a renewed interest in the continued employability and career development of diverse groups of staff members. Coetzee et al. (2010) explain the internal career as a self-definition of career success as it is more subjective, long-term and stable and represents life goals as well as work goals. These are aspects young people need to determine before entering the world of work. However, the external career is an organisational definition of career success that is more short term, unpredictable and fast-changing (Coetzee et al., 2010). Concurrently, students also have to equip themselves with the knowledge and skills required by the industry they intend to be a part of. The transition from secondary school to tertiary education, as well as the importance of career guidance will now be discussed.
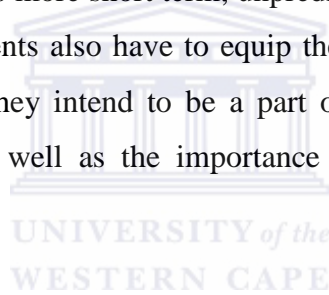
2.3 THE CONVERSION FROM SECONDARY SCHOOL TO TERTIARY EDUCATION AND THE IMPORTANCE OF CAREER GUIDANCE

The early years of secondary school are when adolescents actively explore their interests and aptitudes, and develop career goals and aspirations (Creed et al., 2006). According to Lens et al. (2004), the transition from secondary to tertiary education is a very important step in both developed and developing countries, with long lasting consequences on individual and societal levels. Career indecision can be viewed as a normal response when adolescents are required to make decisions regarding their careers, which is likely at transition points such as the shift from secondary to tertiary education (Creed et al., 2006).

For the duration of an individual's years at secondary school and throughout their tertiary education, important decisions regarding educational and vocational futures have to be made

(Herr et al., 2004). During these years young people have to consider the type and amount of further education required or the type of career to pursue upon graduating from secondary school (Millar & Shevlin, 2003). When young people have completed secondary school it is expected that they would have acquired a sense of 'agency' (Herr et al., 2004). At this stage, young people should be able to make informed decisions and are accountable for their further development (Herr et al., 2004).

Tertiary education is transforming with the aim of keeping pace and remaining responsive to the developing needs of the changing society and world of work (Watson & McMahon, 2009). According to Miller and Marvin (2006), true success is primarily contingent on establishing informed career plans. Greenhaus et al. (2007) further add that exploring careers assists individuals in obtaining the necessary information required to enable good decision making with regards to the course of their careers. This exploration provides individuals with "some idea of what is probable, possible, and desirable in choosing and preparing for a career" (Shertzer, 1981, p. 223).

In terms of career guidance, the three roles of the Careers Teacher are proposed by various arguments (Hayes & Hopson, 1975). Firstly, adolescents should be empowered to select a life instead of merely a living; secondly, the individual and their lifestyle should be universally moulded by their selected career; and thirdly, adolescents should be coached in self-knowledge and sensible decision making, to be able to manage key decision making processes needed when selecting their subjects and when ultimately leaving school (Hayes & Hopson, 1975). Furthermore, Ginzberg (1971, cited in Tolbert, 1980) has discussed the enhancement of secondary school career guidance services and proposes the primary focus be placed on career guidance assistance being received external to the school environment. The employability of youngsters is a significant aspect of effective career guidance (Herr et al., 2004). Individuals involved in career guidance should ensure that secondary school graduates are employable, in terms of acquiring a job and retaining it.

Even though career planning is generally seen to be the concern of secondary school and tertiary students preparing to enter the labour force for the first time; individuals should not regard it to be a once off incident (Miller & Marvin, 2006). Furthermore, comprehensive career planning demands cautious career commitments from students, to provide for a sense of direction and purpose throughout their academic years (Hoorn, 2013). Effective career

guidance initiatives would indicate results in the personal development and maturity of adolescents. It would enable them to take on a more active and assured role in guiding their life paths (Herr et al., 2004). The modern reality of the economy is that the labour market is more unstable and careers are less stable (Miller & Marvin, 2006). Hence, career planning and concern towards the development of one's career is vital. The concept of career development and its various elements follows.

2.4 CAREER DEVELOPMENT

According to Tolbert (1980), career development denotes the lifelong process of developing work values, forming a professional identity, educating oneself regarding opportunities, and considering plans in various working conditions. Development encompasses progressively effective exploration, selection, and assessment of career prospects, subsequently; career development is a key component of the entire developmental process (Zunker, 2012). Career development considers the selection of a career as a range of choices made over numerous years, and not only one decision made at a specific stage in one's life (Schreuder & Coetzee, 2014). Huang (2006) concurs that career development is a process of continuously balancing the diverse life roles of the individual over their lifespan. Furthermore, Tolbert (1980) states that career development is determined by biological and social factors. He adds that certain minor and certain major choices are faced at times of noteworthy variations in roles, much like the transition from student to employee.

The theory of career development, has established several well-defined constructs that are corroborated by an expanding body of new research and knowledge, regardless of its relatively short history (Prideaux & Creed, 2001). Huang (2006) is critical of most career models as it encourages a concentration on contextual aspects that considers the effects of several contexts, such as society, economy, and family; whilst disregarding cultural and historical backgrounds. Rousseau and Venter (2009) add that an individual's ability to make decisions regarding their careers are related to environmental, individual and situational factors. Huang (2006) concurs that one has to discuss the social and cultural frameworks in which individuals live and connect with one another to completely comprehend the concept of career development.

Reasonable career development requires young people to possess high levels of career maturity (Schreuder & Coetzee, 2014). Career maturity, career indecision and career decision making self-efficacy, are three constructs, which are closely related and may need to be explored in unison more often (Prideaux & Creed, 2001). Career maturity greatly influences career development and career decision making (Schreuder & Coetzee, 2014). Prideaux and Creed (2001) further explain that career maturity describes an unfolding ability to make career related decisions; career indecision is a stumbling block within the developmental process; and career decision making self-efficacy reflects the confidence to undertake these related tasks.

According to Huang (2006), existent career theories are predominantly founded on steady work environments; disproportionately concentrating on males and single work roles. Conversely, the careers of females in the post-industrial era have impacted the nature of occupations, through the continual negotiation of several roles and more recurrent changes in occupations (Huang, 2006). Interestingly, career development literature has recently noted numerous tendencies in the demographics of the western labour force, which incorporate increases in the number of: dual-career households, females partaking in the workforce, as well as women in managerial and professional positions (Bosch, de Bruin, Kgaladi, de Bruin, 2012). Career development in the South African context follows.

2.4.1 Career Development in the South African context

During apartheid, the majority of South Africans were either harshly constrained or deprived of the choice of career (Stead & Watson, 1998a). The post-apartheid era has brought much needed changes, which have gained momentum over the years (Geldenhuys & de Lange, 2007). According to Stead (1996), as South Africans progressed post-apartheid, rapid political, economic, and social transformations occurred. As South Africa developed into a new political dispensation, the decisions and challenges of career development became increasingly significant (Schreuder & Coetzee, 2012). The socio-political transformations emphasised a unique interaction amongst individuals' career development and their contextual factors. Notions based on the social order of apartheid were substituted with original concepts (Stead, 1996). Individuals had to manage their own developmental changes, as well as the intense environmental transformations which made career exploration and planning activities more complex (Stead, 1996).

International and South African research has been limited concerning the career development of rural and socio-economically disadvantaged young people (Watson, McMahon & Longe, 2011). Career research in South Africa seems to require a great amount of innovation to address the requirements and concerns brought about by globalisation and the post-apartheid, multicultural workplaces (Schreuder & Coetzee, 2012). According to Stead (1996), career research in South Africa was predominantly focused on the individual at that time. The difference between black and white Southern African populations in relation to career development, is indicated by research findings that the traditional features of black culture influences the modern black individual's approach to everyday life (Watson, Stead & De Jager, 1995). Conversely, Bosch et al. (2012) found that a greater number of young black African women are evading traditional women's work roles and are even pursuing male dominated careers. This contradicts the traditional norms for black Africans, and indicates a key shift in the salience of the roles of family, marriage and home care (Bosch et al., 2012).

According to Stead and Watson (1998a), South African career research has essentially been reliant on career theories originating from the United States of America. Stead and Watson (1998b) add that the majority of the psychological theories have mostly concentrated on white Westernised Americans without much indication of the appropriateness of such theories to other ethnic groups. Stead and Watson (1998a) further state that the career theories of Super (1990), Vondracek, Lerner, and Schulenberg (1986), and Holland (1985) have specifically been inspected for their suitability in the South African context.

Stead and Watson (1998a, p. 290) propose that "the developmental stages, self-concept, career maturity, and decision making aspects of Super's theory needs to be re-examined or even redefined if they are to become more meaningful constructs in the South African context". Stead and Watson (1998a, p. 290) further dispute that "as a result of unstable and unpredictable contextual factors continuously impacting South African youth, it is difficult to fruitfully employ Super's developmental stages". Career research in organisations in the 21st century has increasingly started focussing on succession planning, attracting, managing and retaining talent and high-potential employees (Schreuder & Coetzee, 2012). Furthermore, from an organisational perspective, career development is viewed as a continuing, official attempt by the organisation that focuses on developing the organisation's human resources, considering the needs of the relevant stakeholders (Byars & Rue 2004). However, career development is considered to be a combined effort by the employee and the organisation

(Schreuder & Coetzee, 2014).

The interaction of contextual factors with the career development of minorities is remarkably omitted in career theories (Stead & Watson, 1998b). Thus, the danger exists in terms of researchers and counsellors potentially applying and generalising such theories to groups on whom the theories have not been established (Stead, 1996). Bosch et al. (2012) postulates that black African 'dual career couples' in South Africa display career development patterns that are not completely consistent with prevailing career theories. These theories place little consideration on the influence of cultural and racial concerns on career decision making and career choice (Bosch et al., 2012). Hence, the suitability of these theories in the context of South African youth, is questionable.

Stead and Watson (1998a) highlight the significance of sociological factors in the career choice of South African young people. The authors further slated the efforts of early developmental and trait and factor theorists for mainly overlooking contextual factors in career choice. A study conducted by Rousseau and Venter (2009) provide six factors which may relate to career choice: "family and friends, cultural influences and education and training, relate to situational variables; cognitive competence and interests, correspond to individual variables, with environmental variables being represented by the factor work values" (p. 10). Thus, the careers students want to pursue are often shaped by their surroundings and their limited knowledge regarding potential careers.

South African psychology has suffered from a severe lack of standardised measures that are applicable for its multicultural and multilingual society (Watson et al., 2001). Cross-cultural use of tests can be discriminatory if the construct measured differs across cultures, especially if the tests are not standardised for use across all cultures (Paterson & Uys, 2005). Majority of the theories do not effectively take into account several of the barriers encountered by American and South African Black young people when determining which career to pursue (Stead, 1996). Practitioners sometimes utilise well-known international tests, which may have a sound base of research, without taking cognisance of the fact that the test is not standardised for use in South Africa (Paterson & Uys, 2005). Measures designed for the South African context is required, as there has been criticism in the national literature on the in-discriminant use of international measures (Watson et al., 2001). Foxcroft (1997) argues that the use of potentially biased tests in South Africa has led to incorrect decisions about

interventions, educational placement, and career choice. Jordaan et al. (2009) state that South African universities may want to take into consideration a strategy of investment in career development for students in the Economic and Management Sciences field, as these institutions are confronted with an escalating problem of having to place graduates into a tremendously competitive labour market.

According to Watson et al. (2001), career decision making self-efficacy seems to be a particularly useful construct for understanding the career behaviours of South Africa's multicultural population. It is well documented that many South Africans have faced and will continue to face challenging circumstances in their career development (Watson et al., 2001). Moreover, Stead (1996) points out that environmental factors have significantly influenced career development of South Africans. Watson et al. (2001) postulate that career development is impacted by unemployment, a lack of role models and support systems. Furthermore, labour legislation has affected the career opportunities of South Africans in various ways. These, and other career issues, can be addressed in several ways. Hence, theories of career development will now be discussed.

2.4.2 Theories of Career Development

In the modern world of work career development is perceived as a long-term process of development of the employee along a path of employment and experience in multiple organisations (Baruch, 2006). Schreuder and Coetzee (2014) postulate that a career is therefore more than a job that revolves around a process, an attitude, or intentional and goal-directed behaviour. Consequently, career development is viewed as an on-going process whereby the individual progresses through a series of life stages, each of which is characterised by a relatively unique set of issues, themes or tasks (Super, 1990).

Career development theories provide direction to individuals (Hoorn, 2013). It assists in making sense of various experiences; through providing young people with career guidance for optimal career decisions and satisfaction (Van Reenen, 2010). According to Tolbert (1980), counsellors utilise their theoretical bases as guiding principles to understand how individuals develop in terms of their career, to evade obstacles, resolve problems and progress with efficacy. Hence, counsellors have their own set of assumptions which guide their actions (Watson & McMahon, 2009).

Zunker (1990) additionally states that authors such as Ginzberg, Roe, and Super published career development and career choice theories in the early 1950s, which became benchmarks in the development of the career-guidance movement. These publications were influential in generating more awareness in career guidance practices and support materials utilised (Zunker, 1990). Furthermore, theorists such as Holland, Gelatt, Krumboltz, and Bordin have all followed, and also contributed to, career development and career choice theories (Zunker, 1990). Reviewed below are three essential career development theories.

2.4.2.1 Trait and Factor Theory

According to Tolbert (1980), Williamson is the theorist responsible for the trait and factor theory. McMahon and Patton (2002) and Van Reenen (2010) add that the trait and factor theory is the modern theories of vocational choice developed by Parsons (1909), which was popularised by Williamson. Zunker (2012) further states that trait and factor theory has been the most durable of all theories of career guidance. During the first several decades of the counselling profession, this theory was one of the most commonly used structural theories (McMahon & Patton, 2002).

The trait and factor theory primarily focuses on the assessment of traits, in terms of matching traits with the requirements of a certain career (Herr et al., 2004; McMahon & Patton, 2002). Consequently, it solves the career-search problem (Zunker, 2012). According to the trait and factor theory, career selection takes place when there is a thorough understanding of the relationship between self-information and career information (McMahon & Patton 2002). The theory covers the high school and adult age ranges (Tolbert, 1980). The emphasis is on personal traits such as interests and abilities, and their association with essential traits for the specific career (Schreuder & Coetzee, 2014). The approach places importance on collecting comparatively objective data regarding the person's traits and how well they match factors that are vital to work success, with affective aspects also being taken into account (Schreuder & Coetzee, 2014). John Flanagan's Project Talent is a well-known study which supports the trait and factor approach (Tolbert, 1980).

According to Tolbert (1980), the theory may be regarded as the foundation of lifelong career development and not only as a strategy for making decisions at a particular time. As individuals learn about the demands of their professions, they also become increasingly aware of their aptitudes, values, interests, and needs (Schreuder & Coetzee, 2014). Moreover,

every career necessitates particular aspects for successful performance. The counsellor is in a position to ascertain the pattern of the students' traits and match this pattern against those necessary for successful job performance (McMahon & Patton, 2002). Therefore, Parsons developed a framework to help individuals decide on a career. Some of the basic assumptions that underlie this theory, are as follows (Herr et al., 2004; Van Reenen, 2010, p. 34):

1. A clear understanding of one's self, aptitudes, abilities, interests, ambitions, resources and limitations.

2. Thorough knowledge of the requirements and conditions of success, advantages and disadvantages, compensation, opportunities, and prospects in different lines of work.

3. Identify and match between individual competencies and job factors using straight forward problem-solving/decision making.

4. The closer the match between personal traits and job factors the greater the likelihood of success in a career.

The linking of individual variances with the concept of job analysis is a core aspect of the theory, as every person has a distinct set of features that's recognisable and measurable (Herr et al., 2004). McDaniels and Gysgers (1992) further explain that trait and factor theory describes individuals as having measurable traits. Moreover, the goal of this comparison is to provide individuals with a basis for making career choices. Additionally, Williamson drew on this approach in order to formulate a counselling strategy employing six developmental steps (Tolbert, 1980, p. 38):

Table 2.1 Williamson's Counselling Strategy

Step	Description
1. Analysis	The collection of data about the individual. Psychological tests are used extensively, but the interview is also frequently employed.
2. Synthesis	The organisation of information to identify strengths, weaknesses, needs, and problems. The effectiveness of this step depends on the adequacy of the data collected in step 1.
3. Diagnosis	The problem and its causes are brought out.
4. Prognosis	The probable success of each option is examined.
5. Counselling	The counsellor helps the client to understand, accept, and put to use information about self and occupations. Emphasis is on finding a way to deal with the present problem.
6. Follow-up	A check is made of the suitability of decisions and the need for additional help.

The trait and factor theory has been widely applied in career counselling. The result anticipated by the "trait and factor counsellor is the resolution of the client's present problem" (Isaacson, 1985, p. 79). The final step of 'follow-up' proposes that additional improvement of the developed plan may be required at a later stage (Isaacson, 1985). Isaacson (1985, p. 79) adds that individuals will be better prepared to resolve prospective problems, as "problem solution is expected to lead to effective self-management". The trait and factor theory has influenced a wide array of career development theories to varying extents. However, at present counsellors would rarely advocate a pure trait and factor approach (Schreuder & Coetzee, 2014). The theory has been criticised for its 'oversimplification' of career counselling (McMahon & Patton, 2002). Its capacity to cope with the needs of clients in a complex world has consistently been questioned (McMahon & Patton, 2002; Super, 1992). Since the early 1950s, additional theoretical approaches were introduced (Isaacson, 1985), two of which are discussed next.

2.4.2.2 John Holland's theory

It is thought by numerous psychologists that individuals choose careers through which their personalities can be expressed. Shertzer (1981) states that such a theory has been developed by John Holland. He proposes that the suitability of a career is contingent on the person's personality, which is sequentially a creation of earlier experience (Herr et al., 2004). Holland does not spend much time contemplating how individuals became the way they are. He does however propose that earlier life history, self-perceptions, and values are some of the prominent factors (Isaacson, 1985). According to Tolbert (1980), John Holland's theory is a 'Needs theory', which considers that needs arise from attributes and experience, and individuals make choices based on their needs. Isaacson (1985, p. 79) concurs that due to Holland's "fundamental emphasis on personality characteristics, his theory is usually classified, like Roe's theory, as being based on psychological need theory".

Holland's theory covers the entire life span of an individual, but the focus is on childhood through early choices (Tolbert, 1980). The theory offers a simple and easy to understand outline on career interest and environment that could be used in career counselling and guidance (Porfeli, 2010). Holland has guided career interest assessment internationally, during the past few decades, and his work is the most well-known of the person-environment fit theories (Corkin, 2008). Central to Holland's theory is the concept that an individual chooses a career to satisfy their preferred modal personal orientation (Zunker, 2012).

Equivalence of an individual's self-view with career preference forms what Holland refers to as the modal personal orientation; which is a developmental process determined through genetics and the individual's life history of responding to demands of their environment (Zunker, 2012). According to Zunker (2012), if the individual has developed a strong dominant orientation, satisfaction is probable in a similar career environment.

Holland developed a Vocational Preference Inventory questionnaire that contains 160 occupational titles, in which respondents indicate which of those careers they like or dislike (Corkin, 2008). Answers are used to form personality profiles. Moreover, Holland's classification has presented the capability of indicating patterns of employment variations for both young men and women (Tolbert, 1980). McDaniels and Gysgers (1992) state that Holland's theory of vocational personalities and work environments are based on seven assumptions. However, Herr et al. (2004), Hoppock (1976), Shertzer (1981) and Van Reenen (2010, p. 38) state that Holland's theory has four basic assumptions, which are stated below:

1. Individuals can be categorised into six typologies which consist of Realistic (R), Investigative (I), Artistic (A), Social (S), Enterprising (E) or Conventional (C).
2. There are six career environments which consist of Realistic (R), Investigative (I), Artistic (A), Social (S), Enterprising (E) or Conventional (C).
3. Individuals search for environments that will let them adopt their skills and abilities, express their attitudes and values, and take on agreeable roles and problems.
4. Behaviour is determined by an interaction between personality and environment.

According to Herr et al. (2004), individuals who select the corresponding careers have comparable personalities, and they respond to numerous situations and problems similarly. The six personality types identified by Holland have been stated above. Watson et al. (2011) conducted a study utilising Holland's typology, which revealed that young people were more interested in professional status level careers in Social and Investigative type categories. This is concerning due to the mismatch between labour market trends and Black adolescents' career aspirations. Additionally, Holland advocates that the six personality types are suggestive of the needs felt by individuals (Herr et al., 2004).

Holland's theory proposes that individuals are attracted to a given career, due to their specific personalities and backgrounds (Herr et al., 2004; Zunker, 2012). It would thus be wise for students to be aware of their particular personality types, to understand how they might react

in different circumstances. Furthermore, Osipow (1973) states that individuals are allowed to express their preference for a particular list of occupational titles, as Holland assigns people to modal personal styles. This has theoretical implications for personality and career choice. Each student is thought to hold stereotypical views of several professions that have psychological and sociological significance for the particular person (Herr et al., 2004). Individuals seek out work environments in which they can fully utilise their skills and abilities (Van Reenen, 2010). According to Holland, when the individual's personality and career are in agreement, satisfaction is highest and turnover is lowest (Porfeli, 2010).

Isaacson (1985) points out that Holland's theory has been persistently criticised in professional literature. According to Hoppock (1976), a more intricate theory would integrate economic and sociological influences, instead of only explaining an individual's first and succeeding decisions in terms of personality pattern and environmental model. Knowledge about one's self and environments are necessary for appropriate decisions to be made (Herr et al., 2004). Moreover, key criticisms emphasise that: a typology approach is too simplistic, the model fails to identify social changes, and the theory does not effectively deal with how individuals develop their personality type (Isaacson, 1985). However, Brown (2003) believes that the theory "will continue to dominate the assessment of interests and research on variables such as occupational satisfaction" (p. 469). Nevertheless, John Holland's theory greatly impacted the field, visibly demonstrated by several research projects inspired by the theory (Herr et al., 2004).

2.4.2.3 Donald Super's Development theory

Donald Super considers that our ideas of the type of individual we are, is put into occupational terms when we express a career choice (Schreuder & Coetzee, 2014). According to Prideaux and Creed (2001), the area of career development has greatly been influenced by the work of Super, which was originally formulated in the early 1950s. Quite extensive further development and revision has gone into his work until the present day (Prideaux & Creed, 2001).

Super's theory has a developmental focus and it's thus part of a group of developmental theories. Key concepts include development stages, career patterns, career self-concept, as well as career maturity (Tolbert, 1980). Super's (1990, p. 199) "loosely unified set of theories" utilises the construct of career maturity, which has become one of the most

prevalent variables in research involving the career development of adolescents. Super's theory states that career development takes place across one's entire life span, and can be divided into five stages (Herr et al., 2004; Patton & Lokan, 2001). The formalisation of career developmental stages has been one of Super's significant contributions (Zunker, 1990).

Table 2.2 Super's (1992) five career stages

	Career Stage	Range of ages
1	Growth	4 – 14
2	Exploration	14 – 25
3	Establishment	25 – 45
4	Maintenance	45 – 65
5	Decline	Over 65

These stages of career development provide the outline for career behaviour and attitudes (Zunker, 1990). The life stages have a significant impact on an individual's level of career maturity, and ultimately their level of career indecision (Van Reenen, 2010). According to Themba et al. (2012), the main tasks in the five career stages are as follows:

1. A description of the type of individual and an understanding of the nature and meaning of work is developed.
2. A vocational preference is developed, identified and applied.
3. This stage involves making a place for oneself in the chosen occupation and consolidating and improving one's position.
4. The challenge of the fourth stage is to maintain and preserve the status one has achieved.
5. The primary task in the fifth stage is to slow down, disengage and cope with the problems of impending or actual retirement.

The working world in general, and specifically in South Africa, is however more unstable and unpredictable than it was when Super first conceptualised this developmental process (Stead & Watson, 1998b). Super suggests that understanding the ages and its related stages helps one to select appropriate responses and activities (Van Reenen, 2010). Furthermore, the concept of career development stages was formulated within a framework where unemployment was not as prevalent as in South Africa (Stead & Watson, 1998b). According

to Stead (1996), the notion of life stages may not effectively indicate the career decision making processes amongst disadvantaged Black young people in South Africa. It may thus be more suitable to consider the stages of career development of Super in terms of the order of developmental tasks that should be learned within the stages (Stead & Watson, 1998b).

Super indicates his multiple approach to career development through "his interest in differential psychology or the trait and factor theory as a medium through which testing instruments and subsequent norms for assessment are developed" (Zunker, 1990, p. 25). He supposed that "differential psychology" is of paramount significance in the ongoing effort "to furnish data on occupational differences related to personality, aptitude, and interests" (Zunker, 1990, p. 25). Super considers a career to be the amalgamation and arrangement of roles taken on by an individual over the course of their life span and did not solely associate it with a person's job-related activities (Stead & Watson, 1998b).

