CAREER MATURITY AMONGST FIRST YEAR UNIVERSITY STUDENTS IN A COMMERCE FACULTY AT A TERTIARY INSTITUTION IN THE WESTERN CAPE

by

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DECLARATION

"I declare that A Study of Career Maturity amongst first year university students in a Commerce faculty at a tertiary institution in the Western Cape is my own work and that all the sources I have used or quoted have been indicated and acknowledged by means of complete references."

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Caroline Hoorn



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I would like to thank God who	enabled me with the str	ength, health and tenacit	ty to complete
my mini thesis.			

To my father, Daniel Hoorn, thank you for consistent presence in my life. You bring so much stability, which enabled me to complete my writing.

My family, friends and colleagues for your continued support throughout my studies.

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I dedicate this mini thesis to my loved ones who passed on; mother, Marie Hoorn and nephew, Brisbane De Vos.

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ABSTRACT

Career maturity is an essential requirement in human existence. Super (1979) identified five stages which highlight the level of maturity an individual should have achieved at a certain age. However, increasingly, it is being recognised that individuals are not at the level of career maturity where they ought to be. In order to address the matter relating to career maturity, the current research investigated the nature thereof amongst first year university students.

The prevalence of specific aspects of career maturity (namely, self-information, decision-making, career information, integration of self-information and career information, and career planning) were investigated. In addition, the correlations between the aspects of career maturity and certain biographical variables such as age, gender and race were examined.

Career maturity refers generally to the individual's readiness to make informed, age-appropriate career decisions and deal with career development tasks (Savickas, 1984). In order to establish what the career maturity level is, a sample of 303 first year university students' responses were collected. A biographical questionnaire and Career Decision-Making questionnaire were administered to the respondents.

The sample group (N=303) consisted of first year university male and female students in the commerce faculty at a tertiary education institution in the Western Cape. The results indicate

that there is a statistically significant relationship between self-knowledge, career information, career planning, integration of self and career information, decision-making and career maturity amongst students who participated. While there were no statistically significant differences in career maturity based on age and gender, there were some race differences in career maturity.

The results yielded some interesting findings, but need to be interpreted with caution since a convenience sample was used, thus restricting the generalizability to the wider population of students.



CHAPTER 1

INTRODUCTION AND PROBLEM STATEMENT

1.1.INTRODUCTION

The construct of career maturity was introduced by Super (1957) as "vocational maturity" in his career development theory more than 50 years ago. Each developmental phase through which an individual moves has specific career development tasks. Career maturity can be described as the degree to which an individual has succeeded in mastering the career development tasks that are relevant for his or her development phase.

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Schreuder and Coetzee (2011) maintain that career maturity is an important aspect of individuals' career development and decision-making, job and career satisfaction, and retention in the contemporary world of work. Langley (1990) contends that career maturity pertains to the readiness of individuals to engage in career decisions which have potential impacts on their future occupational choices and prospects. Individuals' career maturity influences their ability to master the necessary career development tasks and challenges relevant to their particular life and career stage (Coertse & Scheepers, 2004).

Vondracek and Reitzle (1998) view career maturity as a construct which was originally proposed to account for individual differences regarding readiness to make career choices,

3

plan ahead and assume the role of an employee. According to Dybwad (2008), research increasingly focuses on individuals' career readiness, career concerns and career adaptability as aspects of their career maturity in dealing with the challenges posed by the contemporary world of work, which is turbulent and uncertain.

Patton (2006) contends that individuals are regarded as career-mature or ready to make appropriate career choices when they have engaged in carefully planned exploration and have appropriate occupational knowledge, self-knowledge and decision-making knowledge. In conjunction with this, career mature individuals are argued to be generally better adjusted to their careers, whereas maladjusted individuals' career choices are generally neither congruent with their field of interest nor with their level of aptitude (Dybwad, 2008).

Research suggests that by the end of secondary education, adolescents have adequate knowledge of the world of work and are at a point to make a career choice. Coertse and Scheepers (2004) are of the opinion that a person's occupation has important consequences for the self and is the pivot on which his/her basic values and life goals rest.

Research has recognized certain barriers that are common in the career decision making process among students. Some of the barriers identified include, interests, values and abilities which are professed as imperative personal elements in career decision making; direct and vicarious work experience which influenced expected career choice of students (Lent, Singley, Sheu, Schmidt & Schmidt, 2007). As a consequence of these barriers, there is necessity for support in practices of exposing students to career exploration activities that

would allow them to clarify their interests, values and abilities in relation to the occupation field of their choice. Financial concerns, negative social family influences, role conflicts, personal adjustment difficulties and ability limitations, impend on student's career choices and therefore such factors are seen as destructive influences on career decision making processes (Hoffmann, Jackson & Smith, 2005).

Elements that were identified as support factors in research conducted by Lent, Brown, Talleyrand, McPartland, Davis, Chopra, Alexander, Suthakaran & Chai (2002) included; social support and encouragement from friends, family and teachers; role models or mentors and financial resources; personal strengths such as self confidence and perseverance and goal setting. This is depicted in figure 1.1.

Figure 1.1: Factors impacting on career decision-making



Source: (Dybwad, 2008).

Creed, Patton and Bartrum (2004) have identified certain interior and exterior elements acting as barriers to career decision-making. According to Mau (2004) inner conflicts such as lack of confidence, low motivation, and peripheral factors such as lack of access to education and poverty may affect decision-making. Moreover, ethnic and gender discrimination, financial problems, family attitudes, perceived lack of ability and lack of educational opportunities have also been cited as acting as barriers to career decision-making (Punch, Creed & Hyde, 2006).

According to Harren (as cited in Julien, 1999) barriers happen when people do not know what information is required, where to find pertinent information, when there is a lack of consciousness of sources of information, when sources of information needed are non-existent, when there is a lack of communication skills, self confidence or ability, discouragement by sources approached for information, delays encountered in information seeking, and inaccurate in inappropriate information received and information scatter.

1.2.PROBLEM STATEMENT

Hermanson, Hermanson and Ivancevich (1995) note that the accounting profession in the USA was facing a major problem, namely to attract top students who had both the substantial accounting knowledge and the strong communication, technical and analytical skills that are required in the increasingly complex environment in which the accounting profession operates. This is however, not unique to the USA, but is also applicable in the South African context. In 1998, the South African Institute of Chartered Accountants (SAICA) set a target

of 3 000 black CAs for the end of 2005, but by the end of end of November 2005, there were only 609.

Prior research on occupational choices has compared the importance of various intrinsic and extrinsic factors that influence students in their choice to pursue becoming a CA or other profession as a career (Jackman & Hollingworth, 2004). Ahmed, Alam and Alam (1997) tested final year students in the Accounting departments of five universities in New Zealand and found that these students gave a high priority to financial and market factors in choosing a career in accounting.

Auyeung and Sands (1997) examined the career choices made by students from Australia, Hong Kong and Taiwan in the selection of Accounting as a career. In the same year, Weil and Wegner (1997) conducted a study on the educational issues that could potentially inhibit the development of black CAs in South Africa. They found that role models were extremely important as a motivational factor for joining the Accounting profession, but that there were few such role models in the black community.

Research (Hermanson et al.,1995; Sale, 2001) found that the decision to major in Accounting was also made prior to embarking on tertiary education. A benefit-cost ratio of the CA profession approach was used in studies by Wheeler (1988) and Felton, Buhr and Northey (1994), who found that the ratio was a significant determinant of career choice factors amongst students. Felton et al. examined the correlation between the decision of fourth-year Ontario university students of whether to choose a career as a CA or not, and the importance these students attached to intrinsic rewards, financial remuneration, the students' impression(s) of the benefits and costs of the profession, and prior exposure to high school

Accounting. Felton et al. (1994) found the most important variable associated with career selection to be the relative benefits and costs of being a CA.

Gul et al. (1989) report that job satisfaction, earnings potential, the availability of employment and aptitude for the subject were the factors that most significantly influenced the decision to pursue Accounting as a discipline. Various factors such as financial remuneration ranked high on the list of decisive factors in studies by Wheeler (1983), Reha and Lu (1985), Cangelosi, Condi and Luthi (1985) and Horowitz and Riley (1990).

Other factors, such as job market considerations (which encompass job satisfaction, job security, job availability, job flexibility and opportunities for advancement over the short term and long term), were found to be important in career decision studies done by Paollilo and Estes (1982), Kochanek and Norgaard (1985), Haswell and Holmes (1988) and Bundy and Norris (1992).

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Kochanek and Norgaard (1985) addressed the issue of the relative importance of criteria that motivated students to select Accounting rather than other majors such as Marketing and Management. They found that job opportunities and the quality of staff ranked highest on the list for men, while women ranked their passion for accounting as their main reason. Lowe and Simons (1997) found that Accounting majors placed the greatest importance on future earnings and the career options available to them.

Bojuwoye (1985) found out in a survey of second year college students that Nigerian students experience complications with issues relating to career development more than they do with any other problem. Wollman (1975) reported that 63% of his respondents were either not at

all satisfied with the way they had planned their career choice or were only fairly satisfied. They confirmed the need for some form of more planning than they initially had. Consequently, the majority of them were found to be willing to participate in a career guidance programme, if made available to them. The main goal of this would be to help them become aware of a decision making process, which applies directly to their career-related concerns. Sound vocational planning demands that a student makes tentative vocational commitments to provide for a sense of direction and purpose through the periods of school. At the same time, sufficient flexibility must be maintained; thereby providing for appropriate shifts in plans as maturity occurs, interest stabilizes and knowledge expands.

1.3 RESEARCH OBJECTIVES

- To determine the career maturity of first year university students in a commerce faculty at a tertiary institution in the Western Cape.
- ➤ To determine how students obtain self-information and convert this information to self-knowledge.
- To determine how students acquire decision-making skills and apply them in making career decisions.
- > To determine how students gather career information and convert it into knowledge of the occupational world.
- To determine how students integrate self-knowledge and knowledge of the occupational world to enable career decision-making.
- ➤ To determine how students implementing knowledge (self-information and career information) in career planning and decision-making.

1.4 HYPOTHESES

Cape.

The following hypotheses were formulated:

H1: There is a significant relationship between Self information and Career maturity amongst university students in a commerce faculty at a tertiary institution in the Western Cape.

H2: There is a significant relationship between Decision making and Career maturity amongst university students in a commerce faculty at a tertiary institution in the Western Cape.

H3: There is a significant relationship between Career information and Career maturity amongst university students in a commerce faculty at a tertiary institution in the Western

H4: There is a significant relationship between Integration of Self Information with Career information and Career maturity amongst university students in a commerce faculty at a tertiary institution in the Western Cape.

H5: There is a significant relationship between Career Planning and Career maturity amongst university students in a commerce faculty at a tertiary institution in the Western Cape.

H6: There is a statistically significant difference in career maturity amongst students based on age amongst university students in a commerce faculty at a tertiary institution in the Western Cape.

H7: There is a statistically significant difference in career maturity amongst students based on gender amongst university students in a commerce faculty at a tertiary institution in the Western Cape.

H8: There is a statistically significant difference in career maturity amongst students based on race amongst university students in a commerce faculty at a tertiary institution in the Western Cape.

1.5.DEFINITIONS AND TERMS ESTERN CAPE

Career can be defined as a lifelong job that people chose or aspired to perform in a specific field (Super & Bohn, 1970).

Career Maturity is defined by Super (1977 cited in De Bruin & Bernard-Phera (2002, p. 105) as "the way in which an individual successfully completes certain career development tasks that are required according to his current developmental phase".

