

**INVESTIGATING GRADUATE EMPLOYABILITY AND PSYCHOLOGICAL
CAREER RESOURCES**

By

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DECLARATION

I, Nicola Symington, declare that ***Investigating Graduate Employability and Psychological Career Resources*** is my own, original work. Furthermore, I declare that all sources used and quoted have been given due acknowledgement by means of complete references.

Nicola Symington

Date

ABSTRACT

INVESTIGATING GRADUATE EMPLOYABILITY AND PSYCHOLOGICAL CAREER RESOURCES

University graduates stand at the dawn of their careers, seeking meaningful employment in a labour market that is characterised by volatile change and globalisation. This new world of work requires flexibility, versatility, and creativity – skills not traditionally required of an employee. Graduates today are required to develop a skills-set that enables pro-active career behaviour and, furthermore, aid the employer to utilise such abilities as business solutions. There is a lack of consensual scientific knowledge available on employability, despite the rise in its importance to the 21st century employer and graduate employee. This is especially true for the South African context. Accordingly, the main aim of this study was to investigate the employability and psychological career resources of graduate students to identify the strengths and development areas of the sample. A self-administered questionnaire consisting of standardised instruments, specifically the Psychological Career Resources Inventory (PCRI, developed by Coetzee, 2008) and the Graduate Employability Measure (GEM, developed by Bezuidenhout, 2011), was distributed to a random sample of 113 final-year students from the Faculty of Economic and Management Science of the University of Pretoria. The results indicate a strong employability profile with few clear-cut development areas. Students believe themselves to have high levels of *career resilience* (mean = 4.94; SD 0.75), whilst also having a strong inclination to the *openness to change* dimension (mean = 4.86; SD = 0.59), pointing to an overall all adaptable orientation to their careers. In terms of the psychological career resources profile, the sample presented with high scores on all dimensions namely: career preferences, career values, career purpose, career harmonisers, and career drivers. This prevailing positive perception regarding psychological career resources can be seen as balanced, and thus facilitates adaptive, proactive career behaviour, which, in turn, influences general employability. This result is validated by the high mean scores on all employability dimensions. It is also evident that there are no significant

differences to be observed between men and women across all dimensions measured, indicating that men and women are equally likely to be proactively involved in their career-management in order to develop the skills required to be seen as employable.

Furthermore, there is evidence of significant relationships between the majority of psychological career resources dimensions and those of the graduate employability dimensions. These results are expected to add valuable insights to the field of career management literature and human resources practices alike, which, in turn, will inform graduates regarding their prospects.

KEYWORDS: Employability, graduate employability, psychological career resources, career values, career preferences, career enablers, career drivers, career harmonisers, adaptability.

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CHAPTER 1: SCIENTIFIC OVERVIEW OF THE STUDY

1.1 BACKGROUND AND MOTIVATION FOR THE STUDY

The economic climate of today demands flexibility, versatility, creativity, and adaptability (Van der Heijden, 2002) – skills not traditionally required for a successful career or even gaining the competitive edge. However, policy-makers are increasingly focusing on graduate employability as a key indicator in higher education decision-making (Dias de Oliveira & Castro Guimaraes, 2010; Cranmer, 2006). This is true for countries such as Britain, China, Germany, Italy, France, America, Portugal and, more recently, South Africa. Governments and employers alike are seemingly realising the importance of the combined knowledge, skills, and endeavours of individuals in building a sustainable competitive advantage (Brown, Hesketh & Williams, 2003; McQuiad & Lindsay, 2005; Hartshorn & Sear, 2005).

Employability has become an important construct and has been present since the 1900s. As can be expected, there are those sceptics who argue that employability is no more than "the latest buzz-word" (Clarke, 2008; Verhaar & Smulders, 1999). Yet, if the labour market has moved away from life-long employment and job security is no longer a given, then employees must consider alternative ways to manage their careers and ensure on-going employment. Employability brings with it a shift in responsibility for career development, making the employee ultimately responsible for the investment and continuous development of his/her career. As such, each person becomes increasingly aware of the importance of learning and the role of the higher education institution (HEI) in this regard (Van der Heijden, Boon, Van der Klink & Meijs, 2009). From these institutions come the future talent of a nation, and many argue that it is the breeding ground for employability skills. Employers are increasingly turning to HEIs in hope of securing graduate students who are well-rounded individuals – knowledgeable individuals with all the attributes required to excel in a position/environment from the onset of employment (Little, 2011). Indeed,