A major idea of Super has been that individuals diverge in their abilities, interests, and personalities (Brown, 2003). Super's theory suggests that to different extents, each career necessitates these aspects (Herr et al., 2004). Super postulates that career development is determined by psychological attributes and environmental conditions; and it is one facet of an individual's total development (Tolbert, 1980). The focus on determinants of career choice is mainly applicable in the South African context and offers a beneficial perspective from which to view career development (Stead & Watson, 1998b). Tolbert (1980) adds that certain career development tasks are mastered to achieve consecutive career maturity levels.

One of Super's greatest contributions to career development is the self-concept notion, which is a key part of Super's approach to career behaviour (Zunker, 1990). The self-concept is the consequence of genetic and social learning elements. It's the main motivating force in career development, as it directs the person in establishing what they want to be in terms of their career (Tolbert, 1980). Moreover, the career self-concept is the driving force that determines the career pattern an individual will follow during the course of their life span (Herr et al., 2004; Zunker, 2012). According to Super, self-concept changes eventually and develops throughout one's life, through various experiences (Van Reenen, 2010). According to Super's theory, developing and implementing the self-concept is in essence the process of career development (Herr et al., 2004).

Stead and Watson (1998b) state that Super's emphasis on role self-concepts may be more suitable to black South Africans as it highlights the inter-relationship between the different life roles of an individual. The approach emphasises the manner in which individuals perceive themselves and the work environment that impacts the development of their career preferences (Brown, 2003). As applied to black South Africans, the influence of socio-political, socio-economic, and family factors on an individual's self-concept has to be considered, to ensure its efficacy (Stead & Watson, 1998b). Therefore, people eventually seek career satisfaction through work roles in which they can express, implement and develop their self-concepts (Zunker, 2012). Furthermore, many young people could believe that the exploration of self-concepts relative to a career may be unrealistic in the South African context, due to high levels of unemployment (Stead & Watson, 1998b).

Isaacson (1985) states that developmental career counselling combines the life stages with an adapted trait and factor approach that Super (1954) refers to as an actuarial method. Including the life-stages concept acknowledges that career counselling processes will differ depending on the client's developmental status (Isaacson, 1985). Furthermore, Super's theory provides a beneficial framework for career guidance. It recognises the need for occupational thinking to advance on the basis of a realistic self-appraisal and a comprehensive understanding of the working environment (Hayes & Hopson, 1975).

Overall, Super developed a very comprehensive developmental model which explains that people will experience different life roles at different stages as they mature (Van Reenen, 2010). According to Super, career patterns are determined by socio-economic factors, mental and physical abilities, personal characteristics and the opportunities to which individuals are exposed (Herr et al., 2004). When adequate information is accessible and the meaning of the information is known to the individual, career patterns may be forecasted (Tolbert, 1980). Super's theory has conversely been criticised for not considering factors such as race, ethnic discrimination and unemployment (Bosch et al., 2012). Nevertheless, his consideration of several life roles could be applicable to the South African context (Bosch et al., 2012).

2.4.2.4 Concluding points on Career Development theories

The theories which have been considered, approach career development and the topic of career choice from several diverse frames of reference (Isaacson, 1985). Even so, majority of

the career development and choice theories emphasise the centrality of self-information and career information as critical to the process of reaching career decisions. This appears predominantly salient for young people who are typically engaged in career exploration (Millar & Shevlin, 2003). It is helpful to recognise that the career choice process takes time, as too many individuals assume that it can be condensed into a once off activity (Herr et al., 2004).

Contemporary career development models have endeavoured to correct the failure of older career literature to take into account the influence of gender and family structures on careers (Bosch et al., 2012). According to Bosch et al. (2012), these new career development models refer to more flexible and non-linear career development paths that are greatly affected by context. These models encompass the Protean career (Hall, 2004), the Boundaryless career (Greenhaus et al., 2007) and the Kaleidoscope career (Mainiero & Sullivan, 2005). The Protean career relates to individuals managing their own careers, which is driven by their personal values (Hall, 2004). The Boundaryless organisation accomplishes its goals through collaboration with many external resource providers (Greenhaus et al., 2007), with the boundaries between work and non-work roles being absorbent for individuals (Huang, 2006). The Kaleidoscope model postulates that the career paths of females are not suitably described by traditional career development theories (Bosch et al., 2012). The study conducted by Bosch et al. (2012) propose that the Kaleidoscope model is not appropriate for black South Africans, as black African females seemingly do not display non-linear and fragmented commitment to the career role. According to Bosch et al. (2012), the career development theories addressed are not necessarily appropriate for non-western contexts, as certain perceived barriers in career development, which are discussed in the next section, are not considered sufficiently.

2.4.3 Perceived Barriers in Career Development

Various studies have reported that secondary and tertiary level students perceive a considerable number of barriers to educational and occupational goal achievement (Luzzo & McWhirter, 2001). Furthermore, Lent et al. (2002) concurs that participants in their study reported having experienced various barriers in implementing their career goals. Assessing gender and ethnic variances in the perception of educational and career barriers is a manner in which career counsellors can address the challenges (Luzzo & McWhirter, 2001).

Gottfredson (1981) is responsible for the construction of one of the best models for investigating the role of perceived career barriers in career development. Gottfredson (1981) postulates that as an individual realises and identifies particular career barriers, based on their perception of career accessibility, they manage this apparent reality by compromising their career objectives in some way (Luzzo, 1996). Hence, perceptions of career barriers have been considered as factors that may wear down the self-confidence of students and thwart the career planning process (Luzzo, 1996).

The results of Luzzo's (1996) study proposes that by advocating more cautious career planning and exploration, identifying career barriers may essentially have an adaptive purpose for certain people. Luzzo's (1996) study further indicates that perceived career barriers may not necessarily impact the career development of all university students negatively. According to Lent et al. (2002), the majority of participants in their study anticipated that they would enter their ideal career fields. However, they did report having experienced career barriers in implementing their career choices. Furthermore, Tolbert (1980) postulates that career development is essentially determined by social learning; with media, community, family, and school's being influential, and economic conditions more explicitly being one of the most inescapable factors. The following section considers types of perceived barriers in career development and certain coping strategies.

2.4.3.1 Types of barriers

Career theory supports the effect of gender on role prominence through the lifetime (Bosch et al., 2012). Studies propose that males and females are expected to follow diverse career paths due to social and psychological gender variances (Mainiero & Sullivan, 2006). Luzzo (1996) conducted an exploratory study of gender differences regarding career barriers and found that amongst college students, females perceived considerably more career barriers than males. Furthermore, a study conducted by Luzzo and McWhirter (2001) found that females and ethnic minorities estimated significantly more career barriers than males and European American students, respectively. Luzzo and McWhirter (2001) acknowledges that certain barriers perceived by females and minority college students reveal institutional racism and sexism. Hence, such barriers necessitate systematic modifications

Participants in Geldenhuys and de Lange's (2007) study are of the perception that society is still largely male dominated. Females are still stereotypically believed to be submissive to

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their male counterparts and essentially requiring protection, with their social role predominantly defined by motherhood and homemaking (Geldenhuys & de Lange, 2007). Furthermore, Stebleton (2007) states that racism and discrimination are frequently prospective barriers to individuals' career pursuits in a foreign country. According to Stebleton (2007), individuals in their study are commonly leading dual lives; developing a new life in the United States, in addition to balancing continuing life responsibilities in their home country.

Geldenhuys and de Lange (2007) state that cultural values cannot be overlooked. In addition, Lent et al. (2002) reported that financial concerns were commonly declared perceived barriers, whereas role conflict concerns were cited with low frequency. Geldenhuys and de Lange (2007) further found that participants experienced dual role conflicts, more specifically; the first-year coloured students who participated in their study had diverse opinions about the dual role of females in the South African society.

2.4.3.2 Coping Strategies

There has been a renewed interest in assessing the ways in which perceived career barriers influence career exploration and planning, due to the vital role it may play in the career decision making process (Luzzo & McWhirter, 2001). According to Luzzo and McWhirter (2001), individuals who possess comparatively high levels of confidence in their ability to cope with perceived barriers are theorised to be more likely to overcome perceived barriers. Establishing the extent of confidence different individuals have in their ability to cope with career barriers, can assist in developing an understanding of the career development needs of females and persons of colour (Luzzo & McWhirter, 2001).

Bandura (1997) used the term "coping efficacy" to describe one of the ways that the perception of barriers can have a particularly noticeable influence on career development. Coping efficacy refers to the person's level of confidence in their own ability to cope with challenging circumstances (Bandura, 1997). In a study conducted by Lent et al. (2002) participants reported coping in various manners with the barriers they had come across in implementing their career choices. According to Lent et al. (2002), the coping options cited 'reasonably often' by the university participants in their study, were seeking social support, financial strategies, cognitive reformation, as well as using problem-focused methods such as direct efforts at problem resolution. Furthermore, almost every participant mentioned social

support or reassurance from friends and family members as a key support factor (Lent et al., 2002). 'Less frequently' reported coping methods encompassed personal goal setting and dependence on professional help (Lent et al., 2002). Factors that may impact the career identities and career choices of students, which are addressed in the following section, may act as perceived career barriers for certain individuals.

2.5 FACTORS THAT INFLUENCE CAREER IDENTITIES AND CAREER CHOICES

It is rarely probable to separate the individual from the work, as it is so closely interconnected (Isaacson, 1985). Therefore, when attempting to assist a person with any aspect of their career, the whole person has to be dealt with, whether the concern is procurement of a job or perhaps adapting to the demands of the work environment (Isaacson, 1985). Moreover, Zunker (2012) addresses the concept of career life planning, which emphasises a substantial number of factors that impact career choice. Key aims of career choice are establishing priorities and objectives for career life planning, developing ultimate life designs and setting long-term and short-range objectives (Zunker, 2012).

Career choice is regarded as a continuing learning process in a person's career and remains a key element of career management (Rousseau & Venter, 2009). According to Zunker (2012), career choice comprises the processing of developmental tasks and solving of psychosocial crises. Furthermore, career choice is a process in which an individual selects and also rejects, and subsequently supresses certain interests and talents (Zunker, 2012). Majority of the career theorists consider career choice to be a decision making task which includes matching individual needs, motives, values and talents (Greenhaus et al., 2007). In sequence, career decisions help to determine individuals' careers, and together they constitute the future career choice (Hoppock, 1976).

Career choice is moreover concerned by the search for self-identity and a sense of meaning in a global society which every individual experiences (Zunker, 2012). Therefore, certain individuals may make more career choices than others, and the more choices made, the more information may be required regarding the profession (Hoppock, 1976). According to Schreuder and Coetzee (2014), majority of the career choice models emphasise individual

and environmental variables. Rousseau and Venter (2009) state that the decisions people make indicate their personal characteristics, their surrounding environment, as well as situational variables which are commonly outside of their scope of control. Choice of career is more frequently prescribed by situational factors then by personality or work opportunities (Rousseau & Venter, 2009). Generally, individuals have two choices; first the selection of a career and then choosing the environment in which to pursue the particular career (Avent, 1975).

In reality many careers require tremendous hard work, whereas it may appear 'glamorous' to adolescents (Shertzer, 1981). Hoppock (1976) outlines five reasons why the wise selection of a profession is vital and why facts about careers are crucial to this selection. The choice of a career may determine: how a democratic society will utilise its labour force; whether an individual will be employed or unemployed; succeed or fail; enjoy or detest their work; and affect nearly every other facet of the individuals' life (Hoppock, 1976). Through their exploratory study, Rousseau and Venter (2009) further indicates six career choice factors, of which cognitive competencies, work values and education and training were significant. An accurate evaluation of career choice variables would consequently reflect cognitive competencies as well as emotional feelings (Rousseau & Venter, 2009). Furthermore, a thorough understanding of the dynamic forces of the choice process is vital for all persons involved with providing career guidance (Hayes & Hopson, 1975). According to Hayes and Hopson (1975), there should be an awareness of how individuals cultivate career preferences and how these are implemented. The lack of adequate knowledge can render effective assistance impossible.

Research concerning social influences on young people's career development describes how influences such as the family, the school and the media socialise adolescents within the predominant cultural environment in which they develop (Watson et al., 2011). Furthermore, individuals should consider their abilities, finances and other requirements of a career (Shertzer, 1981). In Geldenhuys and de Lange's (2007) study participants conveyed concern that their jobs could be hindered by dual-role conflict, their culture, and the effects of a male dominated world, in addition to the reality of probable unemployment. Super proposes that an individual's social class, marital status, financial resources, educational level, and general cultural values of families are all main factors prompting career choice (Zunker, 2012). Some of these specific factors influencing career identities and career choices, are discussed next.

2.5.1 The Role of Family in Career Decision Making

In 1977, Kanter viewed, work life and family life as two distinct and "non-overlapping worlds" (Isaacson, 1985, p. 4). Conversely, Tolbert (1980) states that educational and career values and roles are significantly affected by the individuals' family and home environment. The 'family' is acknowledged as a social influence, which impacts the career aspirations of adolescents in relation to the careers of their parents (Watson et al., 2011). Hayes and Hopson (1975) add that the family generally offers a child their initial social experiences. Moreover, Tolbert (1980) reports that home and family elements were associated with the levels of career commitment and career implementation of college women. In a study conducted by Myburgh (2005) the primary findings displayed that performance in Accounting at school and the advice given by parents, relatives and school teachers significantly impacted the students' decision to become a Chartered Accountant. Hence, family can play a role in the certainty of adolescents' career focus. According to Tolbert (1980), theories normally acknowledge the role of the early home life in the formulation of needs, values, and job-related stereotypes.

Tolbert (1980) proposes that subcultural pressures and rewards are transferred to the child through the home, subsequently behaviour patterns may enrich or hinder career development. According to Tolbert (1980), the father's profession substantially impacts the son's career decisions and is a main factor in determining the socio-economic level of the family. Luzzo's (1996) research indicates that college students who perceive that they have previously overcome family-related barriers, have developed more mature career decision making attitudes and improved their confidence in making effective career decisions. Furthermore, Stead (1996) states that the educational and economic repercussions of the apartheid policy have partly been associated with the role the family plays in the career development of its members. In general the guidance many Black parents offer is limited to the need to provide a continuous income and the need for social and professional status, subsequently, the career knowledge of their children remains limited (Stead, 1996). According to Avent (1975), a bad choice of career could stem from the influence of parents. Therefore, individuals are still required to consult a knowledgeable adult regarding their prospective career plans.

In the lives of African communities the traditional concept of family is progressively losing its prominence, and dual career families progressively experience tension through role confusion (Van Vlaenderen & Cakwe, 2003). Furthermore, the family situation may be

critical, with guidance from parents and extended family members being decisive (Rousseau & Venter, 2009). According to Stead (1996), the influence many Black parents have over their children has been diminished by the amplified politicisation of young people. Consequently, young people are challenging many traditional values held by their parents (Geldenhuys & de Lange, 2007).

2.5.2 Socio-economic background

Ackerman and Botha (1997) postulate that individuals' preference towards a specific career path is influenced by external social impacts and their cultural surroundings. Socioeconomic status has consistently been identified as an environmental influence on adolescents' career aspiration (Watson et al., 2011). There are also socio-political determinants of the differences between black and white students in South Africa (Watson et al., 1995).

Many individuals' freedom to select the type of career they would like to pursue is determined by the kind of society in which they find themselves (Hayes & Hopson, 1975). In instances where freedom exists, the choice of career has important consequences both for the individual and for society (Hayes & Hopson, 1975). Counsellors and their clients are predisposed to "learned roles and cultural pressures" (Tolbert, 1980, p. 210). Significant factors in determining the chosen career strategies are the social and economic conditions of the family, mainly associated with the male's career status (Isaacson, 1985).

In a study conducted by Myburgh (2005) on environmental factors influencing career choice, highly ranked perceived benefits amongst first-year Accounting students were the availability of employment as well as size and reputation of organisations in a particular area. Career issues appear to be closely related to upholding acceptable subsistence levels, even though parents' ambitions for the career development of their children are high, predominantly among disadvantaged families (Stead, 1996). Geldenhuys and de Lange (2007) further add that financial constraints and potential social status impacts the career choices of individuals. Similarly, Botha and Ackerman (1997) report that an economically disadvantaged position motivates young people to select a career which holds promise of financial independence. Additionally, many job seekers from disadvantaged communities are dependent on short-term contract work, as the unskilled casual labour market rarely offers workers a choice of work (Rousseau & Venter, 2009).

2.5.3 Age and Gender

According to Hoppock (1976), the career choices of certain individuals improve with age, when the individual discovers additional ways of making a living and better understand them self. Increased accuracy and suitability of career information may enable adolescents to reach wiser decisions earlier in life (Hoppock, 1976). Moreover, career choices are significantly impacted by home and family responsibilities, according to Super's career pattern for females (Zunker, 1990). By tradition females have concentrated on their roles as spouse, parent and homemaker; however many females appear to be more dedicated to their jobs (Bosch et al., 2012).

Due to the search for personal development, economic necessity and a desire for financial independence, a greater number of females are formally taking part in the labour force (Elloy & Smith, 2004). Avent (1975) contends that the equality between the genders is greater when the educational level is higher, which is seen to be 'sensible', as physical strength becomes less noteworthy in professions where an above-average level of education is required. According to Zunker (1990, p. 27), females are reorganising their "career priorities and are looking beyond the traditional feminine working roles".

There has been greater interest in the ways in which females combine paid work and homemaking roles (Huang, 2006). In recent times, South Africa has observed a greater number of females in the work force (Bosch et al., 2012). According to Bosch et al. (2012), legislative developments may be shifting the mind-set of black African females. Subsequently, the concept of a career is taking a central focus in their lives, whilst offering financial independence. Furthermore, when role's transform for one gender; "pressure develops toward changes in the other"; therefore, males have reassessed their "roles, beliefs, and values" concerning the relationships they have with females (Zunker, 1990, p. 400).

2.5.4 Individual Differences

Every person has a unique pattern of interests, temperaments and other personality traits, which is seen as individual differences (Shertzer, 1981). Rousseau and Venter (2009) add that individual variables are associated with interests, talents and personality; whereas work related interests specifically refer to what an individual would like to do as a career. Thus, interests are vital, as individuals who select careers compatible with their interests are commonly more content in their jobs (Rousseau & Venter, 2009).

Personality has been acknowledged as an important variable related to career choice. Stead (2004) adds that in terms of career choice, personality is a core construct described in several career theories, including Trait and Factor theory, Holland's theory, and Super's theory, which were discussed earlier. In the work environment personality matters and drives essential consequences such as career interests, career choice, job performance and job satisfaction (Ozer & Benet-Martinez, 2006). Personality fundamentally has a comparatively fixed nature (Stead, 2004), and largely contributes to career self-efficacy (Rousseau & Venter, 2009). Furthermore, the notion of the 'self' in career theories is dominant (Stead, 2004). Geldenhuys and de Lange's (2007) study found that for first-year South African female coloured students to stabilise their career identity, self-information was imperative.

Abilities and levels of aptitudes further contribute to an individual's differences (Shertzer, 1981). An individual can shape their career in a certain manner to suit their specific talents and abilities (Avent, 1975). Talent refers to aptitudes and developed abilities, which indicates what an individual is capable of (Rousseau & Venter, 2009). According to Rousseau and Venter (2009), talents are consequently natural aptitudes in some special direction. However, several individuals unfortunately select careers that are inappropriate for their specific talents. Personality and talent are distinctive and intricate constructs, which develop as the person matures, and should not be regarded as fixed variables in career choice (Rousseau & Venter, 2009). In Geldenhuys and de Lange's (2007) study certain respondents' self-actualisation was significant, and thus they conveyed a need for job satisfaction and to pursue their specific interests. However, individuals with limited or unmarketable skills and qualifications are frequently reliant on any kind of work being offered (Rousseau & Venter, 2009).

2.5.5 Type of Secondary Schooling

Educational policies are almost consistently impacted by political aspects (Stead, 1996), which can influence the schooling offered to young people. Ginzberg (1972, cited in Tolbert, 1980) is amongst the theorists who advised that greater attention be given to the influence of social institutions on career development and career maturity. Stead (1996) states that the school the individual attends is possibly second to the family in preparing young people for the prospective work environment. Therefore, the secondary school students attend may simplify or hinder advancement toward career success, as it plays a role in their development and general maturity (Tolbert, 1980). Research conducted in South Africa by Pieterse (2005) reveals that there are variances in career choices and career maturity levels for students of

different grades and different school environments.

Hayes and Hopson (1975) add that the school is a significant representative of socialisation. Hence, its goals and values can have a substantial influence. Dhillon and Kaur (2005) conducted a study in India to research career maturity among the students of private and public schools, with a sample of 500 secondary school students. The results indicates that the students from private schools possess a higher "career maturity attitude", "career maturity competence", "self-concept and achievement motivation" (Dhillon & Kaur, 2005, p. 71). This in turn influenced the career choices of these students. Furthermore, Tolbert (1980) states that career roles are influenced by the school, where gender-linked careers could be reinforced. Hayes and Hopson (1975) concur that to some degree the nature and certainty of a person's career pattern is determined by their educational accomplishments. Hence, the source and accessibility of information is vital, as job-related knowledge is important (Geldenhuys & de Lange, 2007).

2.5.6 The Role of Educational Providers

Individuals have to take ownership of managing their careers. However, industry as well as educational institutions should collaborate to make resources available to students which will allow them to make informed career decisions (Jordaan et al., 2009). Educators are at times initial role models in the lives of young people; hence their role in the establishment of career identity cannot be taken too lightly (Geldenhuys & de Lange, 2007). A developmental programme, in which students are respectively offered particular learning experiences in a certain sequence, is referred to as a career education programme (Zunker, 2012). According to Brown (2003), career education programmes typically exceed the scope of career guidance programmes. Educational providers should ensure that career education programmes are "infused into existing curricula, as an instructional strategy that relates established subject matter to career-development concept" (Zunker, 1990, p. 227). Hence, there is a need for industry and educational providers to assume a more dominant role in the career development and career maturity of students (Jordaan et al., 2009). However, numerous educators of "basic academic subjects strongly object to vocationally oriented educational programmes because they consider other non-vocational values and learning" as equivalent or more significant (Zunker, 1990, p. 235).

Zunker (2012) expresses concern that the benefits resulting from work anticipated in career education programmes are idealistic and do not necessarily prepare students for the realities of the work environment. In a study conducted by Jordaan et al. (2009) results propose that secondary and tertiary institutions should collaborate more effectively to inform and educate potential students regarding prospective career paths available to them. According to Jordaan et al. (2009), this collaboration could assist in minimising career indecision and empowering existing and potential students to make informed decisions regarding their tertiary education and their ensuing careers. This would result in students achieving greater certainty in terms of their career focus. The need for career guidance is addressed in the following section.

2.6 THE NEED FOR CAREER GUIDANCE

Career counselling and career guidance centres on planning and making decisions regarding careers and education (Herr et al., 2004). It comprises exploration of values and characteristics, with factual data about the counsellors' resources being important (Tolbert, 1980). The post-apartheid context of South African workplaces pose unique career challenges for individuals as well as career counsellors (Schreuder & Coetzee, 2012). According to Zunker (2012), the need for career counselling is vital at all educational levels. Isaacson (1985) concurs that the need for career counselling is widespread, yet such assistance is at times challenging to acquire and less helpful than anticipated.

Career counselling is commonly only encountered during adolescence; however it should be extended into adulthood (Jepsen & Choudhuri, 2001). Consequently, career counselling should not concentrate predominantly on once off career choices. The focus should be on assisting people to make smoother transitions, which would prospectively help avert instability in career paths (Huang, 2006). The absence of career counselling assistance is costly to the individual and the rest of society (Isaacson, 1985). Career counselling is possibly best utilised to initially help students overcome internal and external barriers to selecting a career and to assist in empowering the student to develop constructive assertiveness (Stead, 1996). Career counselling regularly necessitates substantial focus on information, decision making, and placement (Tolbert, 1980).

Career guidance is a structured programme to assist adolescents to enhance their self-knowledge, learn about the work environment, gain experiences that will assist in decision making, and discover various careers (Herr et al., 2004). Frank Parsons' view that young people need assistance with career planning has been re-confirmed by several research studies (Isaacson, 1985). According to Tolbert (1980), a career guidance programme helps the person to integrate knowledge, experience and appreciations associated to the following career development elements: "Self-understanding, understanding of the work society, awareness of the part leisure time may play in the person's life, understanding of career planning factors, understanding of the information and skills necessary to achieve self-fulfilment in work and leisure" (p. 408). Career counsellors should improve the balance between assisting clients accomplish career success in the employment system and assisting clients with balancing their lives (Huang, 2006). Stead (2004) further states that culture is a vital variable in counselling.