Career Development is "the ongoing process by which individuals' progress through a series of stages, each of which is characterized by a relatively unique set of issues, themes or tasks" (Schreuder & Theron, 2006, p. 105).

Career Planning refers to "the process by which individuals obtain knowledge about themselves (their values, personality, preferences, interests, abilities), information about employment opportunities, formulate goals, and develop a plan for reaching these goals" (Schreuder & Theron, 2011, p. 15).

1.6.LIMITATIONS OF THE STUDY

This quantitative research is an examination of career maturity amongst first year university students in Commerce faculty at a tertiary institution in the Western Cape.

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Students who received career counselling could feel the study is not applicable to them, and could potentially impact on their willingness to participate.

Only first year students were required to participate, thus excluding second and third year students.

The CDQ tool is a traditional pencil-and-paper survey tool, which might have limited the willingness of the participants to complete it entirely.

1.7.ORGANISATION OF THE STUDY

The thesis is presented as follows:

Chapter 1 discusses the background of the study, research problem, research questions, research objectives, significance of the study and its scope.

Chapter two provides a detailed discussion of career maturity and its various aspects. Specific reference is made to the causes impacting on career maturity and the necessity of career counselling for first year tertiary students. Definitions of career, career maturity, career development, career counselling, career planning as well as the various theorists' reflections on career maturity are provided.

Chapter three provides an indication of the research design utilized to execute the research. In particular, the selection of the sample, data collection methods, the psychometric properties of the relevant instruments as well as the statistical techniques is discussed.

Chapter four addresses the results arising from the empirical analysis of the data which was obtained.

Chapter five concludes on theory and results obtained in the study. Moreover, practical implications of the research findings are highlighted and recommendations for future research are outlined.



CHAPTER 2

LITERATURE REVIEW

CAREER MATURITY AMONGST UNIVERSITY STUDENTS

2.1.Introduction

Tertiary education is becoming increasingly costly and students 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, or they decide to pursue a new career and start over, with considerable financial and family life implications.

Recent research (Blustein, Phillips, Jobin-Davis, Finkelberg & Roarke, 1997; Worthington &

Juntunen, 1997) describes the transition from secondary to tertiary education as a critical

decision point for adolescents. According to Lens, Herrera and Lacante (2004), this transition

is a very important step in both developed and developing countries, with far reaching and

long lasting consequences on individual and societal levels.

In previously disadvantaged communities in South Africa, educational and career planning

was characterised by under-development, marginalisation, and under-resourcing. This could

have impacted negatively on these individuals' motivation towards and perspectives of their

future careers. Akhurst and Mkhize (1999) noted that various studies in South Africa have

emphasized the need for young people to enjoy career education.

The process of growing up involves a series of choices – about friends, values, spouses, ways of living and, especially, schooling, work and career choices. Some of these decisions are embedded in family life, customs and informal influences. Others are institutionalized and formalized thereby, such as decisions about professional careers. Grubb (2002) views these career-related decisions as a developmental process, unfolding over time.

According to Grubb (2002), career guidance is fast becoming increasingly important. The selection of an appropriate occupation is valuable not only for individual purposes, as a means of increasing satisfaction at work, earnings and stability of employment, but also for the social goals of efficiency, productivity and competitiveness. Improved career guidance is also necessary for individuals to make rational choices within expanded alternatives in the field of work. This seems to be especially relevant to the post-apartheid situation in South Africa, since previously disadvantaged individuals and groups now have expanded career choices, for which they are not adequately prepared.

The majority of researchers (Blustein & Phillips, 1994; Powell & Luzzo, 1998; Reid- Van Niekerk & Van Niekerk, 1990; Savickas, 1984, 1993) define "career maturity" as the readiness and competency of an individual to make critical career decisions. These choices are based on attitudes (Blustein & Phillips, 1994; Powell & Luzzo, 1998), on self-knowledge, knowledge of the world of educational opportunities and of the job market, and sufficient knowledge of career decision making processes (Powell & Luzzo, 1998; Savickas, 1984, 1993).

Research conducted in South Africa by Reid-Van Niekerk and Van Niekerk (1990) indicated that there were differences between race or ethnic groups with regard to career maturity. They found that both coloured and black first-year university students possessed significantly lower career maturity attitudes than their white counterparts, and for them this pointed to the need for career development interventions.

According to Cranmer (as cited in Guzman & Choi, 2013), there is a disparity between the skills attained at school and the skills desired in employment. Therefore, young adults entering the skilled and semi-skilled labour market sectors are more disposed to take up what is available than to take jobs (Robert, 1977). Likewise, they experience a disparity between themselves and their jobs to changing degrees during the course of their career (Takase, Nakayoshi, & Teraoka, 2012).

Regardless of the increased access to education and jobs, individuals go through several career changes that they face during the course of their work lives, thus including them in explorative and developmental activities that may or may not build on earlier work experience (Savickas et al., 2009).

2.2. The Changing Nature of Career in the World of Work

2.2.1. Technological Advancements

Technological advancements and general volatility the global market are altering perceptions or restrictions of work and therefore affecting career decisions (Barker &Kellen, 1998). Roberts (2006) is of the view that swift changes in the labour market have caused amplified doubt and volatility in people's careers.

Therefore, the career decisions that the adolescents of today have to make are not the same as the one's the youth in 1960's and 1970's had to make (White, 2007). The escalations and access to higher education have also pushed motivations that people have which in turn has led to alterations in the employment forms of people as well as their outlooks of their skills (Wood, 2000). As a result of the ever developing nature of the world of work, individuals regularly face challenges that influence their career.

South Africa has not been insusceptible to the universal changes that are happening in the world of work. Since 1994, the South African economy had gone through substantial changes where government had put in place policies to redress the differences of the past as well as incorporate the South African economy with that of the global economy (Oosthuizen & Bhorat,2005). Between 1995 and 2002, employment in South Africa expanded from 9.5 million to just over 11 million, a growth of around 16% and equal to a growth rate of 2.1% per annum (Oosthuizen & Bhorat, 2005).

In general, employability in South Africa has developed and individuals can now seek employment in businesses in which they previously could not. This, in turn, has consequences for the labour market in terms of capacity. As a result of these progresses, career development in South Africa has had to review its role in society. For instance, the career pursuing behaviours that individuals are involved in as a result of the above mentioned changes, has required a new lens of observing and consideration for career development.

2.2.2. The World of Work Today

Work for most people is the centre of their attention for much of their adult life. To a large extent, work regulates the joys and frustrations of daily life. One's work makes available the means through which an individual expresses personal distinctiveness and gathers financial resources (Newman & Newman, 2003).

Drucker (2002) is of the view that society is led by knowledgeable workers. Their career development is categorized by excellently tuned talents that are built around a solid knowledge base that constantly requires modernizing. The new type of knowledge workers, however, have risen from advances in technology, such as hi-tech information technologist. Future knowledge workers will change the existing ones as technology continues to change with the introduction of advanced products (Zunker, 2006).

2.2.3. Career Development

Career development has been described by Hoyt (1977) as an evolving process, ranging over almost the full life span, through which persons develop their capacity for and engage in work as part of their overall life style. Schreuder and Theron (2006) defined career development as the on-going process by which individuals progress through a series of stages, each of which is characterized by a somewhat unique set of issues, themes or tasks.

2.3. Theories of Career Development

The term "career maturity" originated as a concept in the career development theory proposed by Super (1957) and is a dominant theme when discussing career development. Another significant concept central to a career is the individual's interest in a particular field. Interest can be defined as "a relatively constant positive or negative stance or motivation towards a specific activity which is based on personality and which directs behavior" (Super, 1977, p.300). When considering career development, it is imperative to help individuals examine their abilities and interests, in order to better support their needs for growth and development within the world of work, taking cognisance of their level of career maturity.

Diverse opinions about what the cause of career development is have given rise to a number of theories about the concept. A theory is, in effect, "a rationalised set of assumptions or hypotheses that provides a person with tools that can be used to explain the past and predict the future" (Johnson, 2000, p.2). Theories therefore give direction, and when tested and supported, can assist in increasing our knowledge. The following section provides a comprehensive discussion of the different career development theories in order to provide a better understanding of the concept and thereby highlighting the significance of career maturity.

2.3.1. Hoppocks' Composite Theory of Occupational choice

Hoppock (1967) was of the view that a career is chosen to meet specific needs. Based on this, careers are chosen in the certainty that they would best meet the most prevailing needs of the individual. Needs may be observed as intelligent or elusively felt attractions which draws the person in certain directions. Either way, Hoppock believes that needs may impact choices (Hoppock, 1967).

Hoppock (1967) suggested that career development begins when a person becomes aware that a career can assist in meeting his/her needs. This awareness grows and his/her career choice progresses as the person develops the ability to anticipate how well a potential career will meet those recognized needs. Career choice hinge on the awareness of the self, knowledge of occupations and the ability to reason clearly. Job satisfaction depends upon the level to which the job meets the needs that have been recognized. (Hoppock, 1967).

2.3.2. Trait and Factor Theory

Trait and Factor Theory, the contemporary theories of career choice established by Parsons (1909) and promoted by Williamson. This is one of the extensively use structural theories during the first several decades of the counseling line of work. In fact, this theory has been the most resilient of all theories of career guidance (Sharf, 1996).

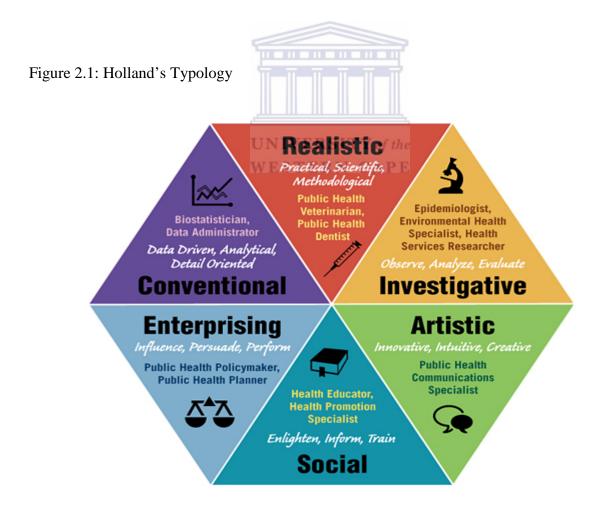
According to Parson (cited in Rogers, 2010), individuals are interested in work which is corresponding with their personalities and competencies. Therefore, Parsons (cited in Rogers, 2010) developed a framework to help individuals choose a career. Some of the basic assumptions that underlie this theory is as follows:

- 1) A clear understanding of 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 a straight forward problem-solving/decision making.
- 4) The closer the match between personal traits and job factors the greater the likelihood success in career (i.e., job performance and satisfaction).

2.3.3. Holland's Theory

A prolific writer in the field of personality and the effect of personality on career choice is Holland (1973; 1985), who developed a theory to envisage the characteristics of individuals and their environment that could lead to either positive or negative work-related outcomes and stability. According to him, career choices are terminologies of personality, ability and the suitable environment. Individuals view the world of work in terms of stereotypes based on their observations and understandings.

According to Holland (1985) and Herr (2001), personal and environmental effects have a great influence on the development of an individual's personality. Parents knowingly create environments that are consistent with their own personality type, world of work and friends. The child is exposed to the environment that the parents have fashioned and in turn will model the behaviour of the parents. The environment, as well as genetics, play a part in fashioning certain preferences for certain activities. These environmental influences contribute to the creation of personality types, which comes through in certain behaviour (Holland, 1973 & 1985; Pattysmith, 2000).



Source: Robbins (2001).