Harvey (2005, p. 13), in his review on employability, notes that "...it is not just about getting a job, it's about developing...about learning, and the emphasis is less on 'employ' and more on 'ability.' "

Employability resembles a steady move away from bureaucratic career structures and life-long employment and, to some extent, a shift away from the traditional psychological contract. The debate around what constitutes employability is not limited to its definition or scope, but also relates to those influential factors that are perhaps not as well defined in current knowledge. Such influential factors often have various names and may be defined somewhat differently by authors. However, a concept coined by Coetzee (2008), that of "psychological career resources," brings with it a refreshing view on those main contributors to employability. Psychological career resources, henceforth referred to as PCRs, are those skills, attributes, and abilities that ultimately contribute to general employability (Coetzee & Bergh, 2009). Consisting of various career preferences, values, motivators, and drivers, it can be said that the term PCRs is all-encompassing when investigating the determinants or influences on employability. In the 21st century, people seem to be regarded as competency traders, meaning that employability depends on the knowledge, transferable skills, experience, and unique characteristics that are brought to the table. Ultimately then, employability refers not only to the ability to secure and maintain employment or move between sectors; it also refers to the continued ability to create work by means of occupation-specific skills and career meta-competencies. It is these career meta-competencies that facilitate the acquisition of more specific skills, which then promote overall employability and expertise (Briscoe & Hall, 1999; Hall & Chandler, 2005).

Despite the lack of agreement on the meaning and contributing factors of employability (Brown et al., 2003), it enjoys wide-spread acceptance as a suitable alternative to the concept of employment (Clarke, 2008). Van der Heijden also notes the lack of scientific knowledge available on the topic (cited in Hartsthorn & Sear, 2005) that extends to the entire employed population, including graduate students. As such, an investigation into the employability and PCRs of graduate students is warranted. The study seeks to understand

graduate student employability within a South African Higher Education Institution, accompanied by an in-depth look at the PCRs of graduates.

1.2 PROBLEM STATEMENT

The 21st century world of work can be described as a volatile, high-speed, ever-changing environment that places high levels of pressure on those functioning within this context (Fugate & Kinicki, 2008). It is generally accepted that this era poses difficulties to both employer and employee that have not previously been present, or has intensified those pressures already experienced. The employer, or organisation, now seeks individuals that are adaptable, creative, innovative, flexible, and keen problem solvers, to mention but a few attributes (Graduate Market Trends [GMT], 2011). The individual can no longer depend only on the relevance of degree when it comes to securing employment (Yorke & Knight, 2006). It is with some dismay that graduate students now realise that, in order to be seen as employable, the bar has been raised, so to speak. The question, however, remains as to what specifically these newly defined requirements and expectations are, and how a student would ensure that he/she possesses such qualities.

Due to the fact that 2009 and, to a lesser extent, 2010, were particularly difficult in terms of economic circumstances, South Africa's labour market is plagued by a particularly high unemployment rate. During the second quarter of 2010, employment contracted by 0,5% or 61 000 jobs (Quarterly labour force survey, 27 July 2010). Despite the economic situation, the war for talent is still raging. Graduate students are in the early stages of career planning and development, where securing any relevant position is at the top of the priority list. As such, both graduate students and the unemployed population must take note of the critically important employability skills that have become the differentiator in the semi-skilled and skilled labour market.

Clarke and Patrickson (2008) indicate that organisations today are driven by the ability to be flexible and adaptable, thus eliminating the promise of job-security. Pascale (1997) points out that individuals need to be self-starters and entrepreneurs in essence, with Clarke (2008) placing emphasis on an attitude with the focus on continuous learning. Employability research includes a number of lists that indicate those skills considered important or desired by employers. Again, there is little consensus among these lists, which may be attributed to the varying requirements of industries and jobs across the world. However, as significant as the differences may be, these lists are all based on the consensus that people must possess employability skills to remain relevant in the employment market.