Career education entails a continuing cooperative undertaking that capitalises upon opportunities in and out of the school setting, to enrich career development for all individuals (Isaacson, 1985). It comprises all school personnel, and all facets of the community. Career awareness and career exploration are the two main purposes of career education (Hoppock, 1976). In a study conducted by Stead (1996), black secondary school students were requested to rank the five most vital sources of career information; consequently guidance teachers and parents were regarded as considerably more significant sources than teachers, relatives, and peers. Even though career planning may not offer the person complete control over life, it can increase the likelihood that the individual can achieve more of their life plans, find greater satisfaction in what they do, and attain self-actualisation (Isaacson, 1985). The roles of career counsellors are addressed next.

2.7 ROLES OF CAREER COUNSELLORS

According to Watson and McMahon (2009), the counselling psychology profession in South Africa is in a process of redefining itself. However, the discussion on career counselling at HEI's in South Africa has essentially remained on a theoretical level (Watson & McMahon, 2009). Traditional career counselling interventions can be productively utilised with those who have a future orientation (Savickas, 1991). Facilitative conditions are helpful in the

career counselling process, as it gives way to a good learning and problem solving environment (Tolbert, 1980). Counsellors could help students visualise their future and link present behaviours with estimated future outcomes, as young people have to comprehend that the past does not have to be repeated (Stead, 1996).

A career counsellor should be able to prepare young people for an appropriate career, which relates to the student's preference and be able to open career opportunities for all students, which relate education to their life goals (Tolbert, 1980). Luzzo (1996) states that counsellors should equip clients with the essential techniques, to be able to identify prospective barriers to future career objectives. It is also imperative for counsellors to contemplate raising student awareness concerning the variance between real and perceived barriers in the work environment (Luzzo, 1996). Career education has to be an essential part of a Nation's educational process which serves as preparation for work (Tolbert, 1980).

Career counsellors should design interventions that are intended to empower clients to overcome perceived career barriers (Luzzo, 1996). Additionally, counsellors have a vital role within career education, which utilises "counselling, consulting, and programming skills in a collaborative working relationship" with those involved in the process (Tolbert, 1980, p. 314). Zunker (2012) states that the career counsellor's responsibility for career education programmes is largely dependent on the size of the school system, its staff, the programme design, and the expertise of the counsellor. Key purposes of the counsellor are the "enthusiastic endorsement and collaborative work with teachers, parents, employers, and community members to promote career education" (Tolbert, 1980, p. 314).

The career counsellor has to focus on the person's understanding of career constructs as they relate to life events (Stead, 1996). The need for counsellors to help clients in interacting with varying degrees of the environment covertly propose that counsellors also have to act as change agents (Stead, 1996). Moreover, it is essential for the counsellor to be proficient in helping the client "acquire, process, and apply information and skills needed in effective career decision making and subsequent implementation of career plans" (Isaacson, 1985, p. 207). One of the counsellor's most important responsibilities is to assist individuals with career planning and career development (Tolbert, 1980).

The school counsellors are individuals who work as members of the learner personnel team and are professionals who are uniquely skilled in assisting others in their pursuit for self-identity and self-fulfilment (Tolbert, 1980). Career counsellors might benefit from not only considering work concerns of their clients, but by also considering the broader life concerns, as well as their life values and preferences (Huang, 2006). The counsellor has to further support the client in understanding the work environment in adequate detail, which will enable the counsellor and the client to develop an extensive list of career alternatives (Isaacson, 1985). The counsellor will then assist in "acquiring and evaluating information about those opportunities in sufficient detail and relevance to the client so that the list can be narrowed ultimately to the best choice" (Isaacson, 1985, p. 207). In due course, clients should be ready to make informed career decisions, after engaging in effective career counselling.

According to Isaacson (1985), the proficiency of the counsellor in the career area is at least two-fold. Firstly, the counsellor should possess a comprehensively broad understanding of the work environment (Isaacson, 1985). Secondly, the counsellor must be able to identify the sources of information and suitable methods that can assist the client in developing a substantial list of appropriate careers and consequently identify the best options (Isaacson, 1985). To assist Black young people in the career choice process, it is crucial for counsellors to be trained in multicultural counselling techniques (Stead, 1996). Counsellors would then be able to intervene efficiently among clients from diverse ethnic groups and backgrounds.

Career counsellors should become cultural workers, who enable people to be agents in the establishment of their own future (Stead, 1996). This type of planning should concentrate predominantly on life planning (Stead, 1996). A significant challenge facing the career counselling profession is the development strategies to help women and ethnic minorities as they participate in career exploration and planning processes (Luzzo & McWhirter, 2001). In terms of career education, students could be encouraged to participate in more positive attitudes towards exploring different careers, which consequently impacts the probability of engaging in career exploratory behaviour (Millar & Shevlin, 2003).

Career counsellors have to be acquainted with major variables which impact career choice and must be conscious of the ways in which they can benefit the career development of each unique client (Hayes & Hopson, 1975). Counselors could consider integrating career planning activities into courses tertiary students need to complete, to be able to graduate

(Hoorn, 2013). According to Themba et al. (2012), the challenge of engaging in career development practices that address the needs of culturally diverse staff members in the military environment necessitates an understanding of the career maturity of military officers and seems applicable amongst all individuals. Additionally, if individuals are to engage in satisfactory career development, a high level of career maturity, which is covered in the next section, is required (Schreuder & Coetzee, 2014).

2.8 CAREER MATURITY

Career maturity has important implications for career development and decision making practices (Schreuder & Coetzee, 2014). According to Themba et al. (2012), it is applicable to all age ranges, no matter the career stage in which an individual finds them self. In career development practices, career maturity is regarded as one of the most commonly employed outcome measures (Themba et al., 2012). Carefully planned career exploration as well as appropriate career information, self-information and decision making knowledge, is required for a young person to be ready to make appropriate career choices (Themba et al., 2012).

2.8.1 Defining Career Maturity

The concept of career maturity has been defined by many authors. Super (1957) initially introduced the construct of career maturity as 'vocational maturity' in his career development theory more than 50 years ago. He claimed that career maturity represented "the place reached on the continuum of vocational development from exploration to decline" (Super, 1957, p.186). Moreover, Super (1990) defines career maturity as the person's "readiness to cope with the developmental tasks" for their specific stage of development (p. 213). Furthermore, Borges, Richard and Duffy (2007) state that career maturity exhibits a developmental process in which the ability of an individual to make thorough career decisions, progressively improves.

Career maturity deduces that individuals are prepared to deal with the developmental tasks that are needed in their specific life stage and are ready to make decisions about their careers (Themba et al., 2012). According to Tolbert (1980), career maturity is similar to other kinds of maturity. Career maturity is the extent to which individuals are able to master certain career development tasks and challenges that are applicable to their life stage (Coertse &

Schepers, 2004; Langley et al., 1996; McDaniels & Gysgers, 1992). It broadly refers to the individual's readiness to make informed and suitable career decisions (Langley, 1990; Themba et al., 2012). Dybwad (2008) further considers career maturity as a multi-dimensional construct.

The concept of career maturity is central to a developmental approach to understanding career behaviour. It involves an assessment of an individual's level of career progress in relation to their career relevant tasks (Nauta & Kahn, 2007). The more successful an individual is in managing existing responsibilities, the chance of successfully mastering future tasks improves (Tolbert, 1980). Moreover, the concept of career maturity is intended to account for individual variations concerning readiness to make career choices, plan ahead and assume the role of a worker (Themba et al., 2012). The principle of career maturity has been used to explain the process by which persons make career choices, as well as their ability to effectively deal with the tasks and challenges in their specific developmental stage (Swanson & D'Achiardi, 2005).

2.8.2 Discussion on Career Maturity

Research has identified career maturity as an important aspect of individuals' career development and decision making, job and career satisfaction, and retention in the contemporary world of work (Schreuder & Coetzee, 2014; Swanson & D'Achiardi, 2005). It is important to identify an individual's state of career maturity in order to provide appropriate career guidance (Schreuder & Coetzee, 2014). Prideaux and Creed (2001) acknowledges the role of career maturity in career development theory and emphasise the need for it to be essentially considered within a social framework. Research shows that the meaning of career maturity may vary for population groups and its determining factors may differ in various cultures (Osipow, 1973). Various demographic aspects have been associated with career maturity, such as age (Themba et al., 2012), race, gender, educational level, cultural contexts (Naidoo, 1993), personality, decision making style (Raskin, 1998), and economic structures (Prideaux & Creed, 2001).

Identifying and describing immature and mature career behaviour is made easier through a clear understanding of career maturity (Themba et al., 2012). Career-mature people tend to have more career information, are more likely to have been self-employed in part-time jobs, appear to be more realistic in their career aspirations, and behave in a manner that is more in

keeping with their abilities and socio-economic circumstances (Themba et al., 2012). Moreover, career-mature individuals are generally better adjusted to their careers, whereas mal-adjusted individuals' career choices are generally not consistent with their field of interest or their abilities (Crites 1971, cited in Themba et al., 2012).

Career maturity concentrates on the way in which the person reacts to the emergent demands, challenges and prospects that are generally linked with a specific life stage (Themba et al., 2012). According to Osipow (1973), this is a normative description of the concept since it focusses on a specific life or career stage. In this context, Themba et al. (2012) state that career maturity is characterised by:

1. An increasing orientation to vocational choice.
2. Increasing amounts of vocational information and more comprehensive and detailed planning.
3. Increasing consistency of vocational preferences.
4. The crystallisation of traits relevant to vocational choices.
5. Increasing wisdom in vocational preferences.

Zunker (2012) states that career maturity inventories measure career development in terms of itemised dimensions from which an individual's career maturity is assessed. Career maturity dimensions are a consequence of career development conceptions, and career maturity is reflected by the degree of career development measurable within this continuum (Zunker, 2012). According to Zunker (1990, p. 171), Super "measured career maturity within several dimensions: orientation toward work (attitudinal dimensions), planning (competency dimension), consistency of vocational preferences (consistency dimension), and wisdom of vocational preferences (realistic dimension)". These dimensions are similar to the characteristics outlined by Themba et al. (2012). The dimensions distinguish between the progressive steps of career development and determine the extent of development in relation to normative age levels (Zunker, 2012).

Career maturity inventories mainly measure individual career development (Zunker, 2012). Additionally, Super (1990) identifies five dimensions of career maturity: planfulness, exploration, information gathering, decision making, and reality orientation. The model was further expanded on by Crites to include the dimensions of career choice content and career choice process (Borges et al., 2007; Dybwad, 2008). In addition, Super (1957) brought about

the notion of the 'vocational maturity quotient' which is defined as the measure of vocational to chronological age. His operationalisation of career maturity was implemented and made available in the Career Development Inventory (Dybwad, 2008).

Crites outlines specific factors that indicate an individual's status in the process of achieving career maturity (Tolbert, 1980). Crites (1974, p. 25) identifies four dimensions: "career-choice competencies, career-choice attitudes, realism of career choice and consistency of career choices" (cited in Tolbert, 1980). Additionally, Crites's model of career maturity proposes that career maturity consists of attitudinal and cognitive dimensions (Themba et al., 2012). Attitudinal dimensions refer to individuals' attitudes and feelings about making an effective career choice and whether they will continue to pursue their career choice as they enter the workforce (Themba et al., 2012). The cognitive dimension refers to individuals' awareness of a need to make a career decision, their understanding of their career preferences and the world of work, and their ability to apply their knowledge of the principles of career decision making to actual choices (Herr et al., 2004; Swanson & D'Achiardi, 2005).

According to Van Reenen (2010), Langley integrated the approach of Super, Crites and Westbrook, and designed a scale called the Career Maturity Scale. The Career Maturity Scale measures five aspects: knowledge of self, decision making, career information, integration of knowledge about self and about the career, as well as career planning (Van Reenen, 2010). According to Wu & Chang (2009), the integrated approach of Langley implies that an individual needs to successfully complete certain developmental tasks. Consequently, it is imperative to take cognisance of the fact that career maturity is an important aspect of career indecision and is thus critical in order to determine which developmental tasks an individual should focus on.

The career maturity inventories of Super and Crites have been criticised for being too undifferentiated (Dybwad, 2008). Consequently, in a study using a high school sample of 1,971 Australian adolescents, Patton and Creed (2001) found developmental differences with 15-17 year olds scoring higher on career maturity attitude and knowledge than the 12-14 year olds. Nevertheless, career maturity has also been criticised as a construct. Savickas (1997) argues that its fragmented structure and lack of parsimony were major weaknesses, and called for the inclusion of learning and decision making processes into the model and the replacement of the construct of maturity with one of adaptability. Raskin (1998) supports this

view and proposes that "career adaptation is a richer, broader, developmental construct than career maturity" (p. 34). Furthermore, Patton and Lokan (2001) state that research into career maturity and its demographic, career and personality correlates have been criticised as being unsystematic and poorly integrated. Nonetheless, many authors continue to acknowledge the contribution of career maturity and apply it in their research studies. Consequently, various elements of career maturity will now be discussed.

2.8.3 Elements of Career Maturity

Career maturity is a multi-faceted concept. Various elements associated to career maturity will be addressed.

2.8.3.1 Self-information

According to Mubiana (2010), self-information can be explained as being aware of one's personality and capabilities. Self-information or self-knowledge is a contributing factor to an individual's awareness and understanding of themselves (Jordaan et al., 2009). According to Super (1990), most career choices attempt to actualise the skills, talents and interests of one's self-concept. This becomes important to an individual, as it enables one to forecast the value of attributes in the working environment and aids informed career decision making (Mubiana, 2010). Affective career decision making takes place when individuals acquire in-depth self-information (Mubiana, 2010).

The notion that an individual's self-concept and perceived accessibility of a career interrelate with each other and directly affects career decisions, is presented in Gottfredson's (1981) developmental theory of career aspirations. Gottfredson (1981) states that perceived accessibility is an individual's conclusions about the difficulties and opportunities they face in the working environment. According to Mubiana (2010), self-analysis, occupational analysis, and the integration of self-information and career information, are three factors involved in the process of choosing a career. Concentrating only on career information is insufficient. Individuals have to importantly acquire knowledge of their aptitudes, abilities, needs, limitations, interests, values, and feelings (Hoppock, 1976).

Young people who possess suitable levels of self-information are in a position to make realistic career choices (Mubiana, 2010). Thus, these individuals stand a better chance of future successful career and employment opportunities. Self-information is necessary in the

career decision making process and life in general. A study conducted by Anakwe, Hall and Schor (2000) indicates that increased self-information nurtured career decision making. Furthermore, knowledge of careers can only be applied when an individual has some knowledge about themselves (Hoppock, 1976). Skills associated with individual self-management are crucial in terms of becoming accustomed to effective career management strategies (Jordaan et al., 2009). However, work opportunities are rare in the turbulent labour market. Hence, many students may consider an investment in self exploration as an exercise that will not achieve the desired outcome (Stead & Watson, 1998b).

2.8.3.2 Career decision status

According to Osipow (1999), a specific aspect of career maturity is career decision status, defined by the Career Decision Scale as certainty or indecision. Certain researchers estimate that as many as 50% of students experience career indecision (Gianakos, 1999, cited in Creed et al., 2006). This is not surprising given the various personal and career-related aspects which have to be considered before selecting a career. Research findings show that students prefer a choice in selecting subjects, but within limits, and seem to place value on guidance (Jordaan et al., 2009). Considerable attention has been focused on the individual's acquisition of mature career decision making attitudes. However, there has also been focus on individuals who have not yet grasped the concept of making a career decision (Van Reenen, 2010). A key antecedent for career indecision is career uncertainty, as students confronted with uncertainty frequently become indecisive about their careers (Elyadi, 2006). Students' ability to make thorough career decisions are then adversely affected.

Increasing the likelihood of students' career advancement, can be achieved through understanding career indecision and its related factors (Jordaan et al., 2009). Indecision occurs when an individual is faced with an important decision and the consequent adverse emotions are so strong that the person is unable to make a decision (Jordaan et al., 2009). Indecisive individuals frequently find it difficult to commit to their decisions and may even overturn them (Elyadi, 2006). Career indecision, in the context of university students, entails students not being able to select a university major or prospective career path (Borgen & Hiebert, 2006). Career indecision has been a major concern of career psychologists for many years. Elyadi (2006) further identifies the following factors that may impact an individual's level of indecision: personal perceptions, emotional reactions, personal preferences, values, and self-efficacy expectations.

Career indecision can be seen as a state which comes and goes over time as a decision is made, is implemented, grows obsolete, and eventually leads to the need to make a new decision (Van Reenen, 2010). It can thus be seen as a state that is 'normal' in human development, as it is an issue that many individuals experience. According to a study conducted by Luzzo (1995a), a student whose career is congruent with their career aspiration, would display more mature attitudes toward career decision making and they would likely be more skilful at making career decisions. Furthermore, Jordaan et al. (2009) found the process of collecting information concerning career alternatives, to be a key factor in decreasing career indecision. Additionally, Jordaan et al. (2009) proposes that a student's choice of degree programme and existing employment status influences the levels of career indecision. Therefore, individuals require adequate career guidance, as high levels of career indecision may impact their levels of career maturity.

2.8.3.3 Career information

The importance of career information is evident in career education literature (Millar & Shevlin, 2003). Jordaan et al. (2009) state that a vital part of career decision making is the process of collecting information regarding career alternatives. According to Hoppock (1976), career information or career knowledge is any kind of information concerning a career, which is potentially useful during career planning. Career information will assist a young person in choosing a suitable career. According to Mubiana (2010), career development and career maturity can be identified through the increased awareness of opportunities and also the career prospects available. However, the wise choice of a career necessitates the correct information regarding the available careers and its requirements (Hoppock, 1976).

Career information typically comprises references to educational requirements and vital personal characteristics (Tolbert, 1980). All the information about a job is essential, since it assists students to establish the availability of certain jobs, how these jobs may satisfy their needs, and the demands of these jobs (Hoppock, 1976). According to Watson et al. (2011), the type of career information South African young people search for is associated with their broader concerns about the career or life implications, such as their future lifestyle. Hence, adolescents are focusing less on their interests and the nature of the career (Watson et al., 2011).

Young people need to importantly gather information about all the possible career options that they may be interested in (Mubiana, 2010). Subsequently, students require access to a wide range of appropriate career information (Millar & Shevlin, 2003). However, students have to be aware of the options to be able to make an informed decision, as numerous careers are unfamiliar to most young people. The process of acquiring information about various careers is part of career exploration (Jordaan et al., 2009). The purpose of career exploration is to gather and evaluate career information to allow individuals to make optimal career decisions and decrease career indecision (Jordaan et al., 2009).

Various sources of career information should be consulted. According to Hoppock (1976), an employee in the particular job is seen as an original source of career information and all other sources of career information are intermediate sources. According to Mubiana (2010), research shows that most often students do not seek information about career options before deciding which programmes to study and which career to pursue. Thus, it is important for students to be encouraged from an early age to engage in career information searching activities (Mubiana, 2010). Careers teachers and other stakeholders concerned with career information commonly accept that an extensive variety of information about the work environment should be provided, as simply providing facts is insufficient (Hayes & Hopson, 1975). However, the study conducted by Mubiana (2010) found no significant relationship between career information and career maturity.

2.8.3.4 Integration of self-information and career information

Adequate integration of self-information and career information is crucial (Langley, 1990; Langley et al., 1996). Once students have a thorough understanding of what their prospective career entails and have explored their own interests and abilities; they have to integrate the two sets of knowledge. Once these two sets of knowledge is integrated, effective career decision making can take place (Langley et al., 1996). This enables students to make informed decisions regarding their careers. Many career education programmes exemplify objectives that recommend the attainment of information associated with both the self and the preferred career (Millar & Shevlin, 2003). However, the integration of self-information and career information could potentially be challenging for students, as this task necessitates mastery of each type of knowledge separately prior to the integration (Bernhardt, 1998).

Very early work of Parsons (1909) propose that "a wise vocational choice required a clear understanding of self, a knowledge of the requirements and conditions in various lines of work; and true reasoning to discover the relation between these two sets of data" (Isaacson, 1985, p. 79). Consequently, information constitutes the foundation for the development of self-awareness and awareness related to career opportunities, which are two universally vital learning outcomes of career guidance (Millar & Shevlin, 2003).

2.8.3.5 Career Planning

According to Felsman and Blustein (1999), a primary outcome of career exploration in late adolescence, is the articulation of career plans. Career planning does not necessarily follow coherent steps. Individuals uniquely place emphasis on various aspects and may consider certain stages of career planning at different times (Shertzer, 1981). Hence, a range of skills are utilised by an individual, in the process of career planning (Zunker, 2012). Career planning encompasses collecting information about oneself and about careers, approximating the possible outcomes of numerous courses of action, and lastly selecting alternatives that may be plausible (Shertzer, 1981).

According to Zunker (2012), a key objective of career planning is for the individual to develop skills which will enable them to control their futures. Consequently, planning should be flexible and contain realistic possibilities from which effective decisions can be made to endorse a more satisfying life (Zunker, 2012). Mubiana (2010) found a significant relationship between career planning and career maturity. However, career planning should not be considered to be an assurance that any future difficulties, or decision making situations will be resolved or made easier (Shertzer, 1981). No exact formula could ensure that individuals do not encounter challenges related to their careers. Nevertheless, proper career planning would assist an individual to improve how they approach and manage new problems (Zunker, 2012).

The process of change is challenging and threatening for many individuals, specifically for individuals who move through life indiscriminately, and discovers frustration and dissatisfaction (Zunker, 2012). Career planning assists an individual in focussing their attention on carefully arranged plans and on those variables which can be controlled (Zunker, 2012). Career planning frequently assists individuals to understand the types of assistance required to work in their field of choice, and helps direct individuals towards available

resources, as it specifically includes problem-solving skills and adjustment skills (Shertzer, 1981). Shertzer (1981, p. 284-287) points out the following career planning suggestions:

Table 2.3 Shertzer's Career Planning Suggestions

1. Study one's self.
This is the key to career planning. In studying one's self, strengths, weaknesses, goals, and personal development trends are all examined. The self-understanding gained enables an individual to imagine how certain careers may best fit their personality, interests, abilities, and goals. All career decisions require one to learn both about themselves and about work, and to integrate these two kinds of knowledge.
2. Write ideas down.
A technique useful for organising ideas about career development is writing them down by time blocks in one's life. This technique forces individuals to crystallise their thinking and to recognise half-formed ideas. It may lead to new insights about possibilities and may help see new relationships, patterns, and trends, or to identify gaps in thinking about career development.
3. Set up some hypotheses or predictions about one's self in a career.
The individual should consider their personality type, their behaviour, the likely changes which may take place in an occupation, the basic problems which occur, and the solutions needed to address problems. These hypotheses should represent an understanding of the individual current state and preferred future state.
4. Become familiar with the pathways for entering preferred occupations.
A pathway to many skilled trades is through apprenticeship programmes. Another pathway to some occupations is the training provided by industry or government, or thee junior to community colleges and four-year colleges and universities.
5. Review plans and progress periodically with another person.
Reflect on the situation often and consider what steps have to be taken next. Taking inventory of progress and planning further steps is helpful in coping with potential personal and labour market changes. Consulting with a school counsellor, parents, and friends helps define goals and improve career plans.
6. If a career is chosen that does not fit, the individual can start over.
A growing number of individuals are changing to careers that have greater appeal to them. Many of those who find that their line of work is unsatisfactory retrain themselves for a different career. Often it is a career they overlooked when they were young or they did not have an opportunity to pursue it, due to financial or other reasons.

Flexible career planning should be provided which can be helpful to individuals in identifying changing needs and to set realistic goals to meet those needs (Zunker, 2012). Hence, ongoing life-learning needs have to be supported by career planning programmes (Zunker, 1990). Thorough career planning programmes offer sources of education and training, as well as assisting individuals in determining their needs for programmes (Zunker,

2012). Individuals can utilise certain techniques to shape their career possibilities, even though there is no definite way to ensure that career plans work out (Shertzer, 1981). Therefore, the individual has to be aware of certain coping strategies. According to Zunker (2012), career planning programmes fortunately offer a regular reassessment of current and future circumstances, as well as providing opportunities to review past choices and readjust them with new values and interests. Career maturity in relation to age, will now be discussed.

2.8.4 Career Maturity and Age

In a study conducted by Themba et al. (2012), no significant differences in career maturity were observed among the various age groups of the adult sample. The age groups in Themba et al.'s (2012) study represented the exploration and establishment life stages of Super's (1990) career development theory. Moreover, studies conducted by Powell and Luzzo (1998) as well as Screuder and Coetzee (2011), indicates results which seem to confirm the view that career maturity is not related to the age that is linked to individuals' particular life stage. Conversely, Van Reenen (2010) postulates that theoretical assumptions may suggest uniform development in career maturity. Practical considerations such as the planning activities needed for immediate decisions at transition points imposed by the education system, suggest uneven development regarding age (Van Reenen, 2010). The study conducted by Patton and Creed (2001) reflects the developmental movement of career maturity and demonstrates the developmental variances of career maturity among adolescents aged 12 to 17.