Holland identified six personality types which he linked to specific activities and matching occupations. Table 2.1 indicates the personality types identified by Holland (1985).

Table 2.1: The Six Personality Types (Holland, 1985)

Types	Activities	Matching occupations
Realistic ("Do-ers")	 Practically minded Prefers working outdoors Likes to build or repair things 	Farmer, forester, pilot, electrician, truck driver, locksmith
Investigative("Thinkers")	 Like to solve mathematical and scientific problems by focussing on theory. Not particulary interested in working with people 	Chemist, biologist, dentist, physician, medical technician, surveyor
Artistic ("Creators")	 Likes self-expression and working alone Creative in artistic media Unconventional 	Dancer, actor, composer, musician, comedian, editor
Social ("Helpers")	Concerened with welfare of othersGet along well with people	Nurse, social worker, counsellor, teacher
Entrepeneural ("Gogetters")	 Likes leadership roles Likes to pursuade others Does not like taks that require long periods of intellectual effort 	Auctioneer, lawyer, judge, sales person, hotel manager, recreation leader
Conventional (Organisers)	 Dislikes work requiring physical skills Prefers structure activities Does not mind rules and regulations 	Accounts clerk, secretary, bookkeeper, mail carrier, typist, bank teller

(Cited in Coertse & Schepers, 2004)

2.3.4. Social Cognitive Theory

The Social Cognitive Career Theory developed by Lent, Brown and Hackett (1996) draws upon Bandura's (1977) self-efficacy theory. It outlines career development, and accounts for the interaction between educational and career interests, career-related choices, and work performance.

The Social Cognitive Career Theory emphasizes the collaboration of personal attributes, external environmental factors and behaviour in career decision-making. An imperative contribution of the Social Cognitive Career theory to the career development sphere is that it focuses on the relationships among social cognitive variables (e.g. self-efficacy), and their relationships with other variables in the individual's socio-contextual environment, such as gender, race/culture, family, community and political constituents.

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Brown (1999) contends that the incorporation of self and social context offers a chance for individuals to gain a sense of control over their career development and increases their career-related self-efficacy expectations. The theory states that, if individuals have confidence in their own ability and have a clear expectation of the outcome of their behaviour, they will act in a way that will help them attain their goal (Herr, 2001).

2.3.5. Socio Economic Theory

The Socio-economic Theory was developed mainly by sociologists and economists who aimed to offer a detailed explanation and description of how an individual's culture, family background, social and economic situations and other aspects outside his/her control can effect his/her personality, values, and career development (Carlson, 1996).

This approach to understanding career development proposes that many people follow the path of least struggle in their career development by simply accepting whatever work opportunities they are presented with (Carlson, 1996). The Socio-economic Theory does not take interior factors into consideration and does not focus on the development and growth of an individual during his/her life.

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2.3.6. Tiedeman's Decision Theory

Tiedeman's (1979) study on career development focused on the procedure of arranging and classifying different occupations through the collaboration of the individual's personality with society. He focused on the decision-making process, indicating that the individual should take possession and control of his/her life. According to him decision-making consists of two stages (Tiedeman, 1979):

1. **Anticipation stage:** During this stage the individual explores a particular career. As he/she becomes aware of different personal needs, possible

alternative occupations are identified. These alternatives are evaluated and compared with one another, after which the individual makes a choice.

2. **Induction stage:** This is the second stage in Tiedeman's (1979) theory where the individual is in a specific occupation and is following the behaviour of his/her colleagues. As the individual experiences the need to fulfil certain unattained personal goals within his/her chosen occupation, he/she will attempt to change this disparity and aim to incorporate personal and career goals. Movement up or down these stages are usually preceded by a decision. However, advancement dominates, so the person usually goes from indecision to choice and then to action.

Although Tiedeman's (1979) theory was not one of the most popular career development theories, he is viewed as having had an important influence in the way career progression is approached. His contribution was considered to be a very mechanistic and simplistic view of the individual's ability to make knowledgeable decisions. Criticism regarding Tiedeman's theory is based on the fact that it focuses only on the adult phase, whereas studies show that childhood experiences are also of serious importance.

2.3.7. Crites's Comprehensive Approach

Crites (1981) created a comprehensive career development model by incorporating various approaches. In principle his approach focuses on development that relates to the decision-making process and not the content. He views time as the primary contributor of career development, and divides an individual's life span into certain stages. The stages are not

linked to specific timeframes and vary from person to person. He also focused on career maturity and postulated that maturity would rise over time.

Crites (1981) proposed that the most significant stage in career development is the establishment phase (age 16 to 25 years), which is a good forecaster of future career success. Crites (1978; 1981) proposed a career maturity model with two dimensions: an affective dimension and a cognitive dimension. The cognitive dimension is represented by career decision-making skills, whereas the affective dimension signifies attitudes towards career development. Crites (1978) maintained that attitude is a dispositional reaction tendency that is distinct from abilities and interests.

Although several measuring instruments have been developed in order to measure the construct of career maturity, Crites' measuring instrument proves to be the most common. The Career Maturity Inventory (CMI) was designed by him to measure the competencies or skills individuals need to make sound career decisions (e.g. planning, problem-solving, and self-appraisal skills), as well as their attitude toward career decision-making (e.g. orientation toward work and willingness to be realistic and make compromises). It consists of two scales, an attitude scale and a competence scale, both with five subtests each. Recently, a revised form of the CMI was published (Crites, 1995).

It was designed to (a) reduce administration and testing time; (b) extend the CMI to the adult level, including post-secondary students and gainfully employed individuals; (c) eliminate the original Attitude Scale and Competence Scale; (d) construct the Career Developer (CDR) (as a supplement to the CMI), to facilitate improved career maturity; and (e) prepare the CMI and CDR for a variety of scoring techniques and data analyses. Crites made an incredible

contribution to the assessment of career development, in particular to career maturity. His theory and way of thinking are to a great extent in line with those of Super (1990) in that they both view a career as a life-long experience filled with decisions that need to be made.

2.3.8. Super's Developmental Theory

Super (1957) is probably one of the best-known writers in the field of career development and is often referred to as the father of career development. His approach views the choice of a career as a sequence of events as conflicting to Holland's (1985) stagnant approach. Super (1957) was of the view that by the time an individual is ready to make the change from secondary school to work or college, a number of different choices have already been made.

His theory postulates that an individual will choose an occupation that allows him/her to function in a particular role that is consistent with his/her self-concept. His theory is based on research done by Rogers (1951) on the self-concept and research done by Buehler (1933) on life-stages. Super (1957) noted that career planning was an on-going process and not a single choice. His work encourages the monitoring of an individual's career development during his/her life rather than just forecasting initial occupational entry.

A person interchanges through several occupational stages during his/her life and Super (1957, p.171) defined these life stages as "...derived from analysis of life histories in which major events and concerns group themselves and vary from one stage to another, justifying

the classification of life into a sequence of characteristic stages". Super's life stages of occupational development is depicted in Table 2.2.

Table 2.2: Super's Life stages of occupational development (Super, 1957)

Life stage	Tasks
Growth (14-15 years)	Physical and psychological growth Formation of attitudes and behaviour mechanisms Important to the self concept Develops knowledge through experiences, which will ultimately be used in choices
Exploration (15-24 years)	Fantasy phase – choices are realistic Tentative phase – choices are narrowed to a few possibilities Realistic phase – choices are narrowed to those that are attainable and opportunities thought to be important
Establishment (to about 44 years)	Trial-and-error phase where individual aims to get permanent place in world of work Stabilisation occurs nearing the end of phase
Maintenance (to about 65 years)	Continues the satisfying parts of the work situation Revises or changes unpleasant and annoying aspects
Decline (65 years +)	Emphasis is on keeping the existing job and meeting required standards of output More conerned with retaining the position than with enhancement

(Cited in Coertse & Scheepers, 2004)

Table 2.2 points out that a person goes through different stages during his/her life. During each of these life stages a person is met with certain occupational tasks, which if done, will allow him/her to progress towards the next developmental stage. Although Super initially viewed these stages as sequential, he later reviewed his theory to acknowledge that individuals might move between phases depending on outside influences. Super (1957, 1980)

therefore came to the conclusion that a career does not only exist within the occupational context but is in fact a combination of roles in life. He postulated that these life roles interact in a manner that is supportive, supplementary, compensatory or neutral. Depending on the varied situations, role interactions can be either facilitating or in conflict with one another.

Super (1962) proposed that values are a major component in the career development process. Values are defined as, 'that which every individual strives towards in order to satisfy needs' Super (1962, p.232). The degree to which the individual can express his/her values within the work environment will regulate the degree of his/her career satisfaction. Super (1980) saw career maturity as a normative term that refers to the extent to which an individual's observed and expected career behaviour is matching.

According to him career maturity consists of five dimensions: awareness of the need to plan ahead, decision-making skills, knowledge of self and the world of work and the use of information resources, general career information, and reality orientation. These five dimensions develop via five activities that he labelled career developmental tasks (Super 1957, 1980). They are listed in Table 2.3:

Table 2.3: Career development tasks (Super, 1980)

Occupation	General characteristic/Developmental task
Crystallisation of career	Developing and planning a tentative vocational goal.
preference	This is mostly based on information from surroundings and
(14-18 years)	role models. Early stages are very unrealistic and imaginative.
	The later years are more focussed in terms of a definte goal.
Specification of career	Firming of the vocational goal. Getting action steps in place.
preference	
(18-21 years)	
Implementation of career	Getting the necessary training and education to fulfil the goal.
preference	Obtaining employment in the relevan field.
(21-24 years)	UNIVERSITY of the
Stabilization of a career	Working and confirming/changing career choice.
(24-35)	
Consolidation of status	Advancement in career.
and advancement	
(35 years +)	

(Cited in Coertse & Schepers, 2004)

The developmental tasks, listed in Table 2.3, provide the individual with the vehicle needed to progress through the five stages of career development. Although the developmental tasks

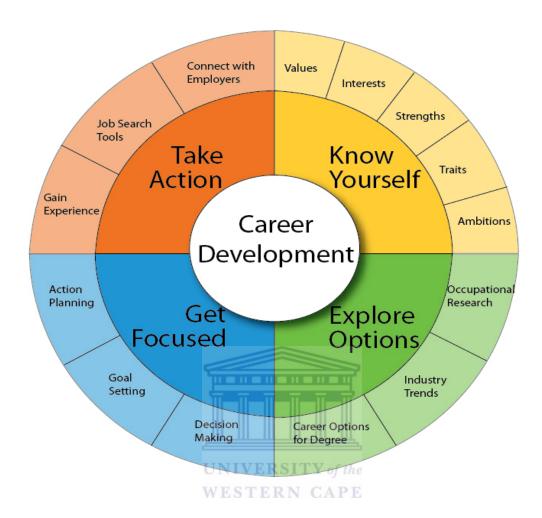
seem sequential, Super (1990) later added that people can move between these stages as they adjust to changes in themselves as well as changes in the external world.

In summary it can be stated that Super's theory focuses on career development as a process incorporating the life stages, roles and values of an individual.

2.4. Career Maturity and Career Development

According to Schreuder and Coetzee (2011), individual career development involves the development of suitable work-related behaviours, developing a vocational identity (through which individuals become aware of their career interests, goals, skills and talents), engaging in actual career decision-making, and developing and sustaining one's employability.

Figure 2.2: A Model of Career development



From an organisational stance, career development is viewed as an on-going, official effort by the organisation that focuses on developing and elevating the organisation's human resources in the light of the needs of both the employee and the organisation (Byars & Rue, 2004).