The present study will accordingly investigate employability and psychological career resources of graduate students in the South African Higher Education Institution context, and will contribute to an understanding of the current status of these inter-linked concepts. The specific application of this investigation in the student population will aid in a greater understanding for both Higher Education Institutions (HEIs) and employers in the South African labour market. The study will add a great deal to scientific knowledge, given that there is such widespread debate on the topic at present (Hartsthorn & Sear, 2005, Clarke & Patrickson, 2008). More specifically, the fields of organisational and career psychology will benefit from this new-found knowledge, as career development as a field will be better informed. This additional knowledge may prove useful in achieving a more coherent picture of graduate employability in South Africa. Finally, the results of this study cannot be generalised to all populations, but the information may be useful in career development as well as recruitment and selection. The research questions can be formulated as stipulated in the following section.

1.2.1 Research questions with regard to the literature review

Research question one: What is graduate employability?

Research questions two: What are the psychological career resources of a graduate student, and how do these influence employability?

Research question three: To what extent are graduate students employable?

Research question four: What evidence is there of a relationship between employability and psychological career resources?

1.2.2 Research questions with regard to the empirical study

Research question one: What are the employability and psychological career resources profiles of the students?

Research question two: Based on the employability profile, what are the strengths of the students?

Research question three: Based on the employability profile, what are the development areas of the students?

Research questions four: What relationship, if any, exists between dimensions of psychological career resources and employability?

Research question five: How do the gender groups differ regarding the employability and psychological career resources dimensions?

1.3 OBJECTIVES/AIMS OF THE RESEARCH

Given the nature of the stated research problem, the aims of the study are as follows:

1.3.2 Main Aim

The general aim of the study is to investigate the employability and psychological career resources of final year students in the Faculty of Economic and Management Sciences of the University of Pretoria.

The research further endeavours to investigate broad trends on how the gender groups differ in terms of the various employability and PCR dimensions.

A secondary aim of the study is to determine those PCRs that influence the employability of students, using the Psychological Career Resources Inventory (PCRI) developed by Coetzee (2008).

1.3.2 Specific aims

The following specific aims relate to the literature review and the empirical study:

Literature review:

- To conceptualise the construct *employability* from a theoretical perspective.
- To conceptualise the construct *psychological career resources* from a theoretical perspective.

Empirical study:

- To investigate the most prominent PCR and employability characteristics of students.
- To investigate any relationships between PCRs and employability.
- To investigate differences in PCRs and graduate employability according to gender.
- To make recommendations for further research in the field of human resource management.

1.4 STATEMENT OF SIGNIFICANCE

Employability is generally portrayed as the ability to gain meaningful employment (Clarke, 2008). Whilst this is a rather one-dimensional view, it is also core to the concept. When one considers the general outline of an advertisement for a job vacancy, it consist of those job-specific requirements such as education and experience needed, but goes one step further in giving an outline of the competencies or attributes inherent to the position. Yorke and Knight (2006) indicate in their research that having the relevant degree is merely a means by which to compete for a job, but that employers choose between graduates based on "something more complex." As organisations have changed as a result of downsizing, restructuring, and outsourcing, the emphasis on flexibility and similar employability skills has increased (Clarke, 2008). It is argued that the source of organisational competitiveness now lies in those advanced skills that are encompassed by employability. Clarke argues that by improving employability skills across a nation, a possible solution is presented to the growing skills gap, or what is often referred to as the war for talent. Clarke also mentions the decline in birth rates in countries such as Australia, which means that supply and demand for labour plays a great role in strategic planning. Securing the required skills to achieve business objectives and a competitive edge has become critical. The study will thus aid in identifying the current graduate employability and PCRs profiles in South Africa.

The current misconceptions regarding employability and the accompanying lack of scientific knowledge (Hartshorn & Sear, 2005) available further add to the significance of the study. Higher education institutions (HEIs) have been identified in many studies (Yorke & Knight, 2006; Harvey, 2005; Bhanugopan & Fish, 2009) as key contributors to the development of knowledge and employability skills. As such, this study will take an informed look at the state of student employability in the South African context. This information may be used to improve existing programmes or develop new programmes giving graduates a greater chance at success in an unsympathetic labour market upon graduation. The knowledge will also enable graduates to accurately assess the situation and those skills required to secure employment in the current working environment.

1.5 RESEARCH DESIGN

According to Bergh and Theron (2003, p. 21), the research design denotes a “specific, purposeful, and coherent strategic plan to execute a particular research project in order to render the research findings relevant and valid.” In other words, it can be said that the research design is the blueprint or plan for the proposed research, while the research methods describe the steps of the research process and specific resources to be used in the study. The research design to be followed is outlined below.