As indicated by the research of Powell and Luzzo (1998), career maturity is not necessarily the result of a linear, steadily progressing process, but is influenced by contextual factors. Furthermore, Van Reenen (2010) states that studies have determined that career maturity increases with age. Early work with the Career Maturity Inventory (Gushue & Whiston, 2006) shows an incremental increase in career maturity from Grade 9 to Grade 12 (Smits, Bryan & McLean, 1996). Additional research postulates that students in higher grades have higher career maturity scores than those in lower grades (Van Reenen, 2010). Additionally, a study conducted by Creed and Patton (2003) found one of the strongest predictors of career maturity to be age, amongst their sample of students. Creed and Patton (2003) specifically found age to be the strongest predictor of career knowledge and career decision making. A discussion in relation to gender follows.

2.8.5 Career Maturity and Gender

A study conducted by Themba et al. (2012) found that males and females differ significantly regarding their career maturity. Research findings generally demonstrate that females, across age and national context, have higher scores on career maturity measures than males (Naidoo, Bowman, Gerstein, 1998; Patton & Creed, 2001; Van Reenen, 2010). Nevertheless, in a study conducted by Fouad (1994) he found that females scored higher on only some of the career maturity subscales. Naidoo et al. (1998) found gender variations in career maturity, with female students specifically indicating higher commitment to the work role and higher value expectations from work.

According to Themba et al. (2012), educational levels appeared to influence the maturity levels of the female and male participants significantly. The findings indicated that the female participants who had a degree/diploma level qualification were significantly better at mastering the career development tasks associated with their particular life stage. Females with a degree/diploma level qualification also scored better than the males and females with only a matric or post-matric level qualification. According to Themba et al. (2012), these findings suggest that further educational studies contributed positively to increasing the female participants' career maturity. More specifically, females who had a diploma/degree level qualification appeared to be better than their male counterparts at making effective career decisions and integrating relevant personal information with career information (Themba et al., 2012).

The study conducted by Patton and Creed (2001) reveals a complex pattern of gender differences, which led these authors to conclude that "boys may benefit from increased attention to career knowledge and girls from attention to the appropriateness of career planning" (p. 349). Additionally, the study by Themba et al. (2012) further indicates that "the male participants with a matric and post-matric qualification, and those who hold the rank of Officer Candidate, appear to be stronger in their career decision making skills and their overall readiness to make career decisions (career maturity) than their female counterparts" (p. 23). These findings are in line with international research in this regard, which shows that traditionally males tend be more strongly career-oriented than females (Sullivan & Crocitto 2007).

Research by Spencer (1999) indicates that females tend to delay their career decision making because of intense role confusion, which stems from gender stereotyping early in their career development. According to Schreuder and Coetzee (2012), females also tend to delay their career aspirations in favour of family responsibilities and their developmental patterns tend to be more individualised. South African females in Naidoo and Jano's (2002) study, reports experiencing "role conflict in the trade-off" between their work and home life (p. 72). In a study of junior secondary school students' satisfaction with various aspects of their work environment, only a few, small differences in favour of girls were found (Dybwad, 2008b, cited in Dybwad, 2009). Furthermore, the observed gender differences in attitudes might be accounted for by investigating variables at the individual level; that is background factors and individual characteristics (Dybwad, 2009). Furthermore, gender-stereotyping of career aspirations is considered to be a consequence of social influences (Watson et al., 2011).

Bosch et al. (2012) found that black African males seem to exhibit greater work-related role commitment than black African females for their entire lifespan, which is in line with western theory. Updegraff, McHale, and Crouter (1996) establishes that females from 'egalitarian' households retained a higher level of performance throughout adolescence, than females from traditional home environments. Even though there may appear to be some inconsistency in results, it can however generally be stated that gender and age differences exist in varying degrees in relation to career maturity.

2.8.6 Concluding thoughts on Career Maturity

Langley et al. (1996) highlights certain aspects of career maturity. These include: obtaining information about oneself and converting such information to self-knowledge; acquiring decision making skills and applying them in effective decision making; gathering career information and converting it into knowledge of the occupational world; integrating self-knowledge and knowledge of the occupational world; as well as implementing the obtained knowledge in career planning (Langley et al., 1996).

A comprehensive report was presented by Patton and Lokan (2001) in terms of research into the correlates of career maturity including age, gender, socio-economic status, culture, role salience, self-directedness, career indecision and work experience. Additionally, as Super's original conception of the construct reflects, Patton and Lokan (2001) stress the significance of contextualism, joining calls from others for more consideration of this factor. They view

such a re-formulation as the key to providing theoretical momentum for future work with the construct, while also advocating the retention of its general principles (Patton & Lokan, 2001). Career maturity is considered within the South African context in the following section.

2.9 CAREER MATURITY IN THE SOUTH AFRICAN CONTEXT

According to Stead and Watson (1998b), few researchers have reviewed the degree to which the meaning of career maturity is comparable between cultures, as well as the extent to which the format of the scale is culturally suitable within the South African context, prior to utilising them. Even though several researchers have utilised career maturity measures, the cultural implications of career maturity has not been emphasised enough (Stead & Watson, 1998b). Moreover, it may be more sensible to refer to role maturity rather than career maturity, in the South African context, which would be placed within the contextual framework of the major theories (Stead & Watson, 1998b).

Ethnicity differences in career maturity have been reported, such as youth from major ethnic groups displaying higher career maturity than their peers from minor ethnic groups (Nauta & Kahn, 2007). According to Stead and Watson (1998b), black South Africans generally achieve lower career maturity scores than individuals from other ethnic groups, which is seen to be a common finding. Hence, Stead and Watson (1998b) state that studies on the applicability of career maturity measures is deficient. An analysis of career maturity in terms of Super's description of life roles may conceivably be more productive (Stead & Watson, 1998b). According to Stead and Watson (1998b), Super considers career maturity as being related to the salience attached to the work role. Research has found that black South African university students indicates the community role to be one of the more salient roles (Stead & Watson, 1998b).

Much more research is needed on Super's theory as it applies to black people, if it is to become truly meaningful in the South African context (Stead & Watson, 1998b). According to research conducted by Stead and Watson (2006), South African school leavers often have limited career knowledge and this impacts on effective career decision making. Hence, there exists a great need for more information to be made available to students about prospective

career paths. A discussion on the relationship between career indecision and career maturity follows.

2.10 THE RELATIONSHIP BETWEEN CAREER INDECISION AND CAREER MATURITY

Career indecision is negatively associated with many career-related variables, including career maturity (Rojewski, 1994). Gushue and Whiston (2006) propose that individuals who possess relatively high levels of career maturity are likely to attain successful and satisfying careers, as they display more awareness of the career decision making process, consider alternatives and link present behaviour to future goals. Career decision making is a systematic process in which different information is evaluated and conclusions are assessed in terms of desirability (Tolbert, 1980). The process of deciding is intricate and distinctive for every person, contingent upon cognitive factors and the person's social environment (Zunker, 2012). Essentially, people assess their choices internally in view of their interests, values, achievements, and experiences; and externally by seeking acceptance and approval within the work environment (Zunker, 2012). According to Super (1957), indecisiveness is a stage in the developmental process when interests have not yet been fully 'crystallised'.

Jordaan et al. (2009) state that career indecision is a key part of the manner in which students perceive their prospective career and how they approach these prospects. Individuals may make haphazard selections of career goals due to uncertainty regarding future career objectives (Zunker, 2012). An established awareness of self and the environment allows individuals to set realistic career goals (Greenhaus et al., 2007). Well-defined steps in decision making strategies offer systems designed to support individuals in selecting a career (Zunker, 2012). Jordaan et al. (2009) add that career decisions and thoughts are impacted by career indecision, and contribute to the way students formulate their career objectives.

Career counselling goals are derived from a framework provided by decision making models (Zunker, 2012). According to Isaacson (1985), determining the client's career maturity is normally the starting point in career counselling, as this status specifies the client's developmental stage. In a decision making process the mature client is more likely prepared

to deal with self-knowledge and information regarding the environment (Isaacson, 1985). Conversely, the immature client has to be assisted to develop the necessary skills to understand and explore them self and different careers, before even considering making a selection (Isaacson, 1985). Furthermore, Themba et al. (2012) state that military employees need to reflect decisiveness, self-reliance and independence in their career decision making, which are all vital characteristics of the career-mature individual. Often in a non-counselling relationship the young and immature person has to be aided in various ways, to obtain the information and skills suitable in the particular career development stage (Isaacson, 1985). Career counselling continues, when the person approaches the decision making stage and has developed suitable career maturity levels (Isaacson, 1985).

Super's five life stages have a significant impact on an individual's level of career maturity, and ultimately their level of career indecision (Van Reenen, 2010). According to Themba et al. (2012), individuals' career maturity reflects their career-related decisiveness, involvement, independence, task orientation and willingness to compromise between their career-related needs and reality. Furthermore, Powell and Luzzo (1998) examined the career maturity of 253 high school students in relation to their career decision making attributional style. The study found that those who had more personal control over their career decisions had more positive attitudes toward career decision making.

According to Borges et al. (2007), opportunities for students to interact within their educational environments are required to improve their career maturity levels and readiness for career decision making. A lack of information has a major impact on career decision making and an individual's career maturity (Mubiana, 2010). Mubiana (2010) states that this factor includes a lack of information about: the steps involved in the process of career decision making, the self and various careers and ways of obtaining any additional information. According to Van Reenen (2010), career maturity in essence measures readiness to make career decisions on the bases of attitudes toward, and knowledge of, career decision making. In terms of career indecision, numerous studies have found that levels of career maturity were higher for university (Brusoki, Golin, Gallagher, & Moore, 1993) and high school students (Rojewski, 1994) who were more decided regarding a career path. Creed and Patton (2003) further state that comparable results have been found for career decision making self-efficacy.

The extent and nature of career indecision is a relevant aspect of career maturity and is a useful construct for providing a criterion index for the development and evaluation of career interventions (Van Reenen, 2010). According to Ohler, Levinson and Hays (1996), an essential objective of educators, psychologists, and career counsellors is assisting individuals make suitable career decisions. Luzzo (1996) points out that the more career barriers an individual identifies the less knowledge of career decision making principles and the less mature attitudes towards career decision making may be displayed. Conversely, Ohler et al. (1996) postulate that career certainty is not necessarily associated with mature decision making, as simply encouraging an individual to select a career is seen as insufficient. Individuals have to be assisted by career counsellors to make career decisions which are suited with their particular strengths and developmental areas (Ohler et al., 1996).

2.11 CONCLUSION

Education remains the biggest influence on employment success of individuals. Students need to importantly be encouraged and supported in completing their education. Many young people, particularly those individuals whom are at risk, have not had successful experiences in the school system. Career counsellors in South Africa are essentially dependent on theoretical and research developments in the United States and Europe (Stead & Watson, 1998b). However, Geldenhuys and de Lange (2007) acknowledge that during the post-apartheid era changes in South Africa have gained momentum.

Research progressively focuses on a person's career readiness, career concerns and career adaptability as features of their career maturity in dealing with the challenges posed by the turbulent work environment (Dybwad, 2008). According to Prideaux and Creed (2001), longitudinal studies are required to enhance the correlational evidence, and some ambiguous findings need further investigation. An increase of career maturity with age has generally been demonstrated. Studies of career maturity and gender produce inconsistent results. Females tend to score higher than males on career maturity, though some studies have found the opposite, and others have found no differences (Patton & Lokan, 2001). Jordaan et al. (2009) further found that career indecision influences the construction of students' career goals and their career-related judgements and choices.

According to Prideaux and Creed (2001), there is a growing case for career maturity to include cultural and time-specific contexts and to have other factors, such as planning, exploration and adaptation, taken into account. Individuals are shaped by their cultures in an intricate matrix of intertwining relationships (Stead, 2004). Hence, a more holistic approach has to be followed to understand the ways cultural meanings influence individuals' interaction in the work environment, which will provide new perspectives and awareness (Stead, 2004). Additionally, young people require assistance to explore alternatives to the traditional classroom setting, as many individuals find success in non-school training programmes. Continual learning is a reality and a critical element in a successful career. Counsellors play an important role in helping young individuals realise and pursue the type of learning that works best for their circumstances. Miller and Marvin (2006) postulate that when adolescents make informed and well thought-out career choices, they will be more dedicated and engaged employees. Hence, adequate career guidance may have a great impact on the career maturity of young people.

The following chapter focuses on the research design and methodology used to conduct the research.

CHAPTER THREE
RESEARCH DESIGN AND METHODOLOGY

3.1 INTRODUCTION

In this chapter, the research context/structure will be discussed. The research methodology utilised in the investigation of career maturity levels amongst final year undergraduate students is presented. Furthermore, this chapter describes the: sample selection, research procedure, data collection method, reliability and validity of the measuring instrument, and statistical methods implemented to analyse the research data gathered for this study.

3.2 SELECTION OF THE SAMPLE

A population encompasses any group which is the subject of research interest (Goddard & Melville, 2001). The population of final year undergraduate students, within a specific department, at a tertiary institution in the Western Cape, was used for the purposes of the study. This study is intended to provide a better understanding into whether or not students' levels of career maturity are indeed influenced by certain biographical factors.

According to Sekaran and Bougie (2010), an element is a single member of a specific population. The population used for this study consists of approximately 224 elements, as there are approximately 224 final year undergraduate students registered within the relevant department. Furthermore, the population frame is a listing of all the elements in the population from which the sample was drawn (Sekaran & Bougie, 2010). The population frame for this study was the university registry containing a listing of all students within the particular department, during the second semester of the 2014 academic year.

When the population is immeasurable or very large, sampling is a practical method to gather information, hence a study of all its elements is not always made possible (Sekaran & Bougie, 2010). Therefore, sampling techniques are used, as it is often unlikely for a researcher to investigate the entire population (Goddard & Melville, 2001). Sampling is a process of choosing an adequate quantity of components from the population to be able to generalise the characteristics to the populations' features, by studying the sample (Sekaran &

Bougie, 2010). Sampling techniques are necessary to generate a sample which is, as far as possible, representative of the entire population (Bell, 2010). According to Bell (2010), the time available to the researcher essentially determines the number of respondents included in a research study. Goddard and Melville (2001) further explain that if a sample represents only particular subgroups of the population or if certain subgroups are over- or under- represented in it, it is said to be biased. Hence, the basic principle which can be utilised in trying to avoid bias in a sample is random selection (Goddard & Melville, 2001).

3.2.1 Convenience Sampling

3.2.1.1 Non-probability sampling

In probability sampling, the subsets in a population have some likelihood of being drawn for analysis (Sekaran & Bougie, 2010). Probability sampling can conclude the probability of any element of the population being included as part of a research sample (Welman, Kruger & Mitchell, 2005). It allows a researcher to approximate sampling error. Sampling error is a statistical term that relates to the unrepresentativeness of a sample (Welman et al., 2005). "Simple random samples, stratified random samples, systematic samples, and cluster samples" are examples of probability samples (Welman et al., 2005, p. 56).

Conversely, non-probability sampling cannot stipulate this probability. In non-probability sampling, subsets have no prearranged chance of being drawn for analysis (Sekaran & Bougie, 2010). Additionally, Welman and Kruger (2002) state that the probability of any element being included in a non-probability sample, cannot be indicated. However, when factors such as time constraints are considered as opposed to generalisability; non-probability sampling is generally utilised (Sekaran & Bougie, 2010). Given the nature of the present study, the population chosen and to some extent the time constraints involved, non-probability sampling was employed. "Accidental or incidental samples, quota samples, purposive samples, snowball samples, self-selection samples, and convenience samples" are examples of non-probability samples (Welman et al., 2005, p. 56).

In simple random sampling, each component in the population in question has an equal probability of being selected as a subject (Bell, 2010). Convenience sampling however, entails the collection of data from a convenient and available subset of the population (Sekaran & Bougie, 2010). Welman and Kruger (2002, p. 62) concur by stating that "it is the

most convenient collection of members of the population that are near and readily available for research purposes". According to Sekaran and Bougie (2010), convenience sampling is generally employed to gather information as rapidly and efficiently as possible. Furthermore, convenience sampling comprises the selection of a sample in a random and unsystematic manner, in terms of the ease of being able to access the sample (Welman et al., 2005). The sample selection process is continued until the requisite sample size is reached (Bell, 2010).

In this research investigation, a convenience sample was used. A sample of 149 students were conveniently drawn from the particular department. Convenience sampling appeared to be most applicable due to time constraints and the availability of the population tested, especially the schedule of the sample. This specific method of sampling is commonly utilised by researchers (Welman et al., 2005). Respondents were included in the sample, as they were easily accessible. Hence, the sampling procedure was susceptible to partiality and various influences (Welman et al., 2005). Specific advantages and disadvantages of the sampling procedure follows.

3.2.1.2 Advantages and disadvantages of sampling procedure

Many of the costs involved in research studies are minimised by employing a non-probability sampling procedure (Sekaran & Bougie, 2010). According to Bell (2010), if the organisation and features of the sample are stated clearly, and the limitations of the data are understood, these types of samples are commonly acceptable. Non-probability sampling is an inexpensive and quick way of gathering primary information (Sekaran & Bougie, 2010), which is quite applicable for the present study. In non-probability sampling, a convenience sample can be drawn from subjects that are conveniently available and willing to provide the required information, therefore, simplifying the collection of the appropriate information (Sekaran & Bougie, 2010). This is in line with the objectives set for this research study. Conversely, a disadvantage of non-probability sampling is that the conclusions drawn based on the sample cannot be confidently generalised to the population in question (Sekaran & Bougie, 2010). It is only applicable to the sample in question, as it is not representative of the broader South African context.

3.3 DATA COLLECTION PROCEDURE

A cross-sectional research study was conducted, based on the survey approach. A total of 149 final year undergraduate students, within a specific department, at a tertiary institution in the Western Cape, was used for the purposes of the study. Informed consent was obtained from the participants prior to the administration of the questionnaire. The final year students were invited to participate voluntarily in the research study. A cover letter accompanied the questionnaire, explaining the purpose of the research and assuring respondents of the anonymity and confidentiality. Returning of completed questionnaires implied that the respondents had consented to participation in the study.

Participants were assured not to feel obliged to complete the questionnaire and that they were free to withdraw from the study at any point in time, if they desired to. Confidentiality was emphasised when communicating with the participants during the administration of the questionnaire. The participants' responses were kept confidential. All the information gathered were used only for the stated research purposes.

The self-administered questionnaires were returned immediately, after completion thereof, as the students were able to complete it in the stipulated time period. This method proved to be convenient and reliable as the completed questionnaires were immediately available for further processing.

3.4 BIOGRAPHICAL QUESTIONNAIRE

A biographical questionnaire was developed, comprising of twelve questions. The biographical questionnaire was completed to gather information relating to the respondents' biographical information, such as gender, age, home language, the degree programme registered for, stated certainty of career focus, type of secondary school attended, their parents' highest level of education, and so forth.

The information gathered with respect to the biographical questionnaire are subsequently graphically represented and discussed with the aim of providing an indication of the most prominent findings in respect to the above stated variables.

3.5 CAREER DEVELOPMENT QUESTIONNAIRE (CDQ)

The Career Development Questionnaire (CDQ) was utilised to measure the construct of career maturity. Langley, du Toit and Herbst (1992) developed and standardised the CDQ for the South African context. The CDQ is a self-rated multi-factorial measure that was designed to determine the career maturity or readiness of young people to make career decisions (Langley, 1990; Themba et al., 2012). According to Stead and Watson (1999), Langley's interpretations of career maturity indicate an amalgamation of the career maturity models of Crites (1969), Super (1980) and Westbrook (1986).

Langley et al. (1996) specifically state that the questionnaire was developed as a tool for young individuals to determine their readiness for making career decisions. According to Stead and Watson (1999), the CDQ can be utilised to evaluate an individual's readiness to interpret his or her scores on interest inventories and aptitude tests and to make career decisions in general. Furthermore, the CDQ can assist with identifying particular career development tasks that certain individuals may be slower to accomplish than their peers (Stead & Watson, 1999). Prior to making career decisions, counselling sessions can be used to address the development areas that have been identified by the CDQ (Stead & Watson, 1999).

3.5.1 The Composition of the CDQ

According to Langley et al. (1996), the CDQ is based on the developmental approach which places emphasis on career development as a continuous process during which individuals have to master various developmental tasks. The CDQ integrates existing career maturity theories (Langley, 1990). Furthermore, Pieterse (2005) states that the concept of career maturity can be operationalised by means of the five subscales of the CDQ. Each subscale consists of 20 questions, and the questionnaire consists of 100 items in total (Pieterse, 2005). Furthermore, Themba et al. (2012) explains that the 100 items of the CDQ measure the following five dimensions of career maturity: self-information (20 items), decision making (20 items), career information (20 items), integration of self-information with career information (20 items) and career planning (20 items).

Langley et al. (1996) explain the five dimensions assessed by the CDQ in more depth, as follows:

Table 3.1 Five Dimensions of the CDQ

Dimension	Description
1. Self-information	The importance of life roles, work values and occupational interest of an individual is of concern here.
2. Decision making	The effectiveness of the individual's decision making ability is of importance.
3. Career information	The testees knowledge of the work environment is evaluated.
4. Integration of self- and career-information	The integration of self-knowledge with that of the work environment is the hallmark here.
5. Career planning	The implementation of a career plan based on the career decisions made.

An individual's response to the items of the CDQ is a forced choice between "True" and "False". The five constructs could be assessed individually or in a group environment.

3.5.2 Validity of the CDQ

Validity considers what a test measures and how well it does so (Foxcroft & Roodt, 2013). Bell (2010) further states that validity indicates "whether an item or instrument measures or describes what it is supposed to measure or describe" (p. 119-120). Additionally, validity reflects whether the measurements made from an instrument are correct (Goddard & Melville, 2001). According to Murphy and Davidshofer (2005), validity has two spheres namely, it confirms whether a test measures what it is supposed to measure and secondly, it verifies how valid the decisions made are, on the basis of the test results.

Validity can be established in a number of ways. More specifically, several types of validity tests are used to examine measures, which can be grouped under three broad categories: content validity, criterion-related validity and construct validity (Sekaran & Bougie, 2010). Content validity ensures that an instrument comprises of a suitable and representative set of items that would measure the intended concept (Sekaran & Bougie, 2010). Sekaran and Bougie (2010) considers face validity as an elementary and minute index of content validity. Face validity is measured in non-psychometric terms, which concerns what a test appears to measure (Foxcroft & Roodt, 2013). Criterion-related validity contemplates "whether an

instrument accurately predicts or diagnoses some particular variable" (Goddard & Melville, 2001, p. 47). It involves the comparison of one instrument with another instrument which has been identified as being valid, and is established through concurrent and predictive validity (Sekaran & Bougie, 2010). Construct validity considers to what extent the outcome from the use of a measuring instrument matches with the anticipated theories, and is evaluated through convergent and discriminant validity (Sekaran & Bougie, 2010).

Langley et al. (1996) made use of the content related method of determining validity. In this study, the questionnaire used appeared to measure what it intended to measure. Face validity could be seen to be a necessary characteristic for any measure. In a study conducted by Themba et al. (2012) the authors found inter-correlation coefficients which indicated interdependence between the scales of the CDQ, thus providing evidence of construct validity. That is, the five scales seem to measure the same construct, namely career maturity (Themba et al., 2012). A statistically significant correlation ($p < 0.01$) between the five dimensions of the CDQ was reported by Gordon and Meyer (2002), among a sample of prospective university students. Furthermore, De Bruin and Bernard-Phera (2002) conducted a confirmatory factor analysis which supports the construct validity of the CDQ as a career maturity measure, among young South Africans from a low socio-economic background.

3.5.3 Reliability of the CDQ

The reliability of a test assesses the extent to which the variation in test scores is due to true differences between people on the trait being measured (Psytech International, n.d.). Bell (2010) describes reliability as "the extent to which a test or procedure produces similar results under constant conditions on all occasions" (p. 119). Reliability is further explained as being the accuracy and consistency with which the intended measures are assessed (Goddard & Melville, 2001; Solomon, 2007). Additionally, "if the same experiment is performed under the same conditions, the same measurements will be obtained" (Goddard & Melville, 2001, p. 41).