Career development is regarded as a combined effort between the employee and the organisation and the result of the interaction between individual career planning and the organisational career development support system (Schreuder & Coetzee, 2011). If employees are to participate in reasonable career development, a high level of career maturity

is essential (Schreuder & Coetzee, 2011). Career maturity infers that individuals are ready to deal with the developmental tasks that are necessary in their particular life stage and are ready to make career decisions (Super 1992).

2.5.Defining Career Maturity

The idea of career maturity entails a readiness, attitude and competency to cope effectively with the career development tasks corresponding to one's life stage (Super, 1957). The postulation can be made that a career mature person is more capable of making a suitable and genuine career choice and decision. Career mature individuals have the aptitude to identify exact work-related preferences and to implement activities in order to reach their goals.

Career maturity is the extent to which an individual is able to master certain career developmental tasks that are applicable to his/her life stage (Langley, du Toit & Herbst, 1996). It is very important to identify an individual's state of career maturity in order to give suitable career guidance. Langley (1990) and Langley, et al. (1996) identify the following five common developmental dimensions as critical stages of individuals' career development that lead to career maturity:

1) Obtaining self-information and converting this information to self-knowledge.

Information on the following career-related aspects can enhance an individual's self-knowledge and self-insight: career guidance needs, importance of life roles, work values, occupational interests, career development life stage, personality, aptitudes and family functioning.

- 2) Acquiring decision-making skills and applying them in effective decision making.
- 3) Gathering career information and converting it into knowledge of the occupational world. Useful career information would include information on different occupations, training facilities and development opportunities, and on financial support for further studies.
- 4) Integrating self-knowledge and knowledge of the occupational world to enable career decision-making.
- 5) Implementing knowledge (self-information and career information) in career planning and decision-making.

2.5.1. Self knowledge

Self-knowledge suggests the mindfulness of certain aspects, that is, needs, life roles, work values and interests. Needs involves the identification of interior or exterior needs and the fulfilment of those needs. Langley (1989) stressed that this is relevant to the person's responsibility to identify his/her career needs at a specific time of life.

Self knowledge refers "to the insight into one's personality which enables them to know what they are capable of" (Mbetse, 2002, p. 83). One of the most well known theories that postulate the significance of self knowledge in career decision - making processes is that of Super, who states that most career choices attempt to objectify the skills, talents and interests of one's self concept (Gianakos, 1999). Barker and Kellen (1998) is of the view that self knowledge has to do with a person knowing their talents, skills, interests, values and other personal attributes that might be of value in the working environment. This knowledge aids one in making decisions that upholds good and informed career decisions.

Anakwe, Hall and Schor (1999) believe that self knowledge incorporates information about the individual and contains skills that focuses on individual development. Attainment of these skills contribute to learning about oneself and thus to realistic goal setting in managing careers. Thus effective career decision-making happens when individuals obtain an in-depth self knowledge.

As specified by Mbetse (2002), self knowledge is an essential attribute if young people are to make realistic career choices. It is therefore important that individuals have good self knowledge to make sure that they make effective and satisfactory career decisions for successful future career and employment prospects. According to research conducted by Anderson and DaGiau (as cited in Lankard, 1996), understanding one's self concept as well as its effect on different roles and relationships has major influence on career maturity.

2.5.2. Career Decision Making

Studies indicate that career decision-making among students in modern society has not been well understood (Dzuiban, Tango & Hynes, 1994). There have been certain elements that have been identified as contributing to career decision-making among adolescents.

Baumgardner (1982) describes cynicism in career decision making processes among students as being high and attribute this to situations where students and academia are caught up in a predicament brought about by changes in the working world and changing economic trends.

According to Donahue (2006), the career decision making process involves six tools. These include engaging in making a choice and knowing that one needs to make a decision and thinking about it; understanding one's self and one's options; identifying, expanding and narrowing a list of possible options; deciding on a study plan or occupation; acting on or implementing the plan; and finally, reflecting on decisions made and knowing that one has made a good choice.

Langley's comprehensive model of career development (as cited in Mbetse, 2002) also proposes similar tools that may assist adolescents in making successful and appropriate career decisions. These tools consist of identifying needs; evaluating life roles; identifying interests; identifying other relevant factors relating to personal or socio-cultural factors, for example; evaluating career maturity; evaluating decision-making ability; obtaining career information; integrating self information with career information; making a career choice and finally planning one's career. According to Harren's decision-making theory (as cited in Bimrose &

Barnes, 2007) which was developed from career decisions made by college students, there are three career decision-making styles:

- (1) The rational style where individuals adopt a logical and systematic approach to decisions
- (2) The intuitive approach where there is more reliance on internal affective states in decision making processes
- (3) The dependent style where decisions are contingent upon the reactions of friends, family, and peers.

Furthermore, Langley (1989) is of the view that decision-making skills are developed through the aid of the following seven mechanisms: firstly, recognizing the need to make decisions; secondly, evaluation of self and goal setting; thirdly, finding alternatives; fourthly, weighing alternatives; fifthly, choosing alternatives with the highest value; sixthly, going into action; and seventhly, experiencing the consequences.

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Langley (1989) further states that the task of getting these skills requires the individual's ability to make a planned and informed career decision. The person evaluates himself/herself in terms of his/her developmental stage and sets a goal aimed at making a career choice (MacKenzie, 1996). The person then weighs up alternative choices, makes a value related choice and has the opportunity of re-evaluating the choice. In so doing, the individual acquires the decision-making skill.

2.5.3. Career Information

Career information is necessary during the different stages of a career development process. Langley (1989) states that it is very imperative for a person to have the aptitude to actively seek out career information. Individuals need to be encouraged to consult libraries, reference books, computer programmes and the internet. They need to collect information about the various career fields and within that, information on particular jobs, training requirements, admission requirements, the salary and prospects.

Zhou and Santos (2007) stipulate that one of the main elements that affect career decision-making is lack of information. This element includes a lack of information about steps involved in the career decision-making process, lack of information about the self and various occupations and lack of information about ways of obtaining additional information. According to Arnold (as cited in Zhou & Santos, 2007), there is a need to have matching information about the two kinds of knowledge to make sure progress are made in the career decision-making process.

One of the most essential tasks that one take on as part of the career decision process is to collect information about the probable career options that one is interested in (Barker & Kellen, 1998). Bimrose and Barnes (2007) posit the view that career development in individuals can be recognized through their augmented consciousness of prospects and selections in their way. Access to and the use of career information is a vital and often essential part of the decision-making process (Stead & Watson, 2006). However, there is

signs indicating that there is lack of career knowledge as well as career fallacies amongst learners, parents and teachers alike (Mbetse, 2002).

2.5.4. Integration of Self Information with Career Information

Langley (1996) believes that effective career decision-making cannot be made unless the person has insight and knowledge to incorporate self-knowledge and knowledge of careers together (Bernard-Phera, 2000). Bernhardt (1998) declares that incorporation of self- and career-knowledge possibly poses the greatest problem for students as it requires mastery of each type of knowledge separately prior to the integration.

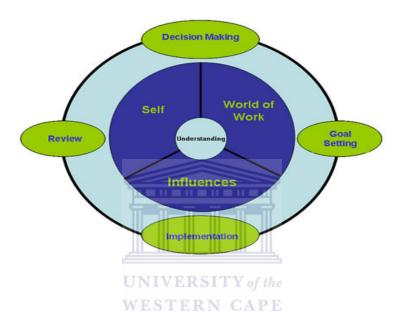


2.5.5. Career Planning

Career planning is a compulsory process to be followed after a career choice is made. It involves collecting information about training institutions. In addition, it is vital that a person be prepared for the changing aspect of the world of work. Antoniu (2010) is of the view that career planning is an ongoing process of discovery in which an individual slowly creates his/her own work-related idea as a result of skills or abilities, needs, motivations and goals of his/her own value system.

Career planning is perceived as a very organized and comprehensive process of targeting career development and implementation of strategies, self assessment and analysis of opportunities and evaluate the results. This is depicted in figure 2.3.

Figure 2.3: Career Planning



The career planning process involves both the organization and the individual's responsibility. Thus, the individuals must identify their aspirations and abilities, and through assessment and counseling to understand their needs of training and development; the organization needs to identify its needs and opportunities, to plan its employees and to ensure its staff gets the necessary information and appropriate training for career development. Therefore, career planning must connect individual needs and goals with organizational needs and opportunities, evaluating, advising and informing its staff on career planning, individual development efforts with training and development programs (Antoniu, 2010). Figure 2.4 illustrates this process.

Feedback

Individual needs and aspirations

Assessment and counseling personnel

Harmonization

Harmonization

Setting on the career path

Training and

development programs

Figure 2.4. The career planning model

Source: J.M. Ivancevich and W.F. Glueck, in Aurel Manolescu – Human Resource Management

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Personnel planning

and career

information

Feedback -

2.4. Socio-demographic differences in Career Maturity

2.4.1. Gender

Organizational needs

and opportunities

In South Africa, women comprise up to 52% of the adult population, of which 41% are considered to be part of the active working population. Even though the ratio between male and female entrepreneurs in South Africa is not highly uneven, the majority of South African women entrepreneurs functions within the crafts, hawking, personal services and retail sectors, in which sectors little technology is utilised in the undifferentiated businesses

concerned (Maas & Herrington, 2006). These findings clearly suggest that some form of gender division of labour still persists in South Africa, with women still being sealed into old-fashioned female functions, tending to concentrate on those activities which are well-matched with their domestic and reproductive roles (Mahadea, 2001).

Research which has been conducted the influence of differences in gender on career choices has also shown the existence of key inconsistencies between the two genders. For instance, women have been found to experience more intricacy in their career choices than do men, because of the former's need to balance their work and family roles (Carter et al., 2003).

Various studies indicate that females usually score higher than males on career maturity, albeit on some scales of career-maturity measures (Fouad, 1988;Herr & Enderlein, 1976; Luzzo, 1995; Kornspan & Etzel, 2001; Naidoo et al., 1998;Patton & Creed, 2001; Post-Kammer, 1987; Super & Nevill, 1984; Westbrook, Cutts, Madison & Arcia, 1980).

A possible clarification of the gender differences may be postulated to be related to gender differences in the rate of overall maturation, which normally occurs earlier in females than males, thus suggesting a specialised approach to career guidance and counselling for girls (Herr & Enderlein, 1976;Omvig & Thomas, 1977) and establishing separate gender standards (Patton & Creed,2001; Westbrook et al., 1980). Naidoo et al. (1998) found that not only are there gender changes in career maturity, but female students indicate more commitment to the work role and have higher value expectations from work.

2.4.2. Race

In a study conducted by Themba, Oosthuizen and Coetzee (2012) it was found that there are no significant differences between the various racial groups were detected in terms of career maturity and therefore they are not reported in the tables. This is in distinction with previous findings, which found significant differences in career maturity between racial groups (Pieterse 2005; Reid-Van Niekerk & Van Niekerk 1990; Watson et al 1995; White 1987).

Current employment equity and affirmative action legislation, which has opened up more career advancement opportunities for black people and especially African people in South African workplaces (Schreuder & Coetzee, 2011).

2.4.3. Education

Several research results disclose that participants with a higher grade of education tend to be more career-mature than those with a lower grade of education (Achebe, 1982; Herr & Enderlein, 1976; Lokan, Boss & Patsula, 1982; Naidoo, Bowman & Gerstein, 1998). Various other studies support this finding as they reveal a positive impact on career maturity by career-education programmes (Omvig & Thomas, 1977; Trebilco, 1984).