1.5.1 Exploratory research

As the name suggests, an exploratory research approach is taken when the researcher wants to investigate a new interest or when relatively little knowledge currently exists on the topic of interest (Saunders, Lewis & Thornhill, 2000). The purpose of exploratory research generally is to investigate the feasibility of a more extensive study, and also to satisfy the curiosity of the researcher. The researcher embarks on a journey of discovery, so to speak.

There is limited available knowledge on the potential relationship between graduate employability and psychological career resources, thus making this method of inquiry appropriate. The intent is to gather information that will allow for a broader study to be conducted in order to make recommendations to both graduates and employers regarding expectations and how to improve overall employability in the South African context.

1.5.2 Validity

Validity in research relates to the accuracy and credibility of the overall research study (Leedy & Ormrod, 2005). Research is undertaken to add to the existing knowledge base; however, the value of such a contribution can only be seen as relevant if it meets the requirements of validity.

Validity should, firstly, answer the question of whether the data allows for meaningful conclusions to be drawn and, secondly, whether observations from the study can be generalized to populations outside of the research context. These two questions refer to what is known as internal and external validity (Leedy & Ormrod, 2005), and are considered to be interrelated dimensions of overall validity.

Internal validity refers to the extent to which the design and results yielded by the study allow conclusions to be drawn that are accurate about any cause-effect relationships within the data. External validity is the extent to which the conclusions drawn can be generalised to those contexts not covered in the research project (Leedy & Ormrod, 2005).

Validity of the research project at hand will be ensured by means of a comprehensive overview of the most recently published literature that relates to employability and

psychological career resources in order to answer the research questions set out in the current study. The researcher will also include more conventional and existing views, given the importance of such material in the conceptualisation of the constructs being investigated. This information will be structured in a rational and organised manner to ensure a proper understanding of all constructs and related concepts, to enable the drawing of well-informed conclusions from the literature.

To ensure the validity of the current empirical study, the researcher will use measuring instruments that are considered psychometrically sound. Furthermore, these instruments will be scrutinized in terms of criterion-related validity (whether they measure what they are supposed to), content validity, and construct validity (the degree to which they measure the intended theoretical constructs) (Leedy & Ormrod, 2005).

1.5.3 Reliability

Reliability pertains to the entire research process, that is, to the overall design, sampling, data collection methods, and the data analysis procedure. Reliability refers to the likelihood that the same results will be achieved, should the measurement process be applied repeatedly (Babbie & Mouton, 2001). A researcher makes every effort to ensure that the research is meaningful and replicable in order to make a valuable contribution to the existing body of knowledge. The reliability of the measuring instruments is discussed in greater detail in Chapter 3.

1.5.4 Unit of Analysis

Bless, Higson-Smith, and Kagee (2006) describe the unit of analysis as the person (or object) from whom the data will be collected. The sample then takes on the meaning of

being a representation of the greater population (Bless et al., 2006), with the individuals within the sample being referred to as the "units of analysis."

1.5.5 Delimitations

The research will be limited to third-year and honours students of the Faculty of Economic and Management Sciences of the University of Pretoria.

Much has been done to define and explain employability in the literature, yet there is a lack of consensus pertaining to the nature and relevance of this concept. Many authors argue for its relevance, with countless more stating that it is merely "the latest buzz-word" (Verhaar & Smulders, 1999; Clarke, 2008). Given this lack of consensus, the current research study will present a broad picture regarding employability, with greater attention paid to the skills aspect thereof. Furthermore, the study will focus on the supply-side of employability as it relates to an individual level, with subsequent emphasis placed on the skills required to be employable. The scope of the study does not allow for consideration of economic factors and demand for labour in great depth, albeit it an important consideration in career development and planning.

1.6 RESEARCH METHODOLOGY

The research methodology is briefly described here, with a more detailed discussion provided in Chapter 3.

The study is exploratory in nature. This approach is appropriate if a researcher is to investigate a new interest, given the lack of scientifically concrete knowledge on a topic

(Saunders et al., 2000; Brown et al., 2003). A population of 255 third-year and honours students from the University of Pretoria in the Faculty of Economic and Management Sciences was selected, where after a sample of 113 was randomly selected, which is considered representative of the greater population. The data was collected in group format by means of a self-administered questionnaire (The PCRI and Graduate Employability Measure), both developed for the South African context.