There are various methods in measuring the reliability of an instrument, namely, Test-retest, Split-half reliability, Alternate form, as well as Cronbach's alpha and Kuder-Richardson Theory (Foxcroft & Roodt, 2013). Firstly, test-retest encompasses the administration of the same test, a certain period after the first administration (Bell, 2010). Goddard and Melville (2001) state that many respondents are likely to be unhappy about answering the same

questions twice. The responses may change or respondents may be 'lost', due to the time lag required in between the two administrations of the test (Goddard & Melville, 2001). Secondly, the split-half method comprises the administration of a test where the items in the test are split into two matched halves and results are then correlated (Bell, 2010). According to Goddard and Melville (2001), this method is an adaptation of the equivalent form method, where the original test and equivalent form thereof are combined into one measurement. However, this method appears advantageous as it permits a single test administration instead of two test administrations (Goddard & Melville, 2001). Thirdly, the alternate form method involves the administration of comparable versions of the same items, and the outcomes are correlated (Bell, 2010). The original test questions are restated, so two tests effectively ask the same questions, but look different, which would imply that respondents did not just answer at random (Goddard & Melville, 2001).

The overall reliability coefficient of 0.77 for the sample of high school pupils and 0.73 for the university sample is above 0.70, proving that the CDQ is reliable when being used as a guidance tool (Langley et al., 1996). Moreover, Langley (1990) reports internal consistency reliability coefficients on the CDQ that are higher than 0.90 for the total score and higher than 0.70 for the subscales relating to university students. The internal consistency reliability coefficients that are reported in the CDQ manual for high school students across the language groups range from 0.66 to 0.82 (Langley 1990; Langley et al., 1996). Langley (1990) and Langley et al. (1996) reported high inter-correlations between the various scales of the CDQ. In terms of the study conducted by Themba et al. (2012), high internal consistency reliability coefficients, ranging between 0.70 and 0.89, were obtained for the CDQ. Additionally, satisfactory reliability coefficients and validity indices were found for all the groups when developing the CDQ (Langley et al., 1992). These groups consisted of South African high school learners and first year university students (Langley et al., 1992).

3.5.4 Rationale for the use of CDQ

According to Clough and Nutbrown (2012), questionnaires are often relatively straightforward to evaluate, extensively used and beneficial for gathering survey data; providing structured and likely numerical data. In order to ensure that data can be objectively evaluated, planning beforehand is necessary and will lead to increased effectiveness (Goddard & Melville, 2001). The measure selected for the present study is an existing questionnaire which measures aspects of participants' career maturity, and appeared to be

relatively easy to complete. The sample could be investigated with minimal personal interaction, and with the objective of forming a broad impression of the respondents' views (Clough & Nutbrown, 2012). However, it is improbable that a questionnaire will reveal the depth of the participants' views in rich detail (Clough & Nutbrown, 2012). Subsequently, this distinction is essentially what separates qualitative and quantitative approaches to investigation (Clough & Nutbrown, 2012). In addition, the CDQ is a well-structured instrument, which asks relevant questions, with clear instructions provided to respondents (Goddard & Melville, 2001).

The reliability and validity of the CDQ further contributed to the final decision to use the questionnaire, with various authors concurring on this matter (De Bruin & Bernard-Phera, 2002; Gordon & Meyer, 2002; Langley, 1990; Langley et al., 1996; Themba et al., 2012). Moreover, the CDQ has been standardised for the South African context (Langley et al., 1992; Langley et al., 1996). According to Stead and Watson (1999), "high school pupils and university students with Afrikaans, English or an African language as their first language were included in the standardisation samples of the CDQ and it may therefore be used with all South African population groups" (p. 151). Furthermore, the questionnaire did not require students to divulge too much information with regards to their personal, educational or financial circumstances. The scoring method is objective, as it has set scores, which left minimal room for personal interpretation. This further reduced any instances of inaccurate and subjective scoring.

Certain studies have however found that black students consistently achieve lower scores on career maturity measures than white students, which may be due to the Eurocentric nature of the CDQ that might not be suitable for South African conditions (Reid-Van Niekerk & Van Niekerk, 1990). Nonetheless, Stead and Watson (1999) indicate that South Africa's distinctive socio-economic circumstances are characterised by "inadequate educational opportunities and large-scale unemployment, which means that career development cannot proceed in the orderly and predictable way that Super (1990) describes" (p. 151). Hence, "the concept of career maturity may not have the meaning in the South African context that Super intended it to have" (Stead & Watson, 1999, p. 151).

The concept of career maturity has numerous assessment tools which have been constructed to measure it (Prideaux & Creed, 2001). According to Crites (1973, cited in Prideaux &

Creed, 2001), the Career Maturity Inventory (CMI) is one of the most widely used instruments. This instrument was designed to test attitudes in respect to decisiveness, involvement, independence, orientation and compromise (Prideaux & Creed, 2001). Moreover, Prideaux and Creed (2001) state that it also encompasses a competence test that assesses knowledge in terms of self-appraisal, occupational information, goal selection, planning and problem solving. The Career Development Inventory (CDI) is another instrument designed to measure Career Maturity (Prideaux & Creed, 2001). The CMI as well as the CDI have attained acceptable psychometric validation to permit their continuous use (Levinson, Ohler, Caswell & Kiewra, 1998, cited in Prideaux & Creed, 2001). However, for the purpose of the present study, the use the CDQ seemed most applicable, as it has been standardised for the South African context.

3.6 DATA ANALYSIS TECHNIQUES

The data analysis was conducted using the Statistical Package for Social Sciences (SPSS). The validity and reliability of the questionnaire utilised was determined through conducting an analysis of the data, using SPSS. More specifically, for the purposes of testing the research hypotheses, a number of statistical techniques were employed, which include both descriptive and inferential techniques.

3.6.1 Descriptive Statistics

Descriptive statistics describe the phenomena of interest, and is used to classify and summarise numerical data (Sekaran & Bougie, 2010). Descriptive statistics further includes the conversion of raw data into a form that would offer information to describe a set of aspects in certain circumstances, which is done through organising and manipulating the raw data gathered (Sekaran & Bougie, 2010). According to Welman et al. (2005), descriptive research involves the comparison of the mean of one group with the mean of another group.

Descriptive statistics are provided by analysing data by using frequencies, measures of central tendency, and dispersion (Sekaran & Bougie, 2010). The mean and median were used to describe the data obtained from the CDQ. Furthermore, the results of the biographical questionnaire were based on the frequencies and percentages obtained based on the sample characteristics. Thus, descriptive statistics were deemed necessary to summarise the results

and convey the findings effectively.

3.6.2 Inferential Statistics

Inferential statistics is used to present the data obtained in statistical format in order to facilitate the identification of important patterns and to make data analysis more meaningful. According to Sekaran and Bougie (2010), inferential statistics is employed when generalisations from a sample to a population are made. Welman et al. (2005) further state that it is concerned with conclusions that can be drawn regarding "population indices, on the basis of the corresponding indices, obtained from samples drawn randomly from the populations" (p. 236).

The statistical methods used in this research study include the Pearson product-moment correlation, t-test and analysis of variance. Thus, inferential statistics provide insight into the degree of certainty with which predictions can be made regarding obtaining the same results in future research studies (Gordon & Meyer, 2002).

3.6.2.1 Relationships: The Pearson Product-Moment Correlation

Pearson correlation is appropriate when an intended research study comprises of numerous variables (Sekaran & Bougie, 2010). Further than knowing the means, standard deviations and medians of the dependent and independent variables, often researchers would want to know how a specific variable is related to another variable (Sekaran & Bougie, 2010). Moreover, Welman and Kruger (2002, p. 206) defines Pearson correlation as "a statistic to measure the degree of association between two interval or ratio variables". Pearson correlation is therefore suitable for the purposes of the present study, as the study attempted to describe the relationship between career maturity and final year undergraduate students' biographical variables. Hence, the data was analysed through the use of Pearson correlation. Pearson correlation was computed for a specific variable included in the research study, i.e. stated certainty of career focus.

The correlation is derived by evaluating the variations in one variable as another variable also fluctuates (Sekaran & Bougie, 2010). The research study assessed the relationship between the biographical variable and career maturity. Pearson correlation was used to show the relationship between the data. Ultimately, when one of the variables is present, another is likely to appear. The causal relationship between the variables may be undetermined;

however, the research study was able to determine if the variables are related to each other (Sekaran & Bougie, 2010). Thus, the stated hypothesis could be accepted or rejected, as the results either postulates a significant positive or negative relationship between the variables (Sekaran & Bougie, 2010).

3.6.2.2 Mean Differences between Two Groups: The t-Test

T-test is appropriate when a researcher is interested to know whether two different groups are different from each other on a particular interval-scaled or ratio-scaled variable of interest (Sekaran & Bougie, 2010). A t-test determines "whether an observed difference in the means of two groups is sufficiently large to be attributed to a change in some variable or if it could have occurred by chance" (Welman et al., 2005, p. 236).

Welman and Kruger (2002) further state that a t-test enables a researcher to determine whether two groups have equivalent or different mean scores. Furthermore, a nominal variable that is split into two subgroups is tested to see if there is a significant mean difference between the two groups on a dependent variable, which is measured on an interval or ratio scale (Sekaran & Bougie, 2010). For the purpose of the present study males and females within the selected sample were compared. A t-test also takes into consideration the means and standard deviations of the two groups on the variable and tests whether the numerical difference in the means is significantly different from 0 as postulated in the null hypothesis (Sekaran & Bougie, 2010).

3.6.2.3 Mean Differences among Multiple Groups: ANOVA

An analysis of variance (ANOVA) helps to examine the significant mean differences among more than two groups on an interval or ratio scaled dependent variable (Sekaran & Bougie, 2010). Welman and Kruger (2002) concur with this statement and further explain that a t-test and ANOVA are appropriate statistics to use when descriptive research involves comparing the mean differences between two or more groups. For the purpose of the present study ANOVA was used, when considering the participants' age and the secondary school participants attended, in terms of comparing it with their levels of career maturity. T-tests and ANOVA enable researchers to conclude whether two groups have equivalent or different mean scores (Welman et al., 2005).

According to Sekaran and Bougie (2010), the results of ANOVA indicate whether or not the means of the various groups are significantly different from one another, as specified by the F statistic. The F statistic shows whether two sample variances vary from one another or if they are from the same population (Sekaran & Bougie, 2010). Additionally, Welman et al. (2005) state that t-test and ANOVA are the appropriate statistics to use, when conducting descriptive research.

3.7 CONCLUSION

The research methodology employed was addressed in this chapter. The chapter further outlined the selection of the sample, data collection procedure, the measuring instruments utilised, including the composition thereof, its reliability, validity, and the rationale for its use. Additionally, the data analysis techniques utilised in testing the research hypotheses were discussed, which encompasses descriptive and inferential statistical techniques.

The ensuing chapter provides a presentation of the results obtained from the statistical analysis.
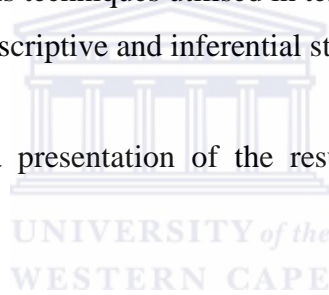
CHAPTER FOUR
PRESENTATION OF RESULTS

4.1 INTRODUCTION

This chapter reports on the results found from the empirical analysis. The Statistical Package for the Social Sciences (SPSS) version 22 was the statistical programme utilised for the analyses and presentation of data. The descriptive and inferential statistics generated for the conjectured relationships are presented.

The data pertaining to the variables included in the study, as collected by the biographical section of the measuring instruments, were summarised through the calculation of descriptive measures. Subsequently, the analyses of the construct relevant to the study, i.e. career maturity, is presented in terms inferential statistics.

4.2 BIOGRAPHICAL INFORMATION

The biographical information of 149 (100%) of the students who participated in the research study, is graphically presented. A brief description is provided, with respect to the information participants provided in the biographical questionnaire. It details respondents' age, gender, language, type of secondary school, type of degree programme, study type, year of study, intention to study further, certainty of career focus, exposure to career counselling, as well as the highest qualifications of their parents. The age distribution of respondents that participated in the research is illustrated in Figure 4.1.
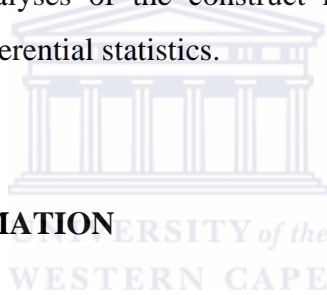
Figure 4.1 Age distribution
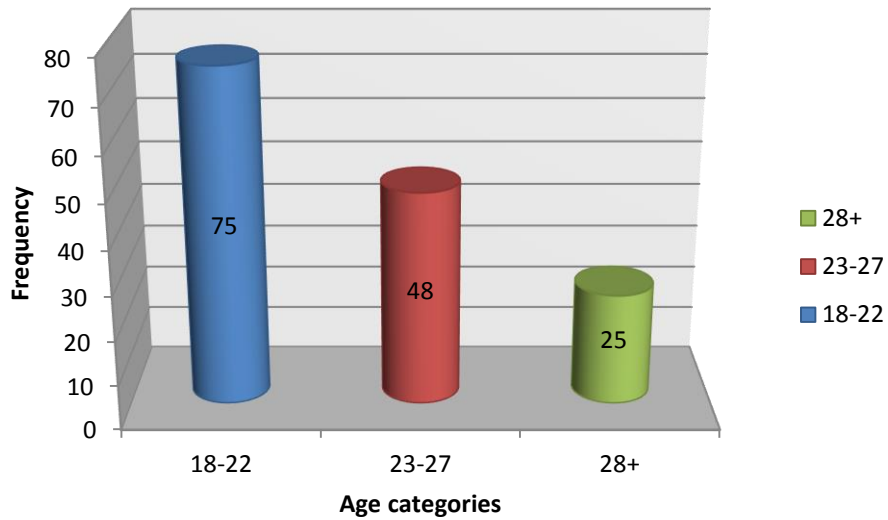
Figure 4.1 represents the age distribution of the participants. The majority of the respondents (50.3%, n=75) fall within the 18 to 22 year old range, which is representative of a student sample. Whereas, 32.2% (n=48) fall within the 23 to 27 year old range and a further 16.8% (n=25) fall within the range of 28 years and older.

Figure 4.2 Gender distribution
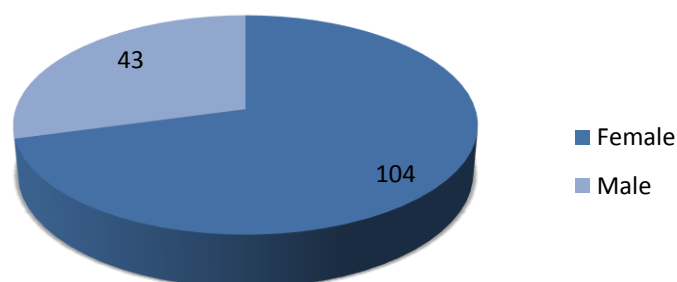
Figure 4.2 depicts the gender of the respondents. The female students represented the greater of the two genders with 69.8% (n=104), which is representative of the specific department utilised. While the male students consisted of 28.9% of the respondents (n=43).

Figure 4.3 Language
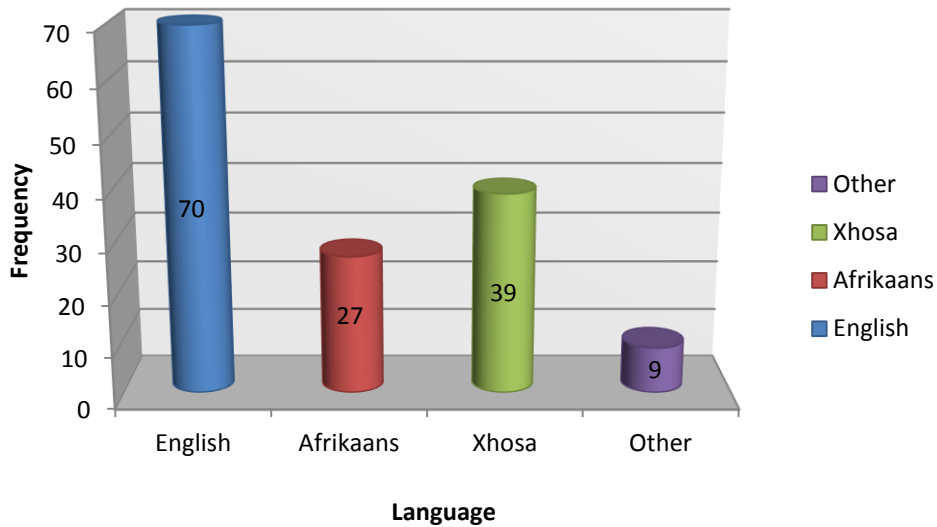
Figure 4.3 represents the home language of the respondents. The majority of the respondents cited English as their home language at 47% (n=70). A further 26.2% (n=39) of the respondents cited Xhosa as their home language, while 18.1% (n=27) of the respondents cited Afrikaans as their home language. Furthermore, 6.1% (n=9) of the respondents cited 'other' as their home language.
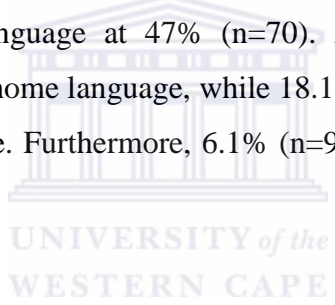
Figure 4.4 Type of Secondary School
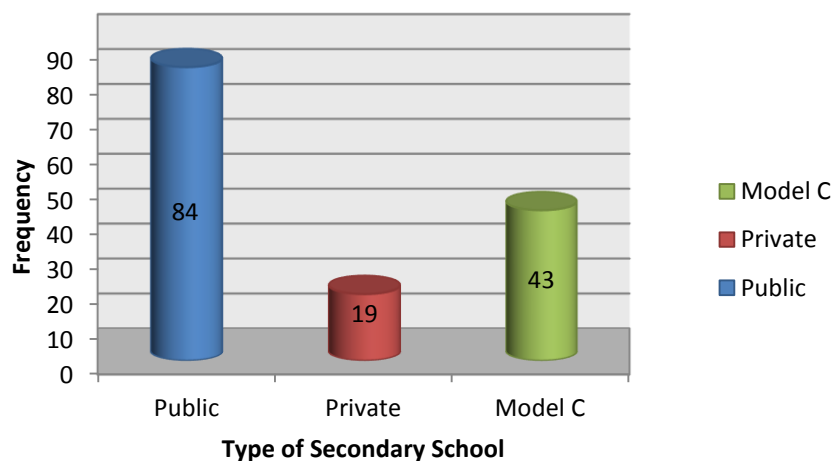
Figure 4.4 illustrates the type of secondary school the respondents attended. The three types of secondary schools were variably represented. Majority of respondents attended Public

schools (n=84), with 56.4%, while 28.9% of the respondents attended a Model C school (n=43). Furthermore, 12.8% of the students attended a Private school (n=19).

Figure 4.5 Type of Degree Programme
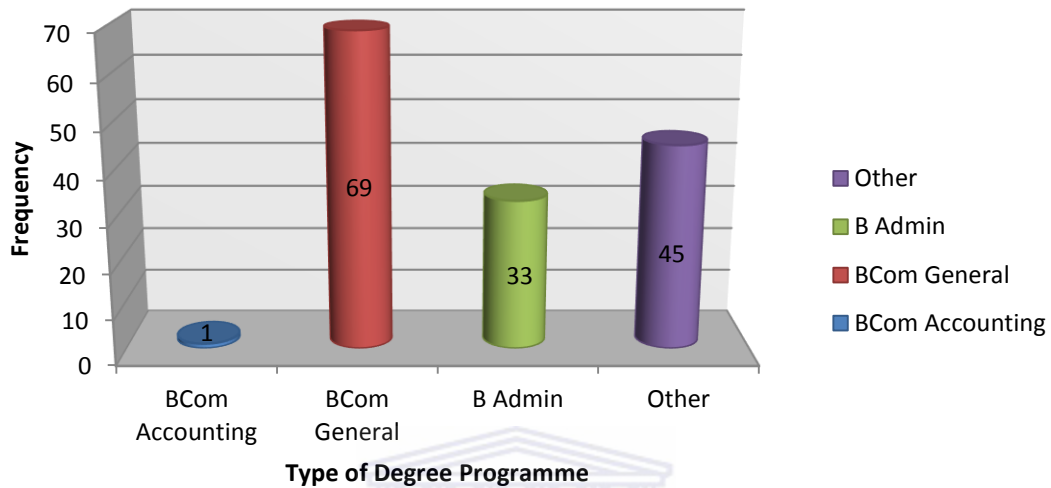
Figure 4.5 represents the type of degree programme of the respondents. The majority of the respondents represented the BCom General degree programme with 46.3% (n=69). The B Admin degree programme was represented by 22.1% of the respondents (n=33), whilst 0.7% of the respondents represented the BCom Accounting degree programme (n=1). A further 30.2% of respondents cited "other" as their degree programme (n=45).

Figure 4.6 Study Type
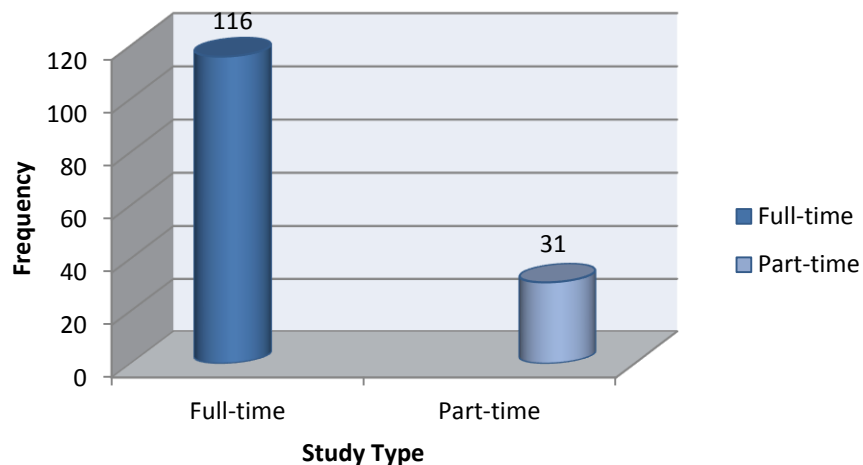
Figure 4.6 represents the study type of the respondents. Majority of the respondents (77.9%, n=116) indicated studying full-time, whereas part-time students represented 20.8% (n=31) of the respondents.

Figure 4.7 Study Year
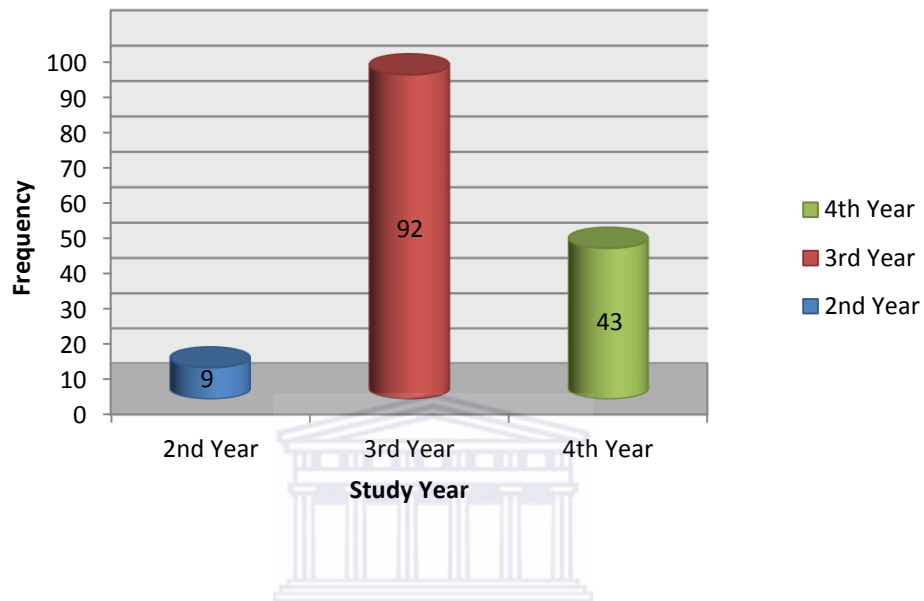
Figure 4.7 represents respondents' year of study. Third year students were represented by the majority of the respondents who participated in the research with 61.7% (n=92), as the sample was drawn from final year undergraduate students. Furthermore, 28.9% of the respondents represented fourth year of study (n=43), who may be registered for the extended degree programme. A further 6.0% of the respondents were in their 2nd year (n=9).

Figure 4.8 Intention to Study further
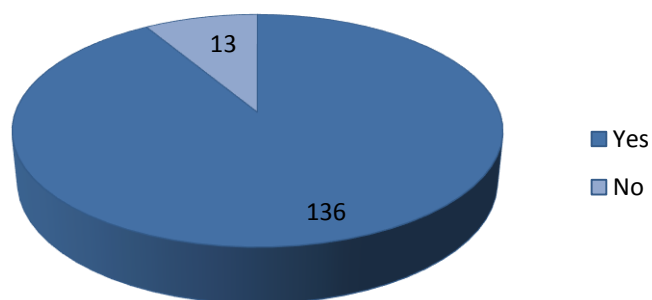
Figure 4.8 represents whether the respondents intend on studying further after their final year. The majority of the respondents who participated in the research indicated "yes" with 91.3% (n=136). Furthermore, 8.7% of the respondents indicated "no" (n=13).