According to Trebilco (1984, p. 200), these results support the "proposition that schools wishing to enhance student skills such as decision-making and ability to locate and use job information would be well advised to implement some form of career education program into their curriculum".

While Post-Kammer (1987) found no significant difference in the level of career maturity of ninth- and eleventh-grade students, Fouad (1988) reports no significant correlation between career maturity and grade level for United States (US) students, but a significant difference is perceived among Israeli students across grades.





Career maturity as implemented by Super is progressive in nature. It is usually expected that as adolescents grow older they learn about careers they are interested in, become more independent, have a clearer depiction of what they want to do as adults, and be mindful of alternative career plans (Super & Bohn, 1970).

However, according to Super and Bohn (1970), the procedure of attaining career maturity seems to be uneven and asymmetrical, as individuals differ on career behaviour such as the tendency to plan ahead and the acceptance of obligation. Studies reflecting the developmental movement of career maturity include the study conducted by Patton and Creed (2001) that demonstrates the developmental differences of career maturity among adolescents aged 12 to

17. The results of the studies of career maturity and age are not equivocal, as some studies find no significant correlation between participants' age and their level of career maturity (Powell & Luzzo, 1998).

2.5.CONCLUSION

An essential variable to consider when investigating career development is the psychological concept of career maturity. Career maturity has been studied comprehensively over the past four decades and is perhaps the most essential construct in development theory (Crites,1978). In general, career maturity epitomizes the repertoire of coping behaviours that individuals possess and the readiness to employ them toward career-related events faced at various life stages (Srebalus, Marinelli, & Messing, 1982; Super, 1974). More specifically, the career maturity construct represents both affective and cognitive skill components that are vital in realistic career decision-making (Crites, 1978; Fouad & Keeley, 1992).

Understanding of career maturity can, in part, forecast the simplicity with which one makes a career choice and the satisfaction and stability of that choice. Furthermore, basic work related skills are positively related to career maturity in adolescents; it can be argued that providing adolescents with basic work related skills can make an important contribution to both their subjective and their economic well-being.

CHAPTER 3

RESEARCH DESIGN AND METHODOLOGY

3.1. INTRODUCTION

In this chapter, the research framework will be discussed as well as the research framework used in the investigation of career maturity amongst first year university students in a commerce faculty at a tertiary education institution in the Western Cape. Furthermore, this chapter describes and explains the sample selection, the statistical analysis, the questionnaires, the reliability and validity of the measuring instrument, the data collection method and the statistical methods adopted to examine the research data collected for this study.

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3.2. SELECTION OF THE SAMPLE

Sekaran (2003) refers to the entire scope of people, students, events or items the researcher intends to investigate whether or not a relationship exists between career maturity amongst first year university students in a commerce faculty at a tertiary institution. According to Sekaran (2003) each individual student is an element of the population.

Sekaran (2003) defines an element as each single member, individual or student of the population. The population size therefore comprises of 960 (elements) first year full time undergraduate students that fall within the above categories of students studying in the commerce faculty at the institution.

A sample is a snapshot or small group of individuals or students of the population from which the researcher will draw generalizable conclusions, that is seen as appropriate to the whole population (Sekaran, 2003). The intended sample size is 288 as per Sekaran (2003) for a population of 551 respondents. Sekaran (2003) further maintains that any sample larger than 30 but less than 500 could be considered appropriate for most research actions. To ensure the intended sample size of 288 participants are met the researcher will use a questionnaire.

3.2.1. CONVENIENCE SAMPLING

According to Sekaran (2003), in non-probability sample, not everyone stands a chance to be chosen as sample subjects. The findings of the sample cannot therefore be confidently generalised as the true values of the population (Terre Blanche & Durheim, 1999 cited in Carr, 2005). Sekaran (2003) further states that at times this method of gathering data is the only viable as well as inexpensive and quickest method to gather data. The study being conducted amongst first year university students employed non-probability sampling, as participants were given a questionnaire for immediate completion, and based on the method of convenience.

The advantages of the above method of sampling are that it is quick and inexpensive means of data collection. It requires little effort on the researcher's part and it is easy to access, using people that are available (Sekaran, 2003). The disadvantages of this method are that it cannot be confidently generalised to the population. Only those conveniently available are selected to participate (Sekaran, 2003).

3.3. PROCEDURE

A cross-sectional research method, based on the survey approach was used. Four Hundred and Fifty (450) first year students, male and female students, coming from different schools, ranging from Public, Private and Model C schools were identified.

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A cover letter, attached to the questionnaire, explained the nature of the study, as well as assuring respondents of the confidentiality of any information provided. Respondents were also provided with detailed instructions as to how the questionnaires were to be completed. Self-administered questionnaires were returned within 2 – 4 weeks, upon completion thereof by the students in the commerce faculty. This method proved to be convenient and reliable as the questionnaires were accessible immediately.

Three hundred and three fully completed questionnaires were returned, thereby constituting a sixty seven percent return rate. This is much higher than the thirty percent anticipated in most research (Sekaran, 2003). Additionally, Sekaran (2003) postulates that sample sizes of between thirty and five hundred subjects are appropriate for most research.

3.4. BIOGRAPHICAL QUESTIONNAIRE

To obtain the relevant biographical and demographic information a self -developed questionnaire was administered to source the information. The following information namely; age, race, gender, language, social group, career counselling, status, urban vs rural, was included in the biographical questionnaire. The data with respect to these biographical questions was subsequently graphically represented and discussed in order to provide an indication of the most significant findings in respect to these variables.

3.5. CAREER DEVELOPMENT QUESTIONNAIRE (CDQ)

3.5.1. NATURE AND COMPOSITION OF THE CDQ

The CDQ was designed by Langley (1990) to ascertain the readiness of adolescents and young adults to make decisions on their careers. It is a measure of career maturity within the South African context. In this empirical study, the CDQ is discussed with reference to the theoretical basis for its development, rationale, scales, administration, scoring and interpretation, and reliability and validity.

The CDQ is based on the developmental approach which highlights that career development is a constant process during which the individual has to master different developmental tasks during uninterrupted stages of life before he or she can move to the next stage of

development (Langley et al., 1996). It is a South African tool that is also based on the incorporation of existing theories of career maturity (Langley, 1990). According to Langley et al. (1996), career maturity reflects the extent to which a person is able to master career development tasks that are appropriate to his or her particular stage of life.

Langley (1990) and Langley et al. (1996), after an analysis of former research on career development and career maturity, recognize the following common dimensions as important stages of development primary to career maturity:

- Obtaining information by the person on him- or herself, and converting this 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.
- Integration of self-knowledge and knowledge of the occupational world.
- Implementation of knowledge in career planning.

3.5.2. RELIABILITY OF THE CDQ

Sekaran (2003, p. 203) states that "the reliability of a measure is an indication of the stability and consistency with which the instrument measures the concept and helps to assess the "goodness" of a measure". Foxcroft and Roodt (2002, p.1) cited in Luddy (2005) provide

further support by stating that "the reliability of a measure refers to the consistency with which it measures whatever it measures". Various types of reliability methods could be utilized in determining how reliable a measure "good" really is which are test-retest, parallel form, split-half and inter-item consistency reliability (Sekaran, 2003).

Langley (1990) reports reliability coefficients of the CDQ that are higher than 0.90 for the total score and higher than 0.70 for the subscales among university students. The internal consistency reliability coefficients reported in the CDQ manual for high school students across the language groups (depicted in Table 4.9) range from 0.66 to 0.82 (Langley, 1990; Langley et al., 1996, see table 3.1).

Table 3.1: Reliability coefficients of the CDQ for language groups (Langley, 1990; Langley, 1996)

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	Scale English (N = 1843)	Afrikaans (N = 1712)	African Languages (N = 1795)
Self-information (SI)	0.76	0.78	0.71
Decision-Making (DM)	0.79	0.79	0.74
Career Information (CI)	0.82	0.82	0.66
Integration (I)	0.77	0.79	0.73
Career Planning (CP)	0.82	0.79	0.79

3.5.3. VALIDITY OF THE CDQ

The term "validity" refers to the "extent to which an empirical measure adequately reflects the real meaning of the concept under consideration (Babbie, 2004, p. 143). The validity of the CDQ will be discussed in terms of its content validity, inter-correlations of the scales, and construct validity.

3.5.3.1. CONTENT VALIDITY

Content validity refers to the extent to which a measure covers the range of meanings included within a concept (Babbie, 2004). According to the directions in the CDQ manual, content validity in this study was addressed using the following methods (Langley, 1990; Langley et al., 1996):

- The items were carefully examined for face validity. To support this procedure a literature study on career development and career maturity was conducted, and a framework of existing theories on these constructs was developed.
- Experts examined the wording of items. Each item was entered in the framework according to the underlying dimensions that had been identified by an expert committee.
- The item scale correlations were examined.

3.5.3.2. INTER-CORRELATIONS OF THE SCALES

According to Langley (1990) and Langley et al. (1996), the inter-correlations between the various scales of the CDQ were expected to be relatively high. The notion is that an individual who keeps a firm level of career maturity on one dimension would be expected to maintain a similar level on others (Langley, 1990; Langley et al., 1996). The results of the inter-correlations between the scales of the CDQ in Table 4.10 indicate interdependence between the scales (Langley, 1990).

Table 3.2: Inter-correlations of the scales of the CDQ (Langley et al., 1996)

	SI	DM	CI	Ι	CP
Self-information (SI)	1.00				
Decision-Making (DM)	0.60	1.00	Į.		
Career Information (CI)	0.50	0.59	1.00		
Integration (I) UNIV	0.53	0.59	0.58	1.00	
Career Planning (CP) WEST	0.45	0.53	0.65	0.54	1.00

Gordon and Meyer (2002) report a statistically significant correlation (p < 0.01) between the five scales of the CDQ among a sample of prospective university students.

Table 4.3: Correlations between the scales of the CDQ (Gordon & Meyer, 2002)

	SI	DM	CI	Ι	CP
Self-information (SI)	1.00	0.68	0.41	0.68	0.40
Decision-Making (DM)	0.68	1.00	0.54	0.71	0.56
Career Information (CI)	0.41	0.54	1.00	0.57	0.62
Integration (I)	0.68	0.71	0.57	1.00	0.63
Career Planning (CP)	0.40	0.53	0.62	0.53	1.00

3.5.3.3. CONSTRUCT VALIDITY

Construct validity is viewed as the degree to which a tool measures the theoretical construct or trait it is supposed to measure (Foxcroft & Roodt, 2005). Results of a confirmatory factor analysis conducted by De Bruin and Bernard-Phera (2002) provide support for the construct validity of the CDQ among previously disadvantaged youths in South Africa. This suggests that the theoretical construct of career maturity, which was developed in the United States of America (USA), retain their meaning for previously disadvantaged South African youth coming from a context that is very different from the USA (De Bruin & Bernard-Phera, 2002).

3.5.4. RATIONALE FOR USE OF THE CDQ

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This tool was chosen on the basis of it being an existing questionnaire which measures facets of career maturity of participants. Furthermore, the selection of the CDQ as the instrument of choice for this empirical study was based on its value as a career-maturity measuring instrument in the South African context. The CDQ indicates adequate psychometric properties which have been recognised in the racially diverse South African environment (De Bruin & Bernard-Phera, 2002). It is a tool that "appears to be an effective and pure indicator of the individual's readiness to make career decisions" (De Bruin & Bernard-Phera, 2002, p. 5). The CDQ has also been used widely in career development research and practice in the South African context.