The statistical measures relevant to this study include descriptive statistics (frequency tables, means and Cronbach alpha coefficients), common statistics (Pearson's correlation test) and inferential statistics (multiple regression analysis), which were performed by means of the SAS statistical software package (Version 1). All results were presented in the form of tables and graphs in order to display an accurate picture of the results. The results were used to draw conclusions and make recommendations. The shortcomings of the study will also be identified and recommendations will be made for dealing with this in possible future research relating to employability and psychological career resources.

1.7 DEFINITION OF KEY TERMS

The key terms to be used in this study include are described below. Further definitions will be provided throughout the study in order to build a comprehensive understanding of all relevant constructs.

Psychological Career resources

Psychological career resources (referred to as PCRs) are defined as “the set of career-related preferences, values, attitudes, abilities and attributes that lead to self empowering, proactive career behaviour that promotes general employability” (Coetzee, 2008, p. 10).

Employability

Employability refers to those proactive career behaviours and abilities that allow people to obtain or generate work through optimal use of both occupation-related and career meta-competencies (Coetzee & Esterhuizen, 2010).

Graduate Student

The term refers to any student at university level in the final academic year of the specific course.

Skills / Competencies / Attributes

These terms are used interchangeably throughout the literature to represent any particular ability that contributes to employability.

1.8 CHAPTER LAYOUT

The study at hand is based on the available literature regarding employability and psychological career resources. As such, the study will be set out in the following manner:

Chapter 2: Literature Review

In this chapter, the concepts of employability and PCRs were formulated, and include a comprehensive discussion of graduate employability. The discussion will include the skills expected and those lacking in graduates, whilst showing the breakdown of global trends in employability profiles.

Chapter 3: Research Methodology

This chapter outlines the research methodology used to gather the data for the study. Included in this chapter are the psychometric properties of the measuring instruments utilised in the data gathering process and the methods used in the analysis of the data.

Chapter 4: Research Results

The results obtained from the data collection are analysed and presented by means of descriptive, common, and inferential statistics in this chapter. Results are presented in graphical and tabular form.

Chapter 5: Conclusions, limitations, and recommendations

This chapter consists of a discussion of the results, recommendations, and conclusions of the study. It provides an integration of the data and the literature, and makes recommendations for the field of human resource management and industrial psychology. Lastly, this chapter makes suggestions for possible future research.

1.9 CONCLUSION

This chapter provided an introduction to the study at hand, giving an overview of the literature, research problem, and importance and benefits of the study. Specific research questions and objectives were highlighted, including the methodology to be used in conducting the research. Further, the limitations of the study were briefly discussed. The layout of the study was provided so as to guide the reader. The following chapter provides a detailed literature review of the constructs relevant to this study.

CHAPTER 2: LITERATURE REVIEW

2.1 INTRODUCTION

It is widely acknowledged that employers today no longer hire employees on the basis of education status only (Stewart & Knowles, 1999; Archer & Davison, 2008, Nilsson, 2010). Although a desired aspect for any potential employee, given today's world of work that is characterised by fast paced change, technological advancement and globalisation (Coetzee & Bergh, 2009), the employer seeks much more than a degree to ensure the organisation's competitive edge. However, general employability of students and, moreover, the availability of job-ready graduates have been the focus of the labour market and government policy-makers for the last decade (Brown et al., 2003).

This chapter takes an in-depth look at the available literature that relates to employability, psychological career resources and, more specifically, to the employability of graduates. Available skills, models, and important influential factors will also be taken into consideration. Furthermore, a summary of the most pertinent studies relating to graduate employability is presented to build a global view of what constitutes an employable graduate. Finally, the interaction and influence of PCRs on graduate employability are discussed, allowing the researcher to draw meaningful conclusions from the data obtained in the study.

2.2 ORIGIN AND DEVELOPMENT

In the following section, a discussion of the origin and development of employability and PCRs will be offered. A definition of each construct gives an idea of the vast number of

differences between prior research studies conducted; however, it provides a much broader understanding of the origin and development of employability and PCRs.