Figure 4.9 Certainty of Career Focus
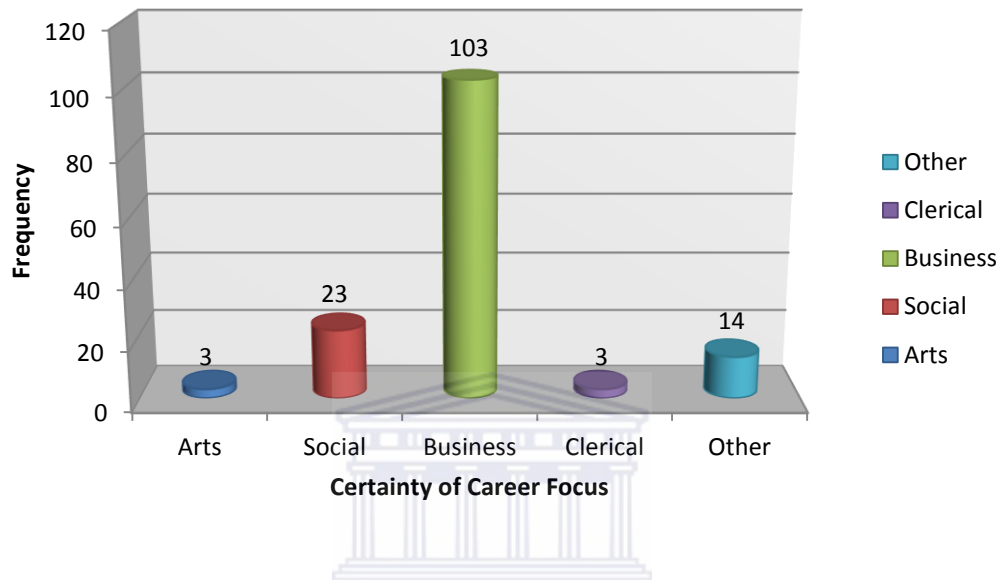
Figure 4.9 represents respondents' stated certainty of career focus. The majority of the participants indicated an interest in the Business career field, with 69.1% (n=103). The Social career field reflects 15.4% (n=23) of respondents' choice. The Arts and Clerical career fields were cited by 2% of respondents respectively (n=3). A further 9.4% (n=14) of respondents cited "other" as their career interest.

Figure 4.10 Exposure to Career Counselling
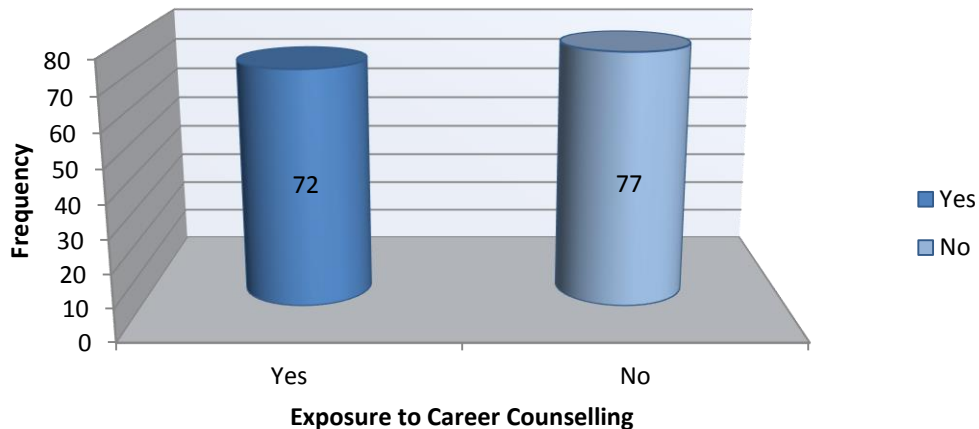
Figure 4.10 illustrates the number of respondents who has been exposed to some type of career counselling previously. A total of 51.7% (n=77) respondents cited "no" they had not had been exposed to some type of career counselling previously, whilst 48.3% (n=72) of respondents cited "yes" they had been exposed to career counselling previously.

Figure 4.11 Highest Qualification of Mother
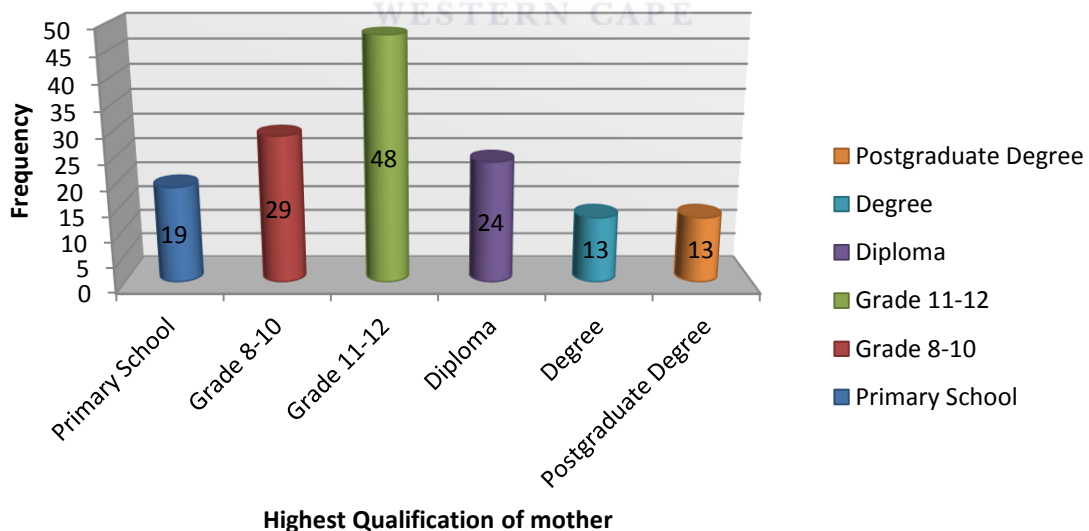
Figure 4.11 represents the highest qualification of the respondents' mother. The majority of the respondents cited their mothers highest qualification to be "Grade 11-12", with 32.2% (n=48), while 19.5% (n=29) cited "Grade 8-10", and 16.1% (n=24) cited "Diploma". A further 12.8% of the respondents cited "Primary school" as their mothers highest

qualification (n=19). "Degree" and "Post graduate degree" represents a further 8.7% (n=13) of respondents responses, respectively.

Figure 4.12 Highest Qualification of Father
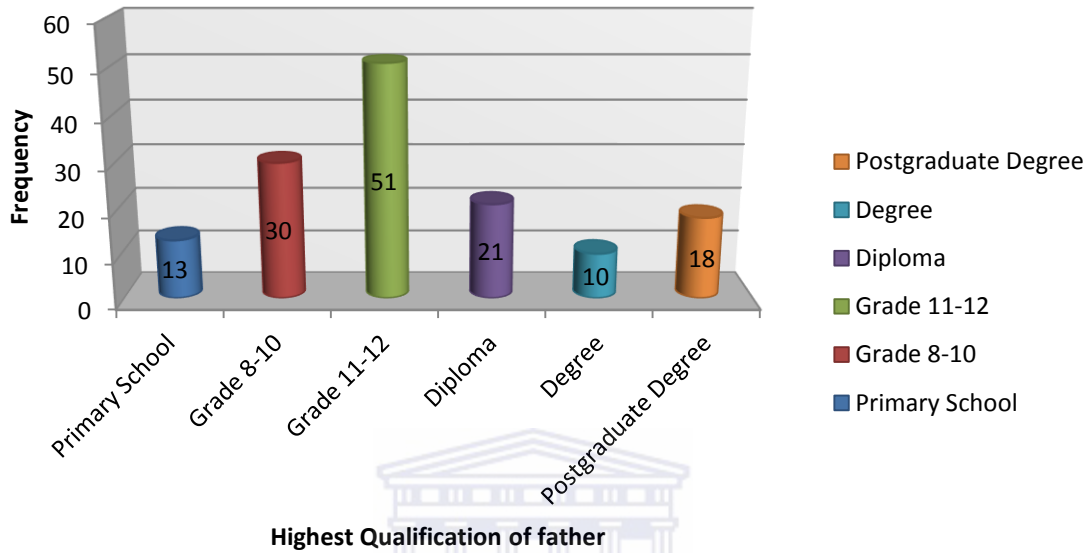
Figure 4.12 represents the highest qualification of the respondents' father. The majority of the respondents cited their fathers highest qualification to be "Grade 11-12", with 34.2% (n=51), while 20.1% (n=30) cited "Grade 8-10", and 14.1% (n=21) cited "Diploma". A further 12.1% of the respondents cited "Post graduate degree" as their fathers highest qualification (n=18). "Primary school" reflects 8.7% (n=13) and "Degree" and represents a further 6.7% (n=10) of respondents responses.

4.3 RELIABILITY

Table 4.1 Reliability of the Career Development Questionnaire (CDQ)

Reliability Statistics	
Cronbach's Alpha	Number of Items
.744	100

The CDQ consists of five subscales. Each subscale consists of 20 questions, and the questionnaire consists of 100 items in total (Pieterse, 2005). Furthermore, Themba et al. (2012) outlines the five subscales as follows: self-information (20 items), decision making (20 items), career information (20 items), integration of information on the self with information on the world of work (20 items) and career planning (20 items). An individual's response to the items of the CDQ is a forced choice between "True" and "False".

To determine the consistency and stability of the questionnaire based on the sample of students, the Cronbach's Alpha was calculated. In the Social Sciences and Humanities, conventionally accepted coefficients above 0.7 are regarded as acceptable (Sekaran & Bougie, 2010). Based on the scale analysis, the reliability of the CDQ was calculated at 0.744 which is indicative of the fact that the questionnaire was indeed reliable.

4.4 DESCRIPTIVE RESULTS

This section outlines the descriptive statistics calculated on the basis of the variables included in the questionnaire. The measures of central tendency and dispersion for the dimensions of the CDQ are shown in Table 4.2. The data presented in Table 4.2 was treated as categorical data.

Table 4.2 Minimum, Maximum, Median and Mean scores for the CDQ

Descriptive Statistics						
	N	No. Items	Minimum	Maximum	Median	Mean
			Statistic	Statistic	Statistic	Statistic
Self-Information (SI) Total	149	20	8	19	12	11.99
Decision Making Total	149	20	4	20	9	9.95
Career Information (CI) Total	149	20	0	20	11	10.79
Integration of SI with CI Total	149	20	0	19	12	12.19
Career Planning Total	149	20	0	20	13	12.15
Career Maturity (Total score)	149	100	25	84	56	57.08
Valid N (listwise)	149					

Respondents scored a minimum of 25 and a maximum score of 84 for career maturity. The median score obtained by respondents is 56 and a mean score of 57.08. A minimum score of 8 and a maximum score of 19 was obtained for Self-Information. The median score obtained by respondents is 12 and a mean score of 11.99. In relation to Decision Making, a minimum score of 4 and a maximum score of 20 was obtained. The median score obtained by respondents is 9 and a mean score of 9.95. In terms of Career Information, a minimum score of 0 and a maximum score of 20 was obtained. The median score obtained by respondents is 11 and a mean score of 10.79.

Furthermore, a minimum score of 0 and a maximum score of 19 was obtained for Integration of Self-Information with Career Information. The median score obtained by respondent is 12 and a mean score of 12.19. Additionally, a minimum score of 0 and a maximum score of 20 was obtained for Career Planning. The median score obtained by respondent is 12 and a mean score 12.15.

4.5 INFERENTIAL RESULTS

The following section addresses the results obtained for the inferential statistics to ascertain the relationship between gender, age, certainty of career, type of secondary school attended and career maturity.

4.5.1 Hypothesis 1

Table 4.3 Mean differences between the different genders, with the dimensions of the CDQ

Group Statistics					
	Gender	N	Mean	Std. Deviation	Std. Error Mean
Self-Information (SI) Total	Female	104	11.80	1.933	.190
	Male	43	12.53	2.131	.325
Decision Making Total	Female	104	9.60	2.806	.275
	Male	43	10.88	2.771	.423
Career Information (CI) Total	Female	104	10.53	3.666	.359
	Male	43	11.40	2.953	.450
Integration of SI with CI Total	Female	104	12.12	2.721	.267
	Male	43	12.56	2.500	.381
Career Planning Total	Female	104	12.12	3.209	.315
	Male	43	12.19	2.946	.449
Career Maturity Total	Female	104	56.15	8.330	.817
	Male	43	59.56	7.722	1.178

Table 4.4 T-test between the different genders, with the dimensions of the CDQ

		Levene's Test for Equality of Variances		t-test for Equality of Means		t-test for Equality of Means		
		F	Sig.	t	df	Sig.	Mean	Std. Error
Self-Information (SI) Total	Equal variances assumed	.574	.450	-2.040	145	.043	-.737	.361
	Equal variances not assumed			-1.959	72.035	.054	-.737	.376
Decision Making Total	Equal variances assumed	.402	.527	-2.540	145	.012	-1.288	.507
	Equal variances not assumed			-2.554	79.358	.013	-1.288	.504
Career Information (CI) Total	Equal variances assumed	1.989	.161	-1.376	145	.171	-.867	.630
	Equal variances not assumed			-1.504	96.572	.136	-.867	.576
Integration of SI with CI Total	Equal variances assumed	.043	.836	-.918	145	.360	-.443	.482
	Equal variances not assumed			-.951	84.897	.344	-.443	.465
Career Planning Total	Equal variances assumed	.375	.541	-.124	145	.901	-.071	.568
	Equal variances not assumed			-.129	84.976	.898	-.071	.548
Career Maturity Total	Equal variances assumed	.002	.966	-2.301	145	.023	-3.404	1.479
	Equal variances not assumed			-2.375	84.191	.020	-3.404	1.433

Table 4.4 reflects the results of the study which found a significant difference in career maturity (t = -2.375, p < 0.05) and Decision Making (t = -2.554, p < 0.05) based on students' gender. These differences include that males have a higher level of career maturity (M = 59.56, SD = 7.72) than their female counterparts (M = 56.15, SD = 8.33). Furthermore, males have a higher level of Decision Making (M = 10.88, S = 2.77) than their female counterparts (M = 9.60, S = 2.81). Table 4.4 further indicates that there is no significant difference in Self-Information (t = -1.959, p > 0.05), Career information (t = -1.504, p > 0.05), Integration of

Self-Information and Career Information (t = -0.951, p > 0.05), and Career Planning (t = -0.129, p > 0.05) based on students' gender.

Hence, the hypothesis is partially rejected, which states that there is a statistically significant difference between male and female final year undergraduate students, with regards to the dimensions of the Career Development Questionnaire (Self-information, Decision making, Career information, Integration of Self-information and Career information, and Career Planning).

4.5.2 Hypothesis 2

Table 4.5 Analysis of variance between the different age groups, with the dimensions of the CDQ

		ANOVA				
		Sum of Squares	df	Mean Square	F	Sig.
Self-Information (SI) Total	Between Groups	2.997	2	1.498	.368	.693
	Within Groups	589.997	145	4.069		
	Total	592.993	147			
Decision Making Total	Between Groups	14.695	2	7.348	.911	.404
	Within Groups	1169.197	145	8.063		
	Total	1183.892	147			
Career Information (CI) Total	Between Groups	45.734	2	22.867	1.920	.150
	Within Groups	1727.347	145	11.913		
	Total	1773.081	147			
Integration of SI with CI Total	Between Groups	29.828	2	14.914	2.122	.124
	Within Groups	1019.253	145	7.029		
	Total	1049.081	147			
Career Planning Total	Between Groups	21.437	2	10.718	1.107	.333
	Within Groups	1404.583	145	9.687		
	Total	1426.020	147			
Career Maturity Total	Between Groups	330.507	2	165.254	2.473	.088
	Within Groups	9691.303	145	66.837		
	Total	10021.811	147			

Table 4.5 above indicates the significance (p = 0.088) is greater than 0.05. Therefore the results of the study found no significant difference in career maturity based on students' ages (F = 2.473, p > 0.05). Furthermore, the researcher considered the individual dimensions of the CDQ.

Table 4.5 above further indicates the significance of Self-Information (p = 0.693), Decision Making (p = 0.404), Career information (p = 0.150), Integration of Self-Information and Career Information (p = 0.124) and Career Planning (p = 0.333) is greater than 0.05. Therefore, the results of the study found no significant difference in Self-Information (F = 0.368, p > 0.05), Decision Making (F = 0.911, p > 0.05), Career information (F = 1.920, p > 0.05), Integration of Self-Information and Career Information (F = 2.122, p > 0.05), and Career Planning (F = 1.107, p > 0.05) based on students' ages.

Hence, the hypothesis is rejected, which states that there is a statistically significant difference between final year undergraduate students based on their age, with regards to the dimensions of the Career Development Questionnaire (Self-information, Decision making, Career information, Integration of Self-information and Career information, and Career Planning).
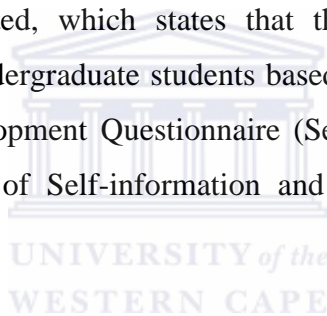
4.5.3 Hypothesis 3

Table 4.6 Pearson correlation between participants' scores on the CDQ, and their stated certainty of career focus

Correlations		Career Maturity	Certainty of Career Focus
Career Maturity	Pearson Correlation	1	.140
	Sig. (2-tailed)		.091
	N	149	146
Certainty of Career Focus	Pearson Correlation	.140	1
	Sig. (2-tailed)	.091	
	N	146	146

Table 4.6 indicates that the relationship between certainty of career focus and career maturity is not statistically significant (r = 0.091, p > 0.01). Hence, the hypothesis is rejected, which states that there is a statistically significant relationship between participants' scores on the Career Development Questionnaire, and their stated certainty of career focus.

4.5.4 Hypothesis 4

Table 4.7 Analysis of variance between the types of secondary school, with regards to the dimensions of the CDQ

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
Self-Information (SI) Total	Between Groups	9.843	2	4.922	1.217	.299
	Within Groups	578.157	143	4.043		
	Total	588.000	145			
Decision Making Total	Between Groups	6.554	2	3.277	.398	.672
	Within Groups	1176.274	143	8.226		
	Total	1182.829	145			
Career Information (CI) Total	Between Groups	2.728	2	1.364	.110	.896
	Within Groups	1768.813	143	12.369		
	Total	1771.541	145			
Integration of SI With CI Total	Between Groups	11.024	2	5.512	.775	.463
	Within Groups	1017.058	143	7.112		
	Total	1028.082	145			
Career Planning Total	Between Groups	.169	2	.084	.008	.992
	Within Groups	1421.612	143	9.941		
	Total	1421.781	145			
Career Maturity Total	Between Groups	18.533	2	9.267	.134	.875
	Within Groups	9924.124	143	69.399		
	Total	9942.658	145			

Table 4.7 above indicates the significance for career maturity (p = 0.875) is greater than 0.05. Therefore, the results of the study found no significant difference in career maturity based on the type of secondary school students attend (F = 0.134, p > 0.05). Furthermore, the researcher considered the individual dimensions of the CDQ.

Table 4.7 above further indicates the significance of Self-Information (p = 0.299), Decision Making (p = 0.672), Career information (p = 0.896), Integration of Self-Information and Career Information (p = 0.463), Career Planning (p = 0.992) is greater than 0.05. Therefore, the results of the study found no significant difference in Self-Information (F = 1.217, p > 0.05), Decision Making (F = 0.398, p > 0.05), Career information (F = 0.110, p > 0.05), Integration of Self-Information and Career Information (F = 0.775, p > 0.05), Career Planning (F = 0.008, p > 0.05) based on the type of secondary school students attended.

Hence, the hypothesis is rejected, which states that there is a statistically significant difference between final year undergraduate students based on their type of secondary school, with regards to the dimensions of the Career Development Questionnaire (Self-information, Decision making, Career information, Integration of Self-information and Career information, and Career Planning). The three interest groups were Public, Model C and Private secondary schools.

4.6 CONCLUSION

This chapter has provided an overview of the most striking findings obtained, based on an empirical analysis of the data. Subsequently, chapter five presents a discussion of the findings obtained and contextualises the research findings based on previous research on career maturity amongst final year undergraduate students.

CHAPTER FIVE
DISCUSSION OF RESULTS, CONCLUSIONS AND RECOMMENDATIONS

5.1 INTRODUCTION

The chapter provides an overview of the salient findings originating from the present research study. The research findings are discussed and references are made to relevant research in relation to the findings of the current study. More specifically, comparisons are drawn from available literature on career maturity amongst students. Furthermore, the chapter provides conclusions drawn from the research and offers recommendations for future research into career maturity amongst final year undergraduate students.

The discussion further comprises biographical information about the sample, results obtained from the measures of central tendency and dispersion related to the questionnaire used, Pearson correlations between the variables, a T-test and an Analysis of Variance.

5.2 DISCUSSION OF RESULTS

Career maturity is central to a developmental approach to understanding career behaviour and contains an assessment of an individual's level of career progress in relation to their career development tasks (Super, 1990; Zunker, 2012). Therefore, the statistical procedures used consisted of descriptive as well as inferential statistics.

5.2.1 Descriptive Statistics

Descriptive statistics encompasses the conversion of raw data into a form that would offer information to describe a set of aspects in certain circumstances (Sekaran & Bougie, 2010). The results of the biographical questionnaire were based on the frequencies and percentages obtained based on the sample characteristics. Furthermore, the minimum, maximum, median and mean were used to describe the data obtained from the CDQ.

5.2.1.1 Biographical Questionnaire

Full time and part-time students were included in the study, to provide a broad age range. Half (50.3%) of the students fall in the 18 to 22 year age range and only 16.8% fall within the

range of 28 years and older, which is representative of a student sample. Consequently, students studying full time were represented by the majority of the respondents (77.9%), and part-time students represented 20.8% of the respondents. Furthermore, the female students represented the greater of the two genders with 69.8%, which is representative of the particular department from which the sample was drawn.

The three types of secondary schools were variably represented. Majority of respondents attended Public schools (56.4%), while 28.9% of the respondents attended Model C schools, and only 12.8% of the students attended Private schools. Majority of the respondents further represented the BCom General degree programme with 46.3%, which corresponds to the large intake of BCom General students at the particular tertiary institution each year. Majority of the respondents were third year students (61.7%), as the sample was drawn from a group of final year undergraduate students. Furthermore, 28.9% of the respondents were in their fourth year of study, who may be registered for the extended degree programme.

The majority of the participants indicated an interest in the Business career field, with 69.1%, which is in line with the specific faculty the participants are registered in. Additionally, a total of 51.7% of respondents cited "no" they have not been exposed to some type of career counselling, whilst 48.3% of respondents cited "yes" they have been exposed to career counselling previously. More effective career counselling could have assisted students in achieving greater levels of career maturity. Majority (91.3%) of the respondents further indicated that they intended to study further and only 8.7% of the respondents indicated "no" they would not. This reflects an awareness of future education and seemingly their prospective careers. Furthermore, majority of the respondents cited their parents' highest qualifications to be "Grade 11-12". Research shows that parents' educational qualification may have an influence on the career decisions of their children (Huang, 2006).

5.2.1.2 Career Development Questionnaire (CDQ)

An overflow of applicants for graduate placements have been caused by the number of graduates in the labour market generally increasing (Jordaan et al., 2009), which means students have to be adequately prepared for the world of work. However, in terms of the five dimensions of the CDQ, respondents interestingly scored a minimum of 0 for career information, integration of self-information and career information, and career planning. This is quite concerning as these participants would be expected to at least have some degree of

knowledge regarding these dimensions at final year undergraduate level. Whereas, a maximum score of 20 was obtained for decision making, career information and career planning. Interestingly, both career information and career planning reflect extreme minimum and maximum scores. Furthermore, the overall results indicate a minimum of 25, maximum of 84, median of 56, and mean of 57.08 for career maturity.

Anakwe et al. (2000) conducted a study which indicated that increased self-information nurtured career decision making. Furthermore, Geldenhuys and De Lange (2007) and Mubiana (2010) found that participants scored relatively high levels of self-information in relation to their career identities. Conversely, in the present study students scored lower on the self-information questions. Work opportunities are rare in the turbulent labour market, hence many students may consider an investment in self-exploration as an exercise that will not achieve the desired outcomes (Stead & Watson, 1998b). Nonetheless, self-information is a causal element in students' awareness and understanding of themselves (Jordaan et al., 2009).