3.6. STATISTICAL METHODS

3.6.1 DESCRIPTIVE STATISTICS

Descriptive statistics are statistics that describe the phenomena of interest. It involves the transformation of raw data into a form that would provide information to describe a set of factors in a situation. This is done through ordering and manipulation of raw data collected. The goal of descriptive statistics is to understand two characteristics of the relationship: its type and its strength (Sekaran & Bougie, 2010).

Descriptive statistics refer to the collection of methods for classifying and summarizing numerical data. The objective of descriptive statistics is to provide summary measures of the data contained in all the elements for a sample (Kinnear & Taylor, 1991). Descriptive analysis incorporates frequencies, measures of central tendency and measures of dispersion.

According to Sekaran and Bougie (2010), frequencies refer to the number of times various subcategories of a certain phenomenon occur, from which the percentage and the cumulative percentage of the occurrence of the subcategories can be easily calculated. The mean (or average) is a "measure of central tendency that offers a general picture of the data without unnecessarily inundating one with each of the observations in a data set" (Sekaran & Bougie 2010, p. 516). The mean or average is the sum of the observed values in the distribution divided by the total number of observations.

Apart from knowing the measures of central tendency, one would also like to know about the variability that exists in a set of observations. The measures of dispersion include the range, variance and standard deviation. "The variance is calculated by subtracting the mean from each of the observations in the data set, taking the square of this difference, and dividing the total of these by number of observations" (Sekaran & Bougie 2010, p. 317). The Standard Deviation offers an index of the spread of a distribution and is simply the square root of the variance.

3.6.2. Inferential Statistics

Inferential Statistics determine the relationship between two variables, differences in variable among different sub-groups, and how several independent variables might explain the dependent variable (Sekaran & Bougie, 2010).

3.6.2.1. Correlation

Correlation determines the relationship between any two variables among variables tapped in the study. A Pearson correlation matrix will prove this by indicating the direction, strength and significance of the bivariate relationships of all the variables in the study. Correlation tests whether there is a relationship between two variables and will indicate the nature, strength, and direction of the relationship using Pearson Product moment correlation coefficient. The correlation coefficient allows the researcher to quantify the strength of the

relationship between two variables. The correlation is derived by assessing the variations in one variable as another variable also varies (Sekaran & Bougie, 2010).

3.6.2.2. ANOVA

Whereas the t-test indicates whether or not there is a significant mean difference in a dependent variable between two groups, an analysis of variance [ANOVA] helps to examine the significant mean differences among more than two groups on an interval or ratio-scale dependent variable. "The results of ANOVA show whether or not the means of the various groups are significantly different from one another, as indicated by the F-statistic" (Sekaran & Bougie, 2010, p. 346).

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3.7. CONCLUSION

In this chapter, the research methodology was discussed. Attention was drawn to the sample selection, the measuring tools and the reason for using it, as well as the statistical methods.

CHAPTER 4

PRESENTATION OF RESULTS

4.1 Introduction

In this chapter, the results emanating from the statistical analysis are presented and salient features are discussed. The descriptive statistics computed for the study are presented first in an outline of the characteristics of the sample with regards to the variables included in the study. Thereafter, the analyses of the construct relevant to the study, that is, career maturity, is presented with the aid of inferential statistical procedures. The outcomes of the statistical analyses conducted to assess each of the hypotheses are sequentially presented.

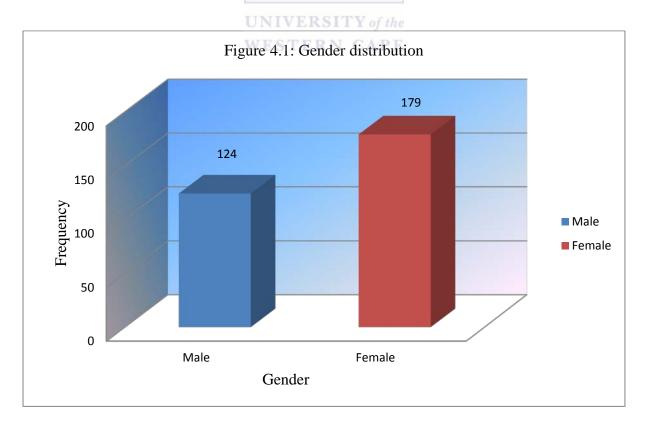
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The statistical programme used for the analysis of the data in order to obtain a feel for the data in this research undertaking, was the Statistical Package for the Social Sciences (SPSS), version 21. The descriptive statistics utilised are based on frequency tables and graphical illustrations to provide information on key demographic variables included in this study. This was achieved through summary statistics, which includes the mean and standard deviation, minimum and maximum values which were computed for each of the variables in the study.

4.2 RESULTS OF THE BIOGRAPHICAL QUESTIONNAIRE

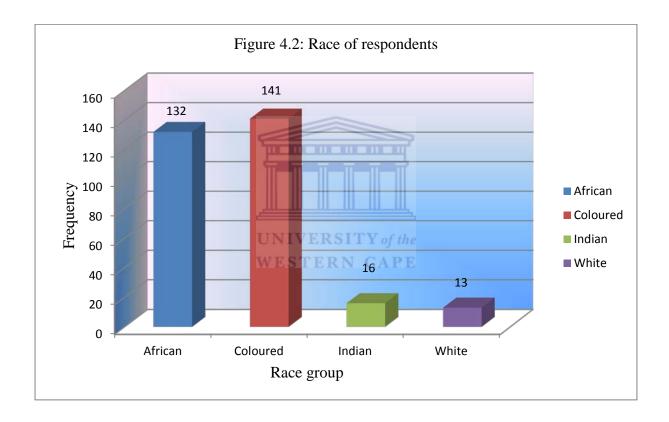
The descriptive statistics calculated for the sample are provided in the sections that follow. That is, the data pertaining to the variables included in the study, as collected by the three measuring instruments employed, are summarised by means of graphic representation and the calculation of descriptive measures. In this manner, the properties of the observed data clearly emerge and an overall picture thereof is obtained. Descriptive statistics, in the form of frequencies and percentages, are subsequently presented graphically for each of the biographical variables.

Figure 4.1 presents a graphical representation of the gender distribution of the selected sample.

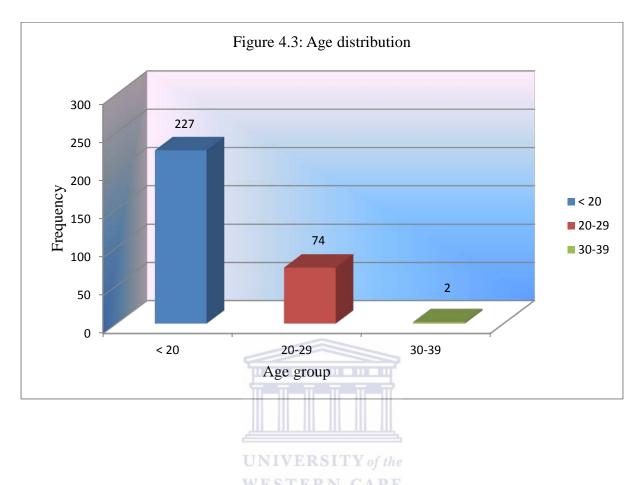


As can be seen from Figure 4.1, the majority of the respondents are female. More specifically, 59.1% (n = 179) of the subjects are female, while only 40.9% (n = 124) are male.

Figure 4.2 depicts the race distribution of the sample.



In terms of figure 4.2, it may be seen that 46.5% (n = 141) are Coloured, with a further 43.6% (n = 132) being African. While 5.3% of the respondents (n = 16) are Indian, only 4.3% (n = 13) are White.



The majority of the respondents were in the age group less than 20 (n = 227, that is 74.9%), followed by those in the age group 20-29 (n = 74, that is 24.4%) and respondents between the ages of 30-39 constituted only 0.7% of the sample (n = 2).

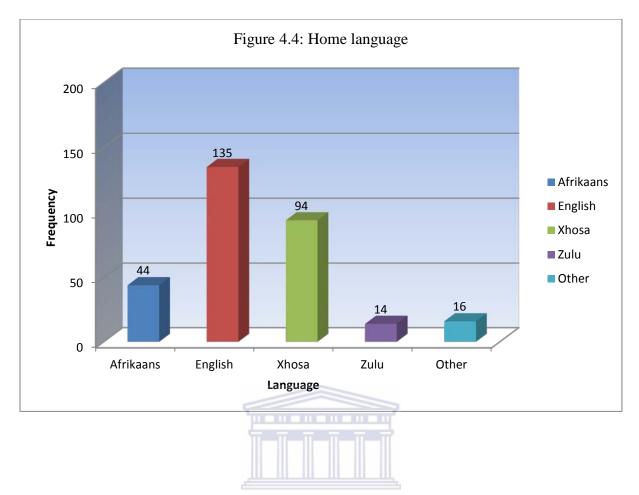
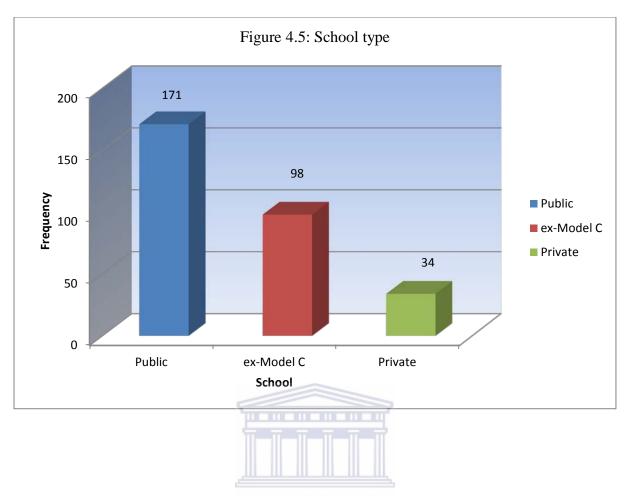
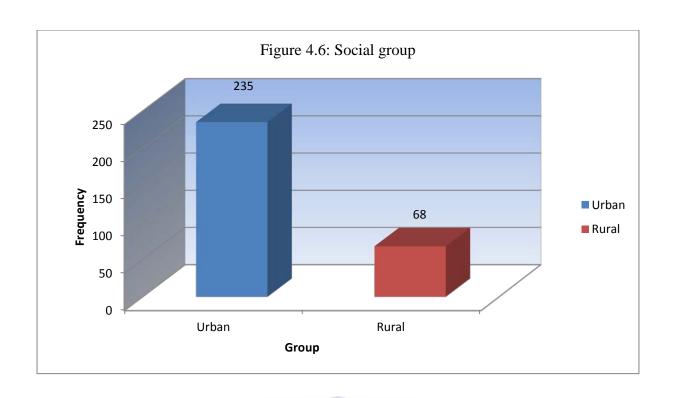


Figure 4.4 reveals that English was the dominant home language in that 44.6% of the respondents spoke English (n = 135). Xhosa was spoken by 31% of the respondents (n = 94), Afrikaans was spoken by 14.5% of the respondents (n = 44). Those speaking other languages accounted for 5.3% of the respondents, with a further 4.6% of the respondents speaking Zulu (n = 14).

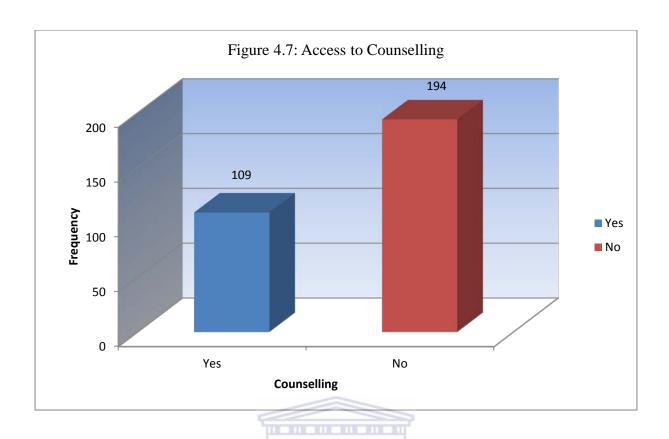


The majority of the respondents attended public schools and constituted 56.4% of the sample (n=171). While 32.3% of the participants attended ex Model C schools (n=98), 11.2% attended private schools (n=34).