2.2.1 Definitions

The following definitions of employability emanated from literature:

- “Employability is about being capable of getting and keeping fulfilling work. More comprehensively employability is the capability to move self-sufficiently within the labour market to realise potential through sustainable employment” (Hillage & Pollard, 1998, p.1);
- Scholarios, Van Der Schoot, and Van Der Heijden (2005, p. 1) define employability as “...the extent to which employees have skills which the market and employers regard as attractive”;
- Employability is “The continuous fulfilling, acquiring or creating of work through the optimal use of competencies” (Van der Heijde & Van der Heijden, 2006, p. 453);
- It is “... the relative chances of acquiring and maintaining different kinds of employment” (Brown et al., 2003, p.111);
- Harvey and Knight in 2003 (cited in Beaven & Wright, 2006, p.17) state that “employability is about graduates being ready to secure work of a suitable level within a reasonable time of graduation and being equipped to keep the post and develop within their chosen career”; and
- Fugate, Kinicki, and Ashforth define employability as “...a psycho-social construct that embodies individual characteristics that foster adaptive cognition, behaviour, and affect, and enhance the individual-work interface” (2004, p. 15).

The above definitions indicate that employability is a broad construct that relates to skills, the attainment of a job, and the ability to move between jobs. It relates to pro-active and responsible behaviour on the part of the individual employee. Barnett (Nilsson, 2010)

argues that it is becoming increasingly difficult to determine which competences will secure and retain a position. As such, managing one's employability is also becoming more difficult. This chapter discusses relevant models of employability that touch on the subject of managing one's employability, but it is important to note that the definition of Fugate et al. (2004) has been used as a base definition pertinent to the Graduate Employability Model (Bezuidenhout, 2011), which will be discussed in section 2.3.4.3 of this chapter.

Psychological career resources is a relatively new construct in terms of its application and specific name, but it can be seen as the embodiment of all skills/competences and individual factors that relate to careers in general. Coetzee and Esterhuizen (2010) define PCRs as a set of **career-related preferences, values, attitudes, abilities, and attributes that lead to self empowering, proactive career behaviour that promotes general employability**. In addition to this, PCRs consist of those career preferences, career values, attributes, skills, and attitudes that are linked to the individual experience of intrinsic/subjective career success (Gunz & Heslin, 2005). The essence of PCRs is, however, that these inherent resources (meta-competencies) ultimately equip the individual to adapt to the changing world of work and attain success within a particular socio-cultural context (Coetzee, 2008).

These definitions offer a starting point for understanding the concept of employability and PCRs. Consideration will now be given to the greater body of knowledge, including the origins and development, as well as relevant models.

2.2.2 Employability

The literature on employability is vast, generally portraying the concept as easily understood yet intricate in nature (Hartshorn & Sear, 2005), with little consensus on its true meaning.

From the definitions presented in the previous section, it is evident that employability can be broken up into four distinct parts. Firstly, it is the ability to secure employment. Secondly, it is the ability to maintain this employment. Thirdly, it includes the ability to move between various jobs and roles within the organisation and, finally, it is the ability to secure a new role with an alternative organisation, if need be. The definition offered by Fugate et al. (2004) shifts the focus to the psychological aspects that are important to excel in the work place. Research on the concept has progressed in recent times, portraying employability as a person-centred construct.

The most widely accepted definition of employability when considering the graduate student is offered by Yorke and Knight (2004, p. 5), stating that employability is “a set of achievements, understandings and personal attributes that make individuals more likely to gain employment and be successful in their chosen occupations.” Yorke and Knight (2003, p. 3) also describe employability as a “blend of understanding, skilful practices, efficacy beliefs (or legitimate self-confidence) and reflectiveness (or metacognition).”

The concept of employability has been popularized in recent years; however, its introduction can be traced to the 1900s, the origin and development of which will be discussed below. Following this introduction to employability, the various models that influence our understanding will be discussed, bringing the focus back to graduate employability and the possible relationship to PCRs.

2.2.2.1 Origin and Development of Employability

Employability as construct has enjoyed much international attention over the past decade (de Grip et al., 2004; McQuaid, Green & Danson, 2005), yet the topic made its appearance in the scientific arena as early as 1909. Indeed, Mansfield (2001) notes that Sir William Beveridge first noted the concept of employability in a book called *Unemployment: A Problem of Industry*. Employability has, however, changed considerably over the years, which is mainly attributable to changing labour market conditions and government policies. The changes have been set out by Gazier (2001) who proposes that employability has moved through the seven operational versions/stages set out below.