Knowledge of students' prospective careers are also of vital importance. According to Salami (2004), a student who is career mature would possess traits such as accepting responsibility, planning, and knowledge of various facets of their chosen career. The first-year students participating in Geldenhuys and de Lange's (2007, p. 124) study indicated that their career decisions were affected by elements such as "the availability of career-related information and career guidance at school". Conversely, the study conducted by Mubiana (2010) found no significant relationship between career information and career maturity. However, participants in the present study scored higher on both the career information, as well as the integration of self-information and career information dimensions. Furthermore, adequate integration of self-information and career information is crucial (Langley, 1990; Langley et al., 1996). Integration of self-information and career information necessitates mastery of each kind of knowledge independently, preceding the integration (Bernhardt, 1998). The results of the present study further indicate the highest mean score (M = 12.19) for integration of self-information and career information.

According to Creed, Patton and Prideaux (2007), a variety of career-related and personal variables have been linked to career maturity, such as career decision status. Nevertheless, students scored lower on the decision making questions in the present study. The lowest

median of only 9 was reported for decision making. Decision making is a key dimension that may have impacted the scores of the other dimensions. Decision making also reflects the lowest mean score (M = 9.95). Being equipped with the necessary information is of less worth when one does not possess the necessary decision making skills. According to a study conducted by Luzzo (1995a), a student whose career is congruent with their career aspiration, would display more mature attitudes toward career decision making and they would likely be more skilful at making career decisions. Luzzo (1996) further found that participants who perceived past family related barriers, exhibited more mature attitudes toward the career decision making process. According to Creed et al. (2007), students who are career focused and engaged in career decision making reported more knowledge and skills associated with the decision making process. Creed et al. (2007) further found that students with higher levels of career decision making confidence, paid work experience and greater ability; reported higher career planning.

According to Felsman and Blustein (1999), a primary outcome of career exploration in late adolescence, is the articulation of career plans culminating in coherent goals and career choices that are well-integrated with the self-concept. The fulfilment being sought by individuals is therefore an ongoing challenge throughout life (Zunker, 2012). Certain young people may however limit their career exploration and commit to career choices without adequate exploratory activity or, may conversely engage in prolonged exploration without committing to a career choice (Felsman & Blustein, 1999). Additionally, Mubiana (2010) found a significant relationship between career planning and career maturity. Similarly, respondents in the present study scored higher on the career planning dimension. The results reported the highest median score of 13 for career planning. The study conducted by Creed et al. (2007) evaluated secondary school students (n = 166) in Grade 8 and once more in Grade 10. The overall results showed important roles for self-efficacy and early work experiences in current and future career planning of secondary school students (Creed et al., 2007). In addition, Hargrove et al. (2005) found that the perceived quality of family relationships played a role in forecasting the career planning attitudes of adolescents.

5.2.2 Inferential Statistics

According to Sekaran and Bougie (2010), inferential statistics is employed when generalisations from a sample to a population are made. The statistical methods used in this research include the Pearson product-moment correlation, a t-test and an analysis of variance.

The construct of career maturity has played a substantial role in research on individuals' career development. Career maturity, according to Super (1990), is the completion of the appropriate career developmental tasks. The construct has been researched in various contexts, ranging from high school students in Australia (Creed & Patton, 2003; Patton & Creed, 2001) and South Africa (Powell & Luzzo, 1998; Watson & Van Aarde, 1986), to South African (Hoorn, 2013; Van Niekerk, 1987) and African-American university students (Naidoo et al., 1998). Career maturity is essential to a developmental understanding of career behaviour (Creed et al., 2007; Powell & Luzzo, 1998). It is one of the most widely researched aspects in the careers domain, with two basic components, namely attitude/behaviour and knowledge (Creed et al., 2007), and five specific dimensions, namely self-information, decision making, career information, integration of self-information with career information, and career planning (Langley et al., 1996).

Career maturity relates to various demographic variables, such as gender, age, socio-economic status (Creed et al., 2007; Naidoo et al., 1998; Patton & Lokan, 2001; Prideaux & Creed, 2001), education, racial differences, and locus of control (Naidoo et al., 1998). Career maturity may also be attached to the degree of importance an individual associates with their work roles (Naidoo et al., 1998) as well as the individuals' family context (Huang, 2006). Creed et al. (2007, p. 379) specifically highlights that existing career research indicates a link between career maturity and the following factors: "being older, being female, having a higher socio-economic background, being more able, having work experience, being more certain about your career path, and having more confidence and esteem". These factors are entrenched in the processes by which adolescents move from a random search for career information and self-exploration, to a more concentrated exploration that characterises career maturity (Vondracek, 1993).

In the present study inferential statistics were used, to make certain inferences from the results based on the sample (n = 149) of final year undergraduate students, within a specific department, at a tertiary institution in the Western Cape. Inferential statistics provides insight into the degree of certainty with which predictions can be made regarding obtaining the same results in future research studies (Gordon & Meyer, 2002). The results will be discussed per hypothesis.

5.2.2.1 Hypothesis 1

The first hypothesis was as follows: there is a statistically significant difference between male and female final year undergraduate students, with regards to the dimensions of the Career Development Questionnaire (Self-information, Decision making, Career information, Integration of Self-information and Career information, and Career planning).

The research shows that there is a significant difference in career maturity and decision making, based on students' gender. However, the results of the study found no significant difference in self-information, career information, integration of self-information and career information, and career planning based on students' gender. Hence, the hypothesis was partially rejected.

Research studies considering the influence of gender differences on career maturity have produced inconsistent results. Patton and Creed (2001) indicated that gender is a key predictor of career maturity. In a study conducted by Themba et al. (2012) the results appeared to substantiate the research finding that males and females differ significantly regarding their career maturity. Langley (1990) and Pieterse (2005) further found gender differences amongst samples of secondary school students. Similarly, the present study found a significant relationship between gender and career maturity. According to Hoorn (2013), research indicates that gender does significantly influence the process males and females undergo when selecting a career. However, as students mature, gender differences may diminish, leading to converse results found by Watson, De Jager and Langley (1990) amongst a sample of university students.

Research findings generally demonstrate that females, across age and national context, have higher scores on career maturity measures than males (Fouad, 1988; Luzzo, 1995a; Naidoo et al., 1998; Patton & Creed, 2001; Van Reenen, 2010). Fouad (1994) found that females scored higher on only certain career maturity dimensions. Certain studies have specifically found female university students to be more mature (Miller, 1974). According to Hargrove et al. (2005), female adolescents indicated engaging in more career planning activities, compared to their male participants. The study by Patton and Creed (2001) further indicated that adolescent females are better informed with respect to career information. In a study conducted by Dybwad (2009) females also expressed a higher need for career information. Conversely, the present study found that the male participants scored higher than the female

participants on career information as well as career planning.

Dybwad's (2009) study further found that male participants displayed more negative attitudes toward future education, while females seemingly experienced a greater degree of uncertainty associated with future career plans. Similarly, in the present study female respondents scored lower on decision making. However, Luzzo's (1996) study found that females displayed greater knowledge of career decision making principles and more adaptive attitudes toward career decision making, which is indicative of higher career maturity levels.

In certain countries where women are traditionally seen to be "dependent on men and where the concept of a career is a relatively new one for women", males are estimated to evidently score higher on career maturity (Watson et al., 1995, p. 40). This sentiment would seem to specifically relate to countries such as Nigeria (Achebe, 1982) and South Africa (Watson, 1984). Bosch et al. (2012) state that females specifically experience more complexity in their career choices than males, due to the need females possess to balance their family and work roles. Certain research studies have specifically found male university students to be more mature (Achebe, 1982), much like the present study that found the male participants to be more mature then the female participants.

The educational context might be responsible for gender differences in certain instances (Dybwad, 2009). According to Themba et al. (2012), the educational level appeared to influence the maturity level of the female and male participants significantly. The findings indicated that the female participants who had a degree/diploma level qualification were significantly better at mastering the career development tasks associated with their particular life stage than their male counterparts, and also better than the males and females with only a matric or post-matric level qualification. According to Themba et al. (2012), these findings suggest that further educational studies contributed positively to increasing the female participants' career maturity.

Conversely, certain research studies indicated an insignificant relationship between gender and career maturity (Blustein, 1988; Lee, 2001; Watson et al., 1995). Similarly, certain South African research studies do not report gender differences in the career maturity of high school (Watson & Van Aarde, 1986) and university students (Van Niekerk, 1987). This largely corresponds to the current research finding, in terms of no significant relationship being

found between self-information, career information, integration of self-information and career information, career planning, and students' gender.

The study conducted by Watson et al. (1995) found no significant effect of gender on career maturity amongst a sample of 260 first year university students in South Africa. Moreover, Watson et al. (1995) found that gender has no significant effect on students' study and work role salience. Seabi (2012) further found no significant difference between males and females with respect to career decision making, which contradicts the present study's finding of a significant relationship between gender and decision making. Additionally, Lee (2001) conducted a cross-cultural comparison of career maturity between Korea and the United States, which indicated that constructs of career maturity are similar across two cultures with no gender differences.

5.2.2.2 Hypothesis 2

The second hypothesis was as follows: there is a statistically significant difference between final year undergraduate students based on their age, with regards to the dimensions of the Career Development Questionnaire (Self-information, Decision making, Career information, Integration of Self-information and Career information, and Career planning).

The results show that there is no significant difference in career maturity based on students' age. The results of the study further found no significant difference in self-information, decision making, career information, integration of self-information and career information, and career planning based on students' ages. Hence, the hypothesis was rejected.

Generally, studies reported older students obtaining higher career maturity scores than younger students, which is typical with a developmental construct (Borges et al., 2007; Creed et al., 2007; Van Reenen, 2010). Research studies conducted cross-nationally, indicated this result, specifically for students in Australia (Patton & Creed, 2001), Nigeria (Achebe, 1982), Israel (Fouad, 1988), and South Africa (Watson & Van Aarde, 1986). Freshman college students were compared with college seniors and graduate students, and similar results were found (McCaffrey, Miller & Winston, 1984). These findings are consistent with the theoretical view of development in career maturity (Super, 1957).

A study conducted by Creed and Patton (2003) found age to be a strong predictor amongst their sample of students. These authors specifically found age to be the strongest predictor of career knowledge and career decision making, which further supports the developmental explanation (Super, 1957) for these dimensions of career maturity. However, the converse was found in the present study. The study by Creed and Patton (2003) also found that older students were more likely to engage in career exploration and planning. Furthermore, Millar and Shevlin (2003) found adolescents who stated an intention to engage in career exploratory behaviour consequently did so. Hence, Millar and Shevlin (2003) suggests that fostering intentions to discover career information is vital. Early work with the Career Maturity Inventory (Gushue & Whiston, 2006) showed a progressive increase in career maturity from Grade 9 to Grade 12 (Smits et al., 1996).

Additional research postulates that students in higher grades have higher career maturity scores than those in lower grades (Van Reenen, 2010). Van Reenen (2010) states that theoretical assumptions may suggest uniform development in career maturity. Practical considerations such as the planning activities needed for immediate decisions at transition points imposed by the education system suggest uneven development, regarding age (Van Reenen, 2010). The study conducted by Patton and Creed (2001) reflects the developmental movement of career maturity and demonstrates the developmental variances of career maturity among adolescents aged 12 to 17.

Certain studies however, do not report a significant relationship between age and career maturity. For instance, in a study conducted by Themba et al. (2012), no significant differences in career maturity were observed among the various age groups of the adult sample. The age groups in the study represented the exploration and establishment life stages of Super's (1990) career development theory (Themba et al., 2012). Powell and Luzzo (1998) further found no association between age and career maturity, with a group of high school students from the United States. Additionally, the present study found no significant relationship between age and career maturity. Moreover, Screuder and Coetzee's (2011) results confirmed the view that career maturity is not related to the age that is linked to individuals' particular life stage.

5.2.2.3 Hypothesis 3

The third hypothesis was as follows: there is a statistically significant relationship between participants' scores on the Career Development Questionnaire, and their stated certainty of career focus.

The research indicates that the relationship between certainty of career focus and career maturity is not statistically significant. Hence, the hypothesis was rejected.

Naidoo et al. (1998) postulate that as student's advance through their academic career, they may exhibit more mature attitudes in their career behaviours, which could further impact their career focus. Creed and Patton (2003) further found a strong predictor amongst their sample of students to be how decided students were on a certain career path, which contradicts the present study. Career indecision may impact students' levels of career maturity (Jordaan et al., 2009). Furthermore, almost half of the participants expressed that they had been exposed to career counselling previously, which is interesting as exposure to career counselling generally correlates with greater career certainty (Van Reenen, 2010).

The study conducted by Borges et al. (2007) found that traditional medical school students had already coped with the tasks of career crystallization and specification, while the students in the accelerated programme had not. The study further showed that traditional medical school students seemed to be able to develop their career identity, and also had a greater ability to convert a generalised preference into a specific preference for a career as a physician (Borges et al., 2007). The results reported by Borges et al. (2007) appeared to indicate a significant relationship between career maturity and the certainty of students' career focus. Conversely, Ohler et al. (1996) postulate that career certainty is not necessarily associated with mature decision making, as simply encouraging an individual to select a career is seen as insufficient.

According to Creed et al. (2007), career education and working during school years, has to importantly be included as key additions to the school curriculum. These experiences may increase students' focus on a certain career path, as well as contribute to the development of career maturity and maturity in general (Creed et al., 2007). Watson and McMahon (2007) found that most students could make connections between curricular, extra-curricular and general school activities linked to their preferred careers.

5.2.2.4 Hypothesis 4

The fourth hypothesis was as follows: there is a statistically significant difference between final year undergraduate students based on their type of secondary school, with regards to the dimensions of the Career Development Questionnaire (Self-information, Decision making, Career information, Integration of Self-information and Career information, and Career planning).

The research shows that there is no significant difference in career maturity, as well as the following dimensions: self-information, decision making, career information, and integration of self-information and career information, and career planning; based on the type of secondary school students attended. Hence, the hypothesis was rejected.

According to Watson et al. (2011), the 'school' is a social influence that has extensively been acknowledged but narrowly investigated within career research studies. Dhillon and Kaur (2005) conducted a study in India to research career maturity among the students of private and public schools, with a sample of 500 secondary school students. The results indicated that the students from private schools possess a higher "career maturity attitude" and "career maturity competence" (Dhillon & Kaur, 2005, p. 71). Furthermore, research conducted in South Africa by Pieterse (2005) revealed that there are variances in career maturity scores for students of different grades and school environments. The findings reported that students from disadvantaged schools are more focused on the future, whereas students in advantaged schools are least focused on the future, which might be explained by the 'inverted' socio-political situation in South-Africa (Pieterse, 2005). Pieterse (2005) further states that students from advantaged schools in South Africa commonly achieve the highest average in career maturity, whereas students from disadvantaged schools achieve the lowest. Hence, the type of secondary school a young person attends can impact their career maturity levels

A study conducted by Holland (1981) amongst a sample of 6th grade students, indicated a significant relationship between self-concept and career maturity. Adolescents need to acquire more self-information, comprehend the association between educational achievement and career planning, and lastly develop sound decision making and career planning skills (Hargrove et al., 2005). Students do not have access to the same information and career services, as this depends on the type of school the students attended. Hence, students' development and career maturity levels can be influenced. Furthermore, Dhillon and Kaur

(2005) determined that the environment of the private schools in India encourages career maturity and these students are better informed regarding career opportunities than the students attending public schools. Creed et al. (2007) found that the more indecisive students are, the more they engage in career planning, which shows that many of these students are trying but may need to be actively encouraged and supported by educators and school counsellors.

Achebe (1982) found that secondary school students did not display high levels of career maturity by the time they graduated. The students who participated in Dhillon and Kaur's (2005) study were driven to engage in learning activities to move towards their desired goals and objectives if in a suitable environment, which was revealed in their career attitude and competence. Moreover, Creed and Patton (2003) state that minor positive effects have been found for ability (school achievement) on career maturity, with strong links between career knowledge and ability. Creed et al. (2007) further state that minor roles were additionally found for ability and career decision status in career planning. Partaking in paid work experience outside of the school has also been associated with career maturity (Creed et al., 2007), with higher school achievement corresponding to increased career planning.

Certain research studies conversely propose that 'schools' do not play a major role as students are able to link school learning to their career aspirations (Watson et al., 2011). The present study found no significant difference in career maturity, based on the type of secondary school students attended. Creed and Patton (2003) further found that school achievement was not a strong predictor of career knowledge. According to Creed and Patton (2003), this could be due to the self-report variable used, or it could be reflective of the transformations taking place in schools where there is a greater focus on catering for the career concerns of low as well as high achieving students. However, the present study also found no significant relationship between self-information, decision making, career information, and integration of self-information and career information, career planning, and the type of secondary school students attended.

5.3 LIMITATIONS

The population frame was not guaranteed to be correct at the time it was used, thus the stated population could have been incorrect, as students could have dropped out during the semester. Only final year students, registered in a structured degree programme participated in the study. As this study did not examine the undergraduate students over a period of time, its findings are limited to a specific time period, as a cross-sectional study was conducted. A longitudinal study could be conducted in future, as the test could then be repeated over a time period, to determine long-term consequences.

Gender had a disproportionate representation in this study, therefore correlations across gender and that of career maturity may have been gender biased. A representative sample size should be guaranteed in future research studies. The sample was further restricted to one department, within a particular university, hence making the study context specific. Additionally, the research was only conducted in one province. Future researchers could consider expanding the sample to include students from multiple universities across South Africa.

Owing to the nature of non-probability sampling, the respondents may not be representative of the broad South African student population. Therefore, the results may not be generalised to the entire population and had to be interpreted with caution. Convenience sampling is not generalisable, and this type of sampling procedure was used in the present study. Moreover, not all of the respondents were exposed to career counselling or any type of career guidance, which could have impacted the results. The reliance on self-report scales raised further issues regarding misinterpretation by students. This presents potential limitations, as these measures cannot be objectively proved, which could subsequently have impacted the results of this study. Also, the sentence construction of the questionnaire prompts forced use, which did not enable the candidates to give any extra information. This limited the information gathered.

5.4 CONCLUSIONS BASED ON THE FINDINGS/INTERGRATION OF RESULTS

The aim of this research was to examine the nature of career maturity amongst final year undergraduate students. More specifically, the objectives of the study included determining if there is a relationship between the dimensions of the CDQ and the biographical factors of final year undergraduate students. An investigation of existing literature was conducted to form the theoretical premise for the study. Overall, the results indicated that there is a significant relationship between gender and career maturity. However, there was no significant relationship found between the age, stated certainty of career, type of secondary school students attended and their career maturity. Furthermore, participants scored minimums of 0 for career information and career planning, whilst scoring maximums of 20 for those dimensions as well. These extreme scores seem alarming.

5.4.1 Gender

The present study found a significant difference between gender and career maturity. However, gender representation was unequal with 69.8% female participants and 28.9% male participants. Interestingly, research has suggested that "gender differences should be evident in countries where women are considered traditionally to be dependent on men" (Watson et al., 1995, p. 40). In the present study the male participants scored higher than the female participants, on all five of the CDQ dimensions, which is reflective of South African societal norms. South African society has traditionally regarded the male as dominant and the major breadwinner, and the female as subordinate and the homemaker (Preston- Whyte, 1988). Additionally, intellectual pursuit in black African culture is traditionally reserved for males (Kiguwa, 2004). Married females without children are looked down upon and frequently lose their status as common law wives; consequently females experience more barriers for formal careers than males (Bosch et al., 2012). Hence, gender appears to be an important variable when societal role expectations may vary with subsequent differences in the career expectations amongst the genders (Watson et al., 1995).

Participants in Geldenhuys and de Lange's (2007) study indicated that all females in South Africa could benefit from the change to democracy and believed that they were in a better career situation now relative to the apartheid era. According to Bosch et al. (2012), black South African females are socialised to produce and care for children and are frequently taught not to outperform males in education or in the workplace. These cultural prescriptions

are powerful and clearly illustrated by Saduwa's (cited in Bosch et al., 2012) report that African women engineers, felt that they were considered to be tomboys for choosing a male dominated profession, and were consequently not suitable wives.

Female participants in the present study could be keeping to role expectations within their specific cultures. However, there has generally been a major shift in the salience of the roles of home care, family and marriage (Bosch et al., 2012). Relations with parents are also related to how well children are equipped to select a career and whether they would like to select their parents' career (Huang, 2006). Participants in the current study may have been influenced by their communities, family and even society at large. Research has indicated that females tend to delay their career aspirations and decision making, due to intense role confusion which stems from gender stereotyping early in their career development and family responsibilities (Schreuder & Coetzee, 2012; Spencer, 1999).

5.4.2 Age

During late adolescence, young people face many challenges, which are considered to be crucial in negotiating the transition to adulthood; these include the need to explore their self-concept and external environment (Felsman & Blustein, 1999). Hence, students' levels of career self-concept may be limited, due to their age range, which develops as one gains life experience (Coetzee et al., 2010). In the present study, the majority of respondents fall in the exploration phase, as expected when using a sample of students, which could have influenced their responses, as they may still be exploring their interests and available opportunities.

Effective resolution of the exploration and commitment tasks in late adolescence has commonly been linked to positive outcomes in consequent career development (Felsman & Blustein, 1999). Furthermore, the majority (77.9%) of the respondents are full time students which could further have influenced the age range found in the present study. Also, as full time students, participants may not have been exposed to work experiences, which could have enhanced their readiness to make career decisions. However, as indicated by the research of Powell and Luzzo (1998), career maturity is not necessarily the result of a linear, steadily progressing process, but is influenced by contextual factors.

5.4.3 Career certainty

During late adolescence many individuals face difficulties committing to a career plan (Felsman & Blustein, 1999), which could have influenced the results of the present study. Career decision status has been found to be related to career maturity, with career mature individuals being more certain about a career path (Creed et al., 2007). Therefore, students with low levels of career maturity would be less certain about their career path, as indicated by the results of the present study.

The majority of the students (69.1%) indicated the 'Business' career field, which correlates to 46.3% of the participants indicating the 'BCom General' degree programme. The broad career field and general degree programme could be indicative of students still exploring prospective career options. Hence, the present study found no significant relationship between certainty of career and career maturity. A total of 91.3% students further indicated that they would like to study further, which could have influenced the results, as these students may still be exploring the available opportunities. However, if students intend to pursue postgraduate studies, they would need to be aware of their preferred area of expertise. Interestingly, the participants of the present study are not certain about which career to pursue, yet the majority of participants intend studying further.

According to Mubiana (2010), research shows that most often students do not seek information about career options before deciding which programmes to study and which career to pursue. Additionally, students could have decided to pursue tertiary education due to pressure from their parents, whilst not having clear career aspirations of their own. In a study conducted by Myburgh (2005) the primary findings displayed that performance in Accounting at school and the advice given by parents, relatives and school teachers significantly impacted the students' decision to become a Chartered Accountant. Furthermore, career issues appear to be closely related to upholding acceptable subsistence levels, even though parents' ambitions for the career development of their children are high, predominantly among disadvantaged families (Stead, 1996).

Jordaan et al. (2009) propose that a student's choice of degree programme and existing employment status influences the levels of career indecision. Therefore, individuals require adequate career guidance, as high levels of career indecision may impact their levels of career maturity (Jordaan et al., 2009). A total of 51.7% respondents cited "no" they had not been

exposed to some type of career counselling previously, whilst 48.3% of respondents cited "yes" they had been exposed to career counselling previously. This is surprising as exposure to career counselling generally correlates with greater career certainty (Van Reenen, 2010). Even though half of the respondents had previously been exposed to career counselling, it does not appear to have had the desired effect. The type of career programme utilised by counsellors may have been less successful. Additionally, participants in the present study may not have participated in effective career and role planning during counselling sessions. Conversely, Ohler et al. (1996) postulate that career certainty is not necessarily associated with mature decision making, as simply encouraging an individual to select a career is seen as insufficient. Individuals have to be assisted by career counsellors to make career decisions which are suited with their particular strengths and developmental areas (Ohler et al., 1996).

According to Davidowitz and Schreiber (2008), many students do not receive career guidance before entering tertiary education. Participants scored the lowest median (9) and mean (12.19), for decision making, which is indicative of students not being equipped with the adequate decision making skills, which could have influenced their career certainty. According to Schein (1993), it is important for individuals to be able to effectively partake in career and role planning, which has not been the case for previously disadvantaged groups, in South Africa's past. In general the guidance many Black parents offer is limited to the need to provide a continuous income and the need for social and professional status (Stead, 1996). Subsequently, the career knowledge of their children remains limited (Stead, 1996).

5.4.4 Type of Secondary school

The present study did not find a significant relationship between the type of secondary school students attended and their career maturity. This could be indicative of participants' personal drive to achieve academic success. Many individuals are also able to overcome various barriers which may impact their career choices. Hence, the type of secondary school adolescents attend may not be a strong contributing factor. Nevertheless, students should possess the abilities, and aptitudes in related subjects necessary for their prospective career, which depends on the career maturity of the student (Salami, 2004). Creed et al. (2007) state however that less equipped students may require more assistance to engage in career development activities, to achieve high levels of career maturity.