Students who came from urban backgrounds represented 77.6% of the respondents, and 22.4% of the respondents were from rural areas (n = 68).

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The majority of the respondents (64%) had no access to counselling to assist them in making $\frac{1}{100}$ informed decisions (n = 194). The remaining 36% had made use of counselling (n = 109).

4.3 DESCRIPTIVE STATISTICS

The descriptive statistics calculated for the sample are provided in the sections that follow. That is, the data pertaining to the variables included in the study, as collected by the three measuring instruments employed, are summarised by means of graphic representation and the calculation of descriptive measures. In this manner, the properties of the observed data clearly emerge and an overall picture thereof is obtained.

 Table 4.1
 Descriptive Statistics for Career Development Questionnaire

Variable	N	Mean	Std. dev.
Self-Information	303	15.42	2.45
Decision-Making	303	13.56	4.32
Career Information	303	12.65	2.03
Integration of Self and Career	303	12.39	2.68
Career Planning	303	11.71	4.38

The mean score (Mean = 15.42) for self-information indicates that respondents generally had sufficient self-information which suggests that they had adequate self-knowledge. The standard deviation (2.45) shows that moderate variation in the responses that were obtained with respect to self-information.

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With respect to decision-making, the mean score (Mean = 13.56) indicates that respondents could improve in this area. The standard deviation (4.32) indicates that there was some variation in how this facet was experienced.

The mean score for career information indicates that subjects had adequate career knowledge. The standard deviation (2.03) shows slight differences in responses with respect to career information.

In terms of the integration of self and career information, the mean score (Mean = 12.39) reveals that respondents could improve this integration. The standard deviation (2.68) indicates that there were moderate variations in the responses obtained on this dimension.

For the career planning dimension, the mean score (Mean = 11.71) indicates that respondents could improve their capacity to plan a career. The standard deviation (4.38) indicates that there was some dissimilarity in the responses obtained.

4.4 INFERENTIAL STATISTICS

In the sections that follow the results of the inferential statistics employed in the study are presented. For the purposes of testing the stated research hypotheses, Pearson's Product Moment Correlation Coefficient was calculated, t-tests and analysis of variance (ANOVA) were performed. With the aid of these statistical techniques conclusion are drawn with regards to the population from which the sample was taken and decisions are made with respect to the research hypotheses.

Table 4.3: Correlation between facets of Career Maturity

	Career Maturity	p-level
Self-Information	.710**	.001
Decision-Making	.607**	.001
Career Information	.634**	.001
Integration of Self and Career Information	.504**	.001
Career Planning	.690**	.001

** p < 0.01

In order to ascertain whether there is a significant relationship between the dimensions of the Career Development Questionnaire and Career Maturity, the Pearson product moment correlation coefficient was computed.

The results indicate that there is a statistically significant, relationship between Career Maturity and Self-Information ($r=0.710,\,p<0.01$), Decision-Making ($r=0.607,\,p<0.01$), Career Information ($r=0.634,\,p<0.01$), Integration of self and career information ($r=0.504,\,p<0.01$) and Career Planning ($r=0.690,\,p<0.01$), respectively. Hence, the null hypothesis is rejected.

Table 4.4: ANOVA: Career Maturity by gender

		Sum of Squares	df	Mean Square	F	Sig.
	Between Groups	.811	1	.811	.190	.663
SITOTAL	Within Groups	1287.235	301	4.277		
	Total	1288.046	302			
	Between Groups	29.536	1	29.536	3.165	.076
DMTOTAL	Within Groups	2809.117	301	9.333		
	Total	2838.653	302			
	Between Groups	7.650	1	7.650	.738	.391
CITOTAL	Within Groups	3120.627	301	10.368		
	Total	3128.277	302			
	Between Groups	1.821	1	1.821	.244	.622
ISCTOTAL	Within Groups	2245.413	301	7.460		
	Total	2247.234	302			
	Between Groups	10.167	1	10.167	1.014	.315
CPTOTAL	Within Groups UNIV	3017.879	301	10.026		
	Total WEST	ER 3028.046	E 302			
	Between Groups	140.139	1	140.139	1.696	.194
GRANDTOT	Within Groups	24864.303	301	82.606		
	Total	25004.442	302			

Table 4.4 depicts the ANOVA with respect to career maturity based on the gender of respondents. The results indicate that there are no statistically significant differences in career maturity based on gender (p > 0.05). Hence, the null hypothesis is accepted.

Table 4.5: ANOVA: Career Maturity by Age

			Sum of Squares	df	Mean Square	F	Sig.
	Between Groups		1.401	2	.700	.163	.849
SITOTAL	Within Groups		1286.645	300	4.289		
	Total		1288.046	302			
	Between Groups		.212	2	.106	.011	.989
DMTOTAL	Within Groups		2838.442	300	9.461		
	Total		2838.653	302			
	Between Groups		7.936	2	3.968	.382	.683
CITOTAL	Within Groups		3120.341	300	10.401		
	Total		3128.277	302			
	Between Groups		12.166	2	6.083	.817	.443
ISCTOTAL	Within Groups		2235.068	300	7.450		
	Total		2247.234	302			
	Between Groups		6.781	2	3.390	.337	.714
CPTOTAL	Within Groups	UNIV	3021.265	300	10.071		
	Total	WEST	3028.046	302			
	Between Groups		8.832	2	4.416	.053	.948
GRANDTOT	Within Groups		24995.611	300	83.319		
	Total		25004.442	302			

Table 4.5 depicts the ANOVA with respect to career maturity based on the age of respondents. The results indicate that there are no statistically significant differences in career maturity based on age (p > 0.05). Hence, the null hypothesis is accepted.

Table 4.6: ANOVA: Career Maturity by Race

		Sum of	df	Mean	F	Sig.
		Squares		Square		
	Between Groups	37.149	4	9.287	2.213	.068
	Detween Groups	37.147		7.201	2.213	.000
SITOTAL	Within Groups	1250.897	298	4.198		
	Total	1288.046	302			
	Between Groups	96.884	4	24.221	2.633	.034
DMTOTAL	Within Groups	2741.770	298	9.201		
	Total	2838.653	302			
	Between Groups	61.684	4	15.421	1.499	.203
CITOTAL	Within Groups	3066.594	298	10.291		
	Total UNIVER		302			
	WESTE Between Groups	33.299	4	8.325	1.121	.347
ISCTOTAL	Within Groups	2213.936	298	7.429		
	Total	2247.234	302			
	Between Groups	110.074	4	27.518	2.810	.026
CPTOTAL	Within Groups	2917.973	298	9.792		
	Total	3028.046	302			
	Between Groups	873.490	4	218.373	2.697	.031
GRANDTOT	Within Groups	24130.952	298	80.976		
	Total	25004.442	302			

Table 4.6 depicts the ANOVA with respect to career maturity based on the race of respondents. The results indicate that there are statistically significant differences for decision-making, career planning and overall career maturity based on race. There were, however, no statistically significant differences in career maturity based on self-information, career information and integration of self and career information.

4.5. RELIABILITY ANALYSIS

Cronbach's Alpha is viewed as an index of reliability associated with the variation accounted for by the true score of the underlying construct (Cronbach, 2004). It is argued that Alpha coefficients range in value from 0 to 1 and may be used to describe the reliability of factors extracted from dichotomous and or multi-point formatted questionnaires or scales. However, there is no lower limit to the coefficient, however, the closer Cronbach's coefficient alpha is to 1, the greater the internal consistency of the items of the scale (Cronbach, 2004).

TABLE 4.7 Cronbach's Coefficient Alpha for the Career Development Questionnaire

Reliability Coefficient					
	No. of cases	Alpha	No. of items		
Career Development	303	0.779	100		
Questionnaire (CDQ)					

The scores obtained for the CDQ can be regarded as satisfactory in terms of the reliability of the instrument. George and Mallery (2003) argue that coefficients above 0.8 can be considered to be good indicators of the reliability of an instrument. Hence with the current study, this was exceeded, indicating a high degree of reliability (Nunnally & Bernstein, 1994).

4.6 CONCLUSION

This chapter has provided an overview of the most salient findings obtained based on empirical analysis of the data. Chapter five presents a discussion of the findings obtained and contextualises the research findings based on previous research on career maturity.

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CHAPTER 5

DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter provides a summary of the pertinent research findings deriving from the research. In order to contextualise the research, comparisons are drawn from available literature on career maturity amongst first year university students. In addition, this chapter provides conclusions that can be drawn from the research and offers suggestions for future research into career maturity amongst first year university students.

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5.2 Summary of Descriptive Statistics

Career maturity is dominant to a developmental approach to understanding career behaviour and contains an assessment of an individual's level of career progress in relation to his or her career – relevant development tasks (Crites, 1976). Therefore, the statistical procedures used consisted of both descriptive statistics and inferential statistics.

Descriptive statistics were deemed necessary to summarize the results and convey the findings effectively; while inferential statistics provided insight into the degree of certainty

with which predictions can be made regarding the same results in future research (Saslow, 2008).

There was a greater proportion of female respondents (n = 179) compared to male respondents (n = 124). The majority of the students were younger than 20 (n = 227), with African students comprising 132 of the respondents and Coloured students comprising of 141 respondents. The home language of respondents was primarily English (n = 135), followed by Xhosa (n = 94). The majority of the respondents had attended public schools (n = 171), with a further 98 having attended ex model-C schools, and 34 having attended private schools. Of the respondents, 235 had attended urban schools, with 68 having attended rural schools.

5.3 Summary of Inferential Statistics

Career maturity mirrors a developmental process in which individuals gradually gain the capacity to make sound career decisions. It has played a significant role in theory and research on the career development of individuals of all ages and in all walks of life.

Therefore, inferential statistics as the body of statistical computations were used in the present study in order to make certain much needed inferences from the finding based on the sample of three hundred and three first year male and female students in a commerce faculty

at a tertiary institution in the Western Cape. Thus, conclusions about this population from the study of the sample could be drawn.

5.3.1 Correlations between dimensions of Career Maturity

The results indicate that there is a statistically significant, relationship between Career Maturity and Self-Information ($r=0.710,\,p<0.01$), Decision-Making ($r=0.607,\,p<0.01$), Career Information ($r=0.634,\,p<0.01$), Integration of self and career information ($r=0.504,\,p<0.01$) and Career Planning ($r=0.690,\,p<0.01$), respectively.

5.3.2 Socio-demographic differences in Career Maturity

There was no statistically significant difference in career maturity based on gender and age (p > 0.05). However, there was a statistically significant difference in career maturity based on race. More specifically, these differences could be discerned from decision-making, career planning and overall career maturity amongst university students.

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In a study conducted by Mubiana (2012) to a group of honours psychology students, the scores were relatively high thus being in line with Geldenhuys and De Lange (2007) whose participants showed remarkable self-knowledge relating to their career identities including independence, confidence and purposefulness.

Studies indicate that career decision-making among students in modern society has not been well understood (Dzuiban, Tango & Hynes, 1994). There have been certain elements that have been identified as contributing to career decision-making among adolescents.