Private secondary schools provide "a healthy environment that not only lays stress on academic curriculum but aims to develop the child's overall personality by encouraging their students to participate in debates, declamations, seminars, dramatics, games, etc." (Dhillon & Kaur, 2005, p. 75). The majority (56.4%) of the students in the present study attended public secondary schools, whereas only 12.8% of the students attended private secondary schools. It is well known that resources at the different types of schools vary tremendously, as mentioned above by Dhillon and Kaur (2005), which ultimately may impact students' development either negatively or positively. Consequently, students who attend public schools may have to be more dedicated, whilst utilising less resources. The following section contains recommendations for future research.

5.5 RECOMMENDATIONS

5.5.1 General recommendations for future researchers

Career research has been criticised for primarily utilising correlational designs and samples of tertiary students (Prideaux & Creed, 2001). Even though cross-sectional designs describe variables and ascertain patterns of relationships at a specific juncture (Creed et al., 2007). A representative sample size should be guaranteed in such future research studies. Longitudinal methodologies are necessary to describe and explore dynamic changes in individuals (Sekaran & Bougie, 2010). Furthermore, a longitudinal study could be conducted in future, as the test could then be repeated over a time period, to determine the long-term consequences and how an individual's career decisions are affected by low levels of career maturity.

A study conducted by Salami (2004) discovered three problem-solving factors, i.e. personal control, confidence and approach avoidance, which are collectively effective in forecasting the career maturity of students. Future researchers could incorporate these factors into their studies. According to Hargrove et al. (2005), studies should also attempt to guarantee the inclusion of adolescents at different grade levels, at-risk, and from more diverse communities. Future research studies need to continually address "the role of quality of family relationships and family-supported goals in the career development of adolescents" (Hargrove et al., 2005, p. 276). Furthermore, future research should consider the influence of personality, decision making style (Raskin, 1998), cultural contexts, historical determinants, economic/political structures (Prideaux & Creed, 2001), socio-economic status (Naidoo et al.,

1998) and race (Watson et al., 1995), on students' levels of career maturity.

Researchers should more often consider that the type of secondary school a student attends, can have an impact on their career choices, due to varying programmes and activities being offered (Dhillon & Kaur, 2005; Pieterse, 2005). The study by Jordaan et al. (2009) indicated discrepancies between students from diverse fields of study and employment status, which should be focused on more greatly in future research studies. Specific recommendations for students, educational institutions and practice, is respectively outlined in the following section.

5.5.2 Recommendations for students

A greater understanding of students' stage of career development can be achieved through a developmental approach, as it results in a more comprehensive approach towards solving students' problems (Watson et al., 1995). Students require greater exposure to career counselling at secondary school level to be better equipped to choose a degree programme to pursue at tertiary level. Career development interventions could assist students in addressing a range of internal and environmental pressures experienced during career decision making (Herr & Cramer, 1997). Young people may perceive the family environment as either an environmental pressure or a support factor, when engaging in career exploration and planning (Hargrove et al., 2005). Importantly, career and role planning can enrich students' understanding of the social network of their prospective career, which could increase their career certainty.

Students need to be consciously aware of who they are, as self-information is vital. Knowledge about one's self and environments are necessary for appropriate decisions to be made (Herr et al., 2004). According to Hargrove et al. (2005), students need to develop their levels of self-information and better understand the association between their educational achievement and career planning. Furthermore, students have to take a vested interest in their future and be more informed regarding the available career opportunities, whilst developing sound career planning and decision making skills (Hargrove et al., 2005). Students' readiness to make career decisions can be improved through the knowledge and skills mentioned above. Furthermore, students should constantly shape their prospective careers and be aware of labour market trends, to avoid educational false starts (Miller & Marvin, 2006).

Students require proper career guidance, at secondary as well as tertiary level. Career development programmes must be tailored to each student, even though common needs are shared by students (Brown, 2003). As a result, understanding the elements that impact the exploration and commitment processes in late adolescence is imperative in expounding on existing theory, whilst encouraging advancement in career intervention practice (Felsman & Blustein, 1999). The improvement of career maturity amongst previously disadvantaged students in South Africa, still needs to be addressed (Pieterse, 2005). Additionally, career development services available to students should include some of the following key aspects (Brown, 2003, p. 364):

1. Career and self-awareness activities.

2. Exploration of interests, values, goals, and decisions.

3. Realities of the job market and future trends.

4. Practical, accurate information about careers.

5. Workshops that deal with special needs such as risk taking, resume development, interviewing, and so forth.

6. An academic advising system that make it possible for students to get the assistance they need in academic planning.

5.5.3 Recommendations for educational institutions

Educational institutions should offer career guidance to students. Career development specialists at tertiary institutions must particularly be prepared to help students choose careers that appear to have relevance to their majors (Brown, 2003). According to Jordaan et al. (2009), tertiary institutions may need to consider a strategy of investment in career development for students in Economic and Management Sciences particularly, as these institutions are specifically facing a growing problem of placing graduates in the increasingly competitive labour market.

According to Stead and Watson (1998a), there has been an increasing shift from career counselling and guidance toward career education, which has mainly been driven by research conducted at tertiary institutions. However, it has not been incorporated into the school education system, even though students consistently rate career education as a vital school objective (Stead & Watson, 1998a). However, career counselling should be available throughout students' academic careers. Watson and McMahon (2009) advocates the use of a 'constructivist' counselling approach, which recognises the holistic and contextualised nature

of career development. This type of counselling is a worthwhile alternative to address career counselling at South African tertiary institutions in the 21st century (Watson & McMahon, 2009).

The type of secondary school a young person attends can impact their career maturity levels. Hence, the inclusion of activities to enhance adolescents' career decision making confidence, has to importantly be considered by career education programme developers (Creed et al., 2007). The activities included in career education programmes need to accommodate the different ability levels of students (Creed et al., 2007). Lens et al. (2004) believe that the most efficient way to develop a young persons' abilities, and assist them in realising their true potential, is through the educational and career training offered in schools.

The transition from secondary and tertiary education deserves greater attention from stakeholders, especially educational institutions. As students pass through different life stages and as situational changes take place, students should be able to set goals, select from available options, and make the necessary decisions (Zunker, 2012). Hence, easily accessible information has to be provided to students, throughout these stages. The results of the study conducted by Jordaan et al. (2009) suggest that secondary schools and tertiary institutions should work closer together to enlighten and educate potential students regarding prospective careers and how to make career choices. Information provided to students could include aspects such as "awareness of the attributes employers seek; a detailed analysis of the typical types of jobs and the availability of these jobs associated with specific degrees of study; and the industry standard remuneration associated with these jobs" (Jordaan et al., 2009, p. 94).

Career planning is a continuous process (Zunker, 2012), which takes place throughout the student's years of education and prospective career. Hence, the need for flexible career paths appears quite relevant. Educational institutions should further focus more greatly on the development of students, rather than simply the traditional pass/fail approach. International surveys have highlighted a lack of appropriate attention to career programmes in schools (Patton, 2005). It would be wise for schools to include formal work experience as part of its programmes, due to the significance of work experience in career exploration and planning (Creed et al., 2007). In addition, activities regarding the transition from school to work have frequently been incorporated into programmes for students at risk of leaving school, however these activities has to take into account the key career education principles (Patton, 2000).

Importantly, industry and educational institutions should develop a partnership and provide the necessary resources to facilitate informed career decision making by students (Jordaan et al., 2009).

5.5.4 Recommendations for practice/career counsellors

The need for improving the career development of tertiary students is acknowledged as a central function of student counselling services which specifically includes career planning (Watson & McMahon, 2009). Consequently, career counselling is only one function of student counselling (Watson & McMahon, 2009). Many issues do however confront career development specialists as they plan programmes for institutions, among those issues are: "emphasise counselling or placement, send clients out on their own to collect information, focus students on the 'vocational' aspects of their training, involve significant others such as parents in the career planning process, and emphasise risk taking or security in the career planning process" (Brown, 2003, p. 365-366). In the present study students almost equally indicated whether or not they had prior exposure to career counselling.

The study conducted by Salami (2004) examined the relationship between problem solving ability and career maturity, amongst a sample of secondary school students in Nigeria. According to Salami (2004), when career counsellors conduct a study focussing on the career maturity levels of students; problem-solving ability should be included as part of the predictor variables. Student counsellors have a multidimensional role that necessitates the holistic consideration of tertiary students' development (Watson & McMahon, 2009). Salami (2004) further points out that counsellors should incorporate problem-solving procedures into their intervention programmes when working with students who are immature in terms of their career and have career indecision or other career choice problems.

A concerted effort should be made by career counsellors to explore methods of integrating work experiences into the career planning process (Luzzo, 1995a). The student will be provided with valuable opportunities for career exploration through work experience and internship programmes that offer employment prospects that correspond with students' career aspirations (Luzzo, 1995a). This could offer students the much needed practical experience sought by industry. According to Watson et al. (1995), counsellors should keep in mind that gender stereotypes may possibly be overemphasised in counselling approaches, which could potentially be detrimental. The programmes utilised by counsellors should further assist

students in developing the necessary skills and mature attitudes toward career decision making (Luzzo, 1995a). Consequently, students would be well prepared for the world of work after graduation. Career counsellors should importantly integrate issues such as "exposure to the world of work, knowledge of careers and self, and the importance of the roles of study and work" as part of their programmes (Watson et al., 1995, p. 45). Organisations should also be willing to develop inexperienced university graduates.

McMahon and Patton (2002) state that career counsellors are increasingly making use of qualitative assessment, with a shift from objectivity to subjectivity. Qualitative assessment is anticipated to encourage individuals to tell their own career stories, and discover their subjective careers and life themes (McMahon & Patton, 2002). Moreover, using these narrative approaches encourages clients to make meaningful sense of their career development (Watson & McMahon, 2009). According to McMahon and Patton (2002), this is however an international trend which has not adequately been reflected in South African career counselling, which remains primarily quantitative in nature. Career counsellors could use the following aspects, to incorporate greater use of qualitative assessment into their programmes (McMahon & Patton, 2002, p. 60-62):

1. Individualise the process for the client.
2. Map the qualitative assessment onto the story previously told by the client.
3. Make the qualitative assessment fit for the client not the client fit the assessment.
4. Broach the subject of using a qualitative assessment device tentatively, respectfully, and informatively.
5. Acknowledge that it is the client's prerogative to engage in the activity.
6. Work with and support the client through the process of the assessment using counselling skills.
7. Debrief/process the activity.
8. Invite feedback on qualitative assessment processes.
9. Be creative.

Career guidance programmes should further provide students with the necessary career information. According to Brown (2003), the number of online sources of career information has expanded. Millar and Shevlin (2003) found that the searching activities young people utilise, tend to be replicated at a later stage in their lives. Hence, facilitating career exploration in adolescents is a way to cultivate a routine that consolidates the habit of seeking

career information (Millar & Shevlin, 2003). Furthermore, students should be made aware of the existence and influence of career barriers on their career choices during career guidance programmes.

The availability of career guidance and counselling throughout adolescents' life-span and at a reasonable cost, is crucial in the changing society (McMahon & Patton, 2002). Importantly, career counsellors should strive to primarily utilise career theories applicable to the South African context. Standardised models have to be implemented, as the fluctuating nature of the client population dictates the provision of career development services in various settings such as, work, community agencies, schools, and tertiary institutions (McMahon & Patton, 2002). The government, policy makers, and curriculum developers can benefit from greater knowledge regarding adolescents' career maturity, with the use of reliable and valid career competency instruments (Hoorn, 2013; Kuijpers & Scheerens, 2006).

Counsellors have to follow proper career guidance models, whilst adjusting the theory to the context. Career counsellors need to learn to be their own futurists and to adapt to changes as they occur (Brown, 2003). Watson et al. (1995) found that culture significantly influences the career development of university students, in terms of counselling. These results emphasise the importance of counsellors being aware of, and considering, the cultural background of students during counselling sessions (Watson et al., 1995). However, cultural stereotypes, such as "black students being of lower socio-economic status and being more salient in their study and work roles because of their disadvantaged status", has to be looked into (Watson et al., 1995).

5.6 CONCLUSION

This chapter has provided a discussion of results, conclusions and recommendations based on the findings of this study. Subsequently, chapter five contextualised the research findings based on previous research on career maturity amongst students.

Various concepts which impact students and their career decisions were covered, such as the changing nature of the world of work, career development, career choices, and importantly, career maturity and its various elements. Reasonable career development requires young

people to possess high levels of career maturity (Schreuder & Coetzee, 2014). Career maturity, career indecision and career decision making self-efficacy, are three constructs, which are closely related and may need to be explored in unison more often (Prideaux & Creed, 2001). According to Borges et al. (2007), exploring career maturity and readiness to cope with developmental tasks faced along the numerous academic paths of a profession seems necessary, as costs to the individual and the profession related to changing one's specialty, is high.

As individuals pass through a number of life stages and as situational changes take place, goals are set, individuals choose from options and alternatives, and make decisions (Zunker, 2012). Naidoo et al. (1998, p. 16) state that "a sense of autonomy" is vital to "the planning, exploration and acquisition of career skills and information", which are all essential aspects of career maturity and career development. As adolescents develop a better understanding regarding certain careers and ascertain ways of earning a salary that correlates with their "abilities, interests, and values"; good career choices are then possible (Shertzer, 1981, p. 259).

The results of the present study indicate that, overall, there is no significant relationship between the age, stated certainty of career, type of secondary school students attended and their career maturity. However, overall, a significant relationship was found between gender and career maturity. Nevertheless, career maturity is a vital part of students' career development. Knowledge regarding one's self as well as career knowledge are important dimensions of career maturity (Langley et al., 1996). Career maturity further influences students' ability to make career choices (Rousseau & Venter, 2009) and effective career planning (Zunker, 2012). These are aspects that have to be kept in mind by students, educational institutions, and career counsellors, to ensure well-equipped adolescents enter the world of work after graduation.

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APPENDICES

APPENDIX A

Investigating Career Maturity of Final Year Undergraduate students

Dear Participant

This questionnaire is designed to study the career maturity of students.

The information provided will be used to aid the researcher in gaining a more comprehensive understanding of the career maturity levels of final year undergraduate students. It is requested that the responses to the questions are truthful as this will allow, for the researcher to gain an accurate and conclusive idea of the levels of career maturity of students.

The individual responses to the questions will be kept strictly confidential and privacy will be upheld. Only the researcher and her supervisor will be privy to the information provided. Moreover, during all phases of the research, all efforts will be made by the researcher to ensure the strict adherence to ethical standards.

Please note that your participation is voluntary. Hence, by completing this questionnaire, you are providing informed consent to partake in this research, which indicates that you have read, understood and agree to the previously stated terms.

Thank you for taking the time to participate in this research endeavour. Your participation is greatly appreciated.

Cordially,

Tasneem Barendse, B Com degree, B Com Honours

Industrial Psychology Masters student

Professor Fatima Abrahams (Supervisor)

APPENDIX B

Introduction

Everyone has to plan his career and make decisions concerning his occupation. If we make effective decisions, it means we enter occupations in which we can achieve and be happy. The questionnaire you are going to complete is known as the Career Development Questionnaire (CDQ).

Aim

The aim of the CDQ is to indicate in what particular area of career development you might possibly experience problems. Obtaining this information makes corrective measures possible.

The Questionnaire

This is a questionnaire and not a test. Consequently there are no correct or incorrect answers. This questionnaire contains a number of statements related to career development. Read each statement carefully and decide whether you agree or disagree with it. Please note:

➢ Section A comprises of biographical questions.

➢ Section B encompasses the CDQ specifically.

SECTION A:

BIOGRAPHICAL QUESTIONNAIRE

Please answer all questions.
Please **clearly mark or circle** the answer applicable to you.

1. What age are you?
(a) 18-22   (b) 23-27   (c) 28 and older

2. Gender: Are you?
(a) Female   (b) Male

3. Home Language
(a) English   (b) Afrikaans   (c) Xhosa   (d) Zulu   (e) Ndebele   (f) Sesotho sa Leboa
(g) Tshivenda   (h) Setswana   (i) Xitsonga   (j) Swati   (k) Sesotho   (l) Other_____

4. Secondary School
(a) Public   (b) Private   (c) Model C

5. What programme are you currently studying?

(a) B Com Accounting   (b) B Com General   (c) B Admin   (d) Other_____

6. Are you?

(a) Full time   (b) Part time

7. What year of study are you in?

(a) First   (b) Second   (c) Third   (d) Fourth

8. Do you intend studying further?

(a) Yes   (b) No

9. Career interests

(a) Crafts   (b) Scientific   (c) The Arts   (d) Social   (e) Business   (f) Clerical

(g) Other_____

10. Have you ever been exposed to some type of career counselling?
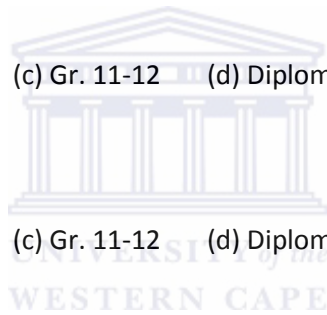
(a) Yes   (b) No

11. Highest qualification of mother

(a) Primary School   (b) Gr. 8-10   (c) Gr. 11-12   (d) Diploma   (e) Degree

(f) Post Graduate Qualification

12. Highest qualification of fathers

(a) Primary School   (b) Gr. 8-10   (c) Gr. 11-12   (d) Diploma   (e) Degree

(f) Post Graduate Qualification

APPENDIX C

CAREER DEVELOPMENT QUESTIONNAIRE

Please answer all questions.
Please **clearly mark or circle** the answer **most** applicable to you.

A. Self-Information

1	I am satisfied with the way in which I am carrying out my responsibilities at present	True	False
2	I have a clear mental picture of what it will be like in my future occupation	True	False
3	I know my strengths and weaknesses	True	False
4	I know the things I am good at	True	False
5	I feel that at present I can experience to the full those things which I regard as the most important in my life	True	False
6	I consider it important to use my abilities to the full in my future occupation	True	False
7	I want to choose an occupation that allows me to do what I believe in	True	False
8	I feel that I want to enjoy my future occupation	True	False
9	When I am really interested in what I am doing, I can keep at it for hours	True	False
10	I believe that an important part of work is the satisfaction one gets from doing it	True	False
11	My interests change all the time	True	False
12	At present I feel that other people are more concerned about my future plans than I am	True	False
13	I cannot understand how some people can be so certain about what they want to become one day	True	False
14	I find that the demands made on me are in conflict with one another (e.g. school/university, home, sport, community and friends)	True	False
15	I find most work dull and unpleasant	True	False
16	I feel that there is a great difference between what I am at present and what I would like to be	True	False

17	It does not matter what occupation I choose so long as it pays well	True	False
18	I suppose everybody has to go to work sooner or later, but I do not look forward to it	True	False
19	At present I am more idealistic than realistic when I think of a future occupation	True	False
20	I want to choose an occupation in which I can be famous one day	True	False

B. Decision Making

21	I have a clear goal in mind when I think about my future occupation	True	False
22	I am an effective decision maker	True	False
23	When I start something. I can usually see it through	True	False
24	I am aware of possible alternatives which I can consider in my chosen occupational field	True	False
25	When I come to choosing an occupation, I'll make up my own mind	True	False
26	I can usually think of ways to solve important problems in my daily life	True	False
27	I am motivated to take the necessary career decisions that are expected of me at this stage	True	False
28	There is more than once way to go about reaching a goal I set for myself	True	False
29	I do not really know how to make a planned decision	True	False
30	I often change my mind about my choice of occupation	True	False
31	I often daydream about what I want to be, but I really have not decided on an occupational choice yet	True	False
32	I find it difficult to decide on priorities in respect of things that are important to me	True	False
33	I frequently feel aimless when I think of my future career	True	False
34	I find it hard to make up my mind about important matters	True	False
35	I prefer others to make decisions for me concerning important matters such as choosing an occupation	True	False
36	I am inclined to make impulsive decisions	True	False
37	It is sensible to try out several occupations and then choose the one I like the best	True	False

38	I may possibly have to decide on an occupation that I am not really interested in	True	False
39	I see choosing an occupation as a trial an error action rather than as a planned decision making process	True	False
40	It is unnecessary to spend to spend too much effort on the choice of an occupation; something will turn up sooner or later	True	False

C. Career Information

41	I am aware of related occupations in the occupational field I am interested in	True	False
42	I have already spoken to people who are employed in the occupation I am considering at present	True	False
43	I know what a typical workday will be like in the occupation I am considering	True	False
44	I know what to do to obtain more information on possible occupations I have in mind	True	False
45	I have already consulted pamphlets and books about future occupations	True	False
46	I know what the most suitable training would be for the occupation that I am interested in	True	False
47	I obtained more information about career possibilities by using a library or other sources of information	True	False
48	I am aware of alternative ways in which I can obtain training for a future occupation	True	False
49	I have an idea what salaries people earn in the occupational field I am interested in	True	False
50	I made a special effort (e.g. enquiries, reading relevant literature) to obtain more information on the careers I am interested in	True	False
51	I know what the future outlook is for employment in the occupational field I am interested in	True	False
52	I know what the demand is for people in the occupation I have in mind	True	False
53	I am not sure if my choice of subjects is suitable for the occupation I have in mind	True	False
54	I do not know what to study courses to take to prepare for my future occupation	True	False
55	I have little or no idea of what working full time will be like	True	False
56	I know very little about the working requirements of various occupations	True	False
57	I seldom think about the occupation that suits me	True	False

58	I really cannot think of any occupation that suits me	True	False
59	Entering an occupation is the only way in which I can learn whether I might like it	True	False
60	Knowing about the work conditions of a job is not that important to me (e.g. working with people/things, indoors/outdoors)	True	False

D. Integration of Self-Information with Career Information

61	I think I understand how to apply my own abilities and potential in the occupation I am considering	True	False
62	I know how my interests and abilities might relate to different kinds of jobs	True	False
63	I should be able to identify with the policy of the organisation to which I am applying for a job	True	False
64	I have the personal qualities that are needed for the career I am considering	True	False
65	It is important to know how a certain occupation will affect my lifestyle	True	False
66	The closer my personality and working environment relate to each other, the more job satisfaction I should experience	True	False
67	Before making a career decision, I will obtain information about different job, and compare how satisfied I would be in each	True	False
68	In making an occupational choice. I need to know what kind of person I am	True	False
69	It is important that I try out my own abilities and interests in a variety of activities and situations	True	False
70	I would very much like to work in an occupational environment in which I can be myself	True	False
71	I do not know if I have the personal qualities which are required in my planned occupation	True	False
72	I am not ready to choose an occupation yet as I do not have enough knowledge about myself or about occupations	True	False
73	I do not know if I am realistic in terms of the way in which I see myself in a specific occupation	True	False
74	I do not yet know my abilities and the world of work well enough to know how they can best fit together	True	False
75	I lack the intellectual ability to make a success of the career I am interested in	True	False

76	I am unsure that my future occupation will provide me with the opportunity of being the person I would like to be	True	False
77	I spend a lot of time wishing I could do work that I know I probably cannot do	True	False
78	It seems probable that circumstances will force me to accept a job to which I am not suited	True	False
79	I think most people have the ability to do well in any kind of job	True	False
80	In the light of his or her abilities there is only one right job for a person	True	False

E. Career Planning

81	I have a clear idea of what steps to take to plan my career	True	False
82	I is very clear to me what I have to do to reach my career goals	True	False
83	I know where to contact a trained professional (such as a guidance counsellor) if I have a career problem that I wish to discuss	True	False
84	I have already made plans to reach my career goals	True	False
85	I know the basic procedure for applying for a job	True	False
86	I have already discussed my career plans with an adult whom I know very well	True	False
87	I have already taken steps to better equip myself as a good worker	True	False
88	I often discuss my future plans with people whose opinion I value	True	False
89	I have previous experience of holiday or part time work	True	False
80	I feel capable of completing all the necessary training for the career I am considering	True	False
91	I regard career planning as a process that continues throughout life	True	False
92	I have difficulty in preparing myself for the occupation I want to enter	True	False
93	There is nothing I can do if my parents do not have the financial mean to provide for my further education	True	False
94	I have a pretty good idea of the occupation I want to enter, but I do not know how to go about it	True	False
95	I am certain about what study courses to take or what occupation to choose	True	False
96	I do not have any specific career in mind with the course I am taking at the moment	True	False

97	I think it is unnecessary to plan a career as there is nothing I can do to make things happen	True	False
98	Only time can tell how I can reach my career goals, therefore I shall not worry about them now	True	False
99	When I accept a new job the most important thing will be to let everyone know exactly what my opinion is	True	False
100	I have a need to learn more about career planning	True	False