Bernhardt (1998) declares that incorporation of self- and career-knowledge possibly poses the greatest problem for students as it requires mastery of each type of knowledge separately prior to the integration.

Seabi's (2012) findings revealed that there are no significant difference between the boys and the girls in respect of the process of career decision making. This suggests that gender has no effect on the process that boys and girls go through when they select a career. This could be seen as flowing from the global transformation in women's rights and affirmative action in South Africa, especially in the workforce where men and women can contest for and occupy the same jobs.

In a study conducted by Themba et al. (2012), overall, no significant differences in career maturity were observed among the various age groups of the adult sample. The age groups in this study represented the exploration and establishment life stages of Super's (1990) career development theory (Themba et al., 2012). Moreover, a study conducted by Powell and Luzzo (1998) indicated results which seem to confirm the view that career maturity is not related to the age that is linked to individuals' particular life stage.

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. According to London (1983, cited in 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.

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 such as those that are indicated by the results of the present study. Furthermore, Van Reenen (2010) explains that early work with the Career Maturity Inventory (CMI) (Gushue & Whiston, 2006) showed an incremental increase in career maturity from Grade 9 to Grade 12 (Smits et al., 1996). Other research postulates that students in higher grades have higher career maturity scores than those in lower grades (Hirschi & Lage, 2008, cited in Van Reenen, 2010).

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Cramer (2000) notes that, unlike in the past, women are actively encouraged to consider stereotypically female as well as stereotypically male paths of career development. The way adolescent schooling is planned or fashioned in Western society emphasize the critical importance of career decision making during the Secondary School years. Knowing more about adolescents' career maturity and readiness for career planning can assist the government, policy makers, and especially curriculum developers to plan and measure the effect programmes designed to enhance career development.

Studies show that work-related goals of underprivileged students are poorly matched with the labour market trends which add to unemployment problems and in turn pose a colossal

problem for career development in South Africa (Stead & Watson, 1998). The primary reason that has been attributed to poor career pursuing behaviour (especially within underprivileged groups) is lack of access to pertinent information on careers and the labour market (Watson, Stead & de Jager, 1995).

As a result of lack of access to information, underprivileged students tend to participate less in career exploration and may sometimes have impractical goals. De la Rey (1999) claims that apartheid policies contributed to the general lack to resources and information as education and policies were planned to keep a racially, politically, socially, and economically separated structure.

According to Patton (2005, cited in Van Reenen, 2010), research findings generally UNIVERSITY of the demonstrate that females, across age and national context, have higher scores on career maturity measures than males. Nevertheless, in a study conducted by Fouad (1994) he found that females scored higher on only some career maturity subscales (Van Reenen, 2010). In a study conducted by Themba et al. (2012) the results appeared to substantiate the research finding that men and women differ significantly regarding their career maturity. The results of the study by Themba et al. (2012) indicated a number of significant differences between men and women regarding their level of career maturity. Furthermore, studies have determined that career maturity increases with age (Luzzo, 1999, cited in Van Reenen, 2010).

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 (Themba et al., 2012). According to Themba et al. (2012), these findings suggest that further educational studies contributed positively to increasing the female participants' career maturity.

More specifically, the women who had a diploma/degree level qualification appear to be better than their male counterparts at making effective career-related decisions and integrating relevant personal information with career-related information (Themba et al., 2012). These female participants also seem to have better-defined information about themselves that have informed their career decision making than those with only a matric-level qualification.

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Patton and Creed (2001, cited in Prideaux & Creed, 2001) also revealed a complex pattern of gender differences, which led these authors to conclude "boys may benefit from increased attention to career knowledge and girls from attention to the appropriateness of career planning" (p. 349). Additionally, the male participants in the study by Themba et al. (2012) who had a matric and post-matric level qualification seem significantly stronger than the females in career information. Research in this regard has shown that traditionally men tend be more strongly career-oriented than women (Sullivan & Crocitto 2007, cited in Themba et al., 2012).

Research by Spencer (1999, cited in Themba et al. 2012) has indicated that women 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 (2011), women tend to delay their career aspirations in favour of family responsibilities and their developmental patterns tend to be more individualised. Moreover, the findings of the study by Themba et al. (2012) suggest that as women advance in further educational studies their career maturity increases significantly.

Furthermore, ethnicity differences in career maturity have also been reported, such that youth from major ethnic groups display higher career maturity than do peers from minor ethnic groups (Nauta & Kahn, 2007, cited in Van Reenen, 2010). According to Van Reenen (2010), there may appear to be some inconsistency in results, it can however generally be stated that gender, age and ethnicity differences exist in varying degrees in relation to career maturity.

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5.4 Discussion on Career Maturity

Vondracek and Reitzle emphasised the practical utility of career maturity data, particularly for work with adolescents, a view echoed by Raskin (1998). In addition, Ohler and Levinson (1194) supported the relevance of assessing career maturity in preparation for developing and improving both counselling and education programs for adolescents.

Culture is an important concept in career decision making. Watson et al. (1995) states that career development may vary between whites and blacks in that traditional black culture may still be a part of everyday life for many individuals. This suggests that culture may have a strong influence on individuals' career decision making processes.

Stead (2004) suggests specifically with career theories, concepts such as self-concept, self-efficacies (which are central in career development) should be culturally determined, examined, modified accordingly because they do not have general meanings across cultures. For example, cross-cultural studies have shown that Asians have a habit to be more self-criticizing than Americans who tend to be more self-enhancing (Mau, 2000). This has been connected to the cultural contexts in which these individuals live that highlight certain aspects of individuals than others.

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Cole (as cited in Stead, 2007) speaks of the development of certain cultural representations that make up the meaning systems of certain cultures in terms of how they view careers and career decision making. Therefore, representations regulate what aspects of career decision-making are essential and must be given greater attention in the career decision-making process.

Claassen (as cited in Foxcroft, 1997) convincingly argues about the state of cultural sensitivity in the South African context by pointing out that "South Africa is not simply a multicultural society, it is a multicultural society in which acculturation of many kinds is taking place and in which a new nationhood is actively encouraged by political authorities.

The cultural distance between cultures and subcultures vary and cultural distances are not the same for various facets of behaviour. The meanings of behaviour differ and the values attached to certain kinds of behaviour differ as well" (p.232).

Therefore, development of theories should always be done in such a way that sensitivity to local contexts is given the utmost prominence. Although some of the western theories have been modified for the South African context, there is still a great requirement for the development of theories that are unique to South Africa. As much as Western theories have provided a very vital base and framework of career theories, more needs to be done for the progression of career and vocational research in South Africa. This research further attempt to contribute to discussions that call for contextually pertinent studies that capture local realities.

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Counselors working with high school students who believe that they have minimal control over the work-related events in their lives might expose such students to a variety of activities designed to alter their attributions for career decision making. On the basis of the research findings, counselors also need to be aware that all students-regardless of ethnic background, sex, or type of curriculum may profit from effective career development programs and activities.

Counselors are encouraged to participate in program evaluation on an continuous basis to determine the suitability of different interventions and techniques for increasing the career

maturity of and encouraging an optimistic attributional style among the varied student populations.

5.5 Limitations

The limitations to the study pertain to the fact that there was not an equivalent gender representation. Thus the results are a bit skewed in terms of gender. Another limitation to the study is that it was limited to one faculty. Should the study have been administered in other faculties, a better representation of the biographical variables, especially race groups.

Owing to the nature of non-probability sampling, the respondents may not be representative of the broad South African student population, and the results may not therefore be generalized to the entire population and should then have to be interpreted with caution. The reliance on self-report scales raises issues regarding misinterpretation by students which present additional potential limitations, as these measures cannot be objectively proved. Also, the sentence construction of the questionnaire prompts forced use, which does not enable the candidates to give any extra information. This limits the information gathered.

Further research is needed to determine the longer-term consequences of a lack of career maturity. As this study will not be examining undergraduate students over a period of time, its findings will be limited to that specific time period. 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 life is affected by low levels of career maturity, after university. Additionally, reliability and validity continuously pose potential problems.

5.6 Conclusions

Career maturity is vital for human existence. This study highlighted various factors that might affect career maturity. Various sub headings within career maturity was explored, such as self - knowledge, career knowledge, career decision-making, career planning, integration of self-information with career information. According to the study, students demonstrated an accurate level of career maturity. However, a detailed programme on career counselling need to be explored to aid students in this crucial process.

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Education remains the biggest impact 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. Research progressively focuses on persons' career readiness, career concerns and career adaptability as features of their career maturity in dealing with the challenges posed by the current world of work, which is turbulent and uncertain (Dybwad, 2008).

According to Prideaux & 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 also 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).

Prideaux & Creed (2001), maintain that 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. 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. Hence, adequate career guidance may have a great impact on the career maturity of students.

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Research has revealed that most students do not always look for information about job and career choices and options before they make their decisions. Therefore, students should be encouraged from a young age to participate in career information searching activities to enable them to make informed career decisions. For instance, psychology requires one to have a long term view at the profession because of its distinctive career path. Stead and Watson (2006) argue that research in South Africa shows that school leavers often have inadequate career knowledge and that this problem influences on effective career decision making.

As stated by Mkhabela (as cited in Watson et al., 1995) black young people had insufficient career knowledge because most of their information was derived from hearsay. This can be attributed to the lack of career guidance that is available in formal educational systems (Stead & Watson, 1998).

5.7 Recommendations for further research

Research conducted in South Africa demonstrates that adolescents are voicing a greater need of more and better information to assist them in decision making on education and employment issues (Stead & Watson, 2006). Therefore, there is a pressing need for more and comprehensive career guidance in schools. According to Mbetse (2002), career fallacy and lack of career knowledge are fuelled by the media industry such as television and film which further maintain and strengthen the misconceptions that are held mostly by adolescents.

According to Crosby (2005), people tend to make assumptions about an occupation's working conditions, job duties, educational requirements, and employment prospects. Some common fables held by individuals include the fact that people think that there is only one career choice for them and that until they find it they will not be satisfied or successful; another fable refer to the fact that individuals think that they must be specialists in their field in order to be successful (Stead & Watson, 1993).

There is a need for interventions to correct the fallacies that adolescents have for instance through the use of career counselling programmes which should be aimed at institutional levels as well as communal levels (Mbetse, 2002). Stead and Watson (2006) state that career information services play a key role in an individual's career development during various stages of career decision making.

Furthermore, foundations of career knowledge range from parents and other family members, friends and peers to career teachers and career advisers. Hargrove, Inman and Crane (2005) postulates that the ability for adolescents to explore and consider career options and thus make suitable career decisions was directly influenced by the quality of family interactions, boundaries, and emotional interdependence. Barker and Kellen (1998) states that "as a general rule, the most successful people in life are those who have the best information" (p.1). Therefore, career exploration should be encouraged early in schools.

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Instead of assuming that career maturity will naturally increase as students move through their junior, and senior years, counselors might want to design methodical interventions that can be incorporated into curricular experiences in hopes of providing students with various prospects to develop more mature career decision-making attitudes and competencies. Intermittent assessment of students' attitudes toward career decision making and their knowledge of career decision-making values would allow counselors to define program usefulness and consider alternative strategies for increasing students' career maturity.

To ensure the accuracy of data received and to enable generalizability the sample size should be increased and determined using stratified sampling methods to reduce sampling error (Sekaran, 2001). The sample size for the study should be bigger in order to draw appropriate conclusions for the study and to be able to generalise the study to the entire population.

In using this instrument for data collection, open-ended questions could be added to the questionnaire to allow the respondents to provide more insight into topics that are vague and inadequate.



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