2.2.2.2 Dichotomic employability

The concept of dichotomic employability was developed in the United States of America and the United Kingdom, where it was distinguished between those individuals that were "unemployable," such as the elderly, and those able-bodied individuals actively searching for employment (de Grip et al., 2004). The reasoning behind this approach was to distinguish between those individuals in need of relief and those that could be employed. According to McGrath (2009), this can be likened to the long-standing Anglo-Saxon dichotomy. The system works to distinguish the "deserving poor" from the "undeserving poor," with the former entitled to charity and the latter in need of reform. The criticism of this approach is vast as individuals are classified either as employable or unemployable, with no other variations on the topic or consideration of the labour market context.

2.2.2.3 Socio-medical employability

This approach dates back to the mid-1950s, with the focus of the labour market shifting toward the underprivileged with reference to medical and social conditions (de Grip et al.,

2004). The reason why much attention was placed on these underprivileged or "handicapped" individuals was as a result of the post-war lack of skilled workers. The outcome of this approach brought with it a measure whereby individuals were classified as more or less employable, with the outcome resulting in steps being taken to improve overall employability or compensate the individual who is seen as "less employable."

2.2.2.4 Manpower policy employability

The next stage or operational phase of employability came about during the 1950s and 1960s, and was relevant mainly in the USA (McGrath, 2009). The focus of this approach shifted to the potential of an individual to become employed, given that employment was one of the main priorities of the government of the day. The manpower policy is, however, an extension of the socio-medical approach, whereby the focus is on the gap between employment needs and employee characteristics such as individual's knowledge, attitudes, and skills (McGrath) pertaining to a broader group of disadvantaged individuals. Such disadvantages included social, physical, mobility (e.g., does one have a driver's licence/police record) and presentation (e.g., whether one can visibly be identified as a drug user) (Gazier, 2001). The aim was to assist people in their search for employment and placement by means of improving their attitude toward employment and their self-confidence. At this stage, the promotion of employability was for purely macro-economic reasons (de Grip et al., 2004). This approach was the most widely accepted and implemented up until the 1970s, when the concept of flow employability emerged.

2.2.2.5 Flow employability

This view on employability was primarily developed in France, and was drastically different to previous approaches. Awareness of the individual was increased in this view, emphasising mainly occupation-related knowledge and skills. The approach was extended

to include knowledge of one's own potential, knowledge of one's position within the labour market, and an increased awareness of the state of the employment market (Mansfield, 2001) in general. The approach was also different in that it focused on the demand aspect of employability and, consequently, the ease of access to employment within local and national economies (McGrath, 2009). The definition of employability as "the objective expectation, or more or less high probability, that a person looking for a job can have of finding one" was formulated by Ledrut in 1966 (cited in McGrath, 2009, p.2) as the core principle of flow employability.

It became evident to both employers and researchers toward the end of the 1970s that more than just occupational skills are required to remain attractive or marketable in the general labour market (de Grip et al., 2004). Subsequently, the term "transferrable skills" was coined by Hoyt in 1978 to include the importance of acquiring skills that can be transferred to various work contexts, making employees less vulnerable in a recession or economic down-turn. These transferrable skills include social and relational skills, and aid the individual, not only in securing employment, but also in maintaining a position or attaining future employment (de Grip et al.).

2.2.2.6 Labour market performance employability

The 1970s were plagued by a global recession, resulting in the international emergence of labour market performance employability. It was now much tougher to find and, more so, to retain employment. This approach was based on measurable labour market results founded on individuals' human capital, and generally included the probability of securing employment, the amount of hours worked, and probable wages (Gazier, 2001, McGrath, 2009, de Grip et al., 2004).

2.2.2.7 Initiative employability

The late 1980s marked the dawn of a new era for employability. As de Grip et al. (2004, p. 214) state, “employability has become a meta characteristic of workers required by employers to cope with rapid changes in products, services and processes.” It became evident that the concept of a “job for life” was rapidly disappearing, with employers increasingly hiring individuals on a temporary or flexible, part-time contract basis (de Grip et al., 2004; McGrath, 2009). The emphasis shifted toward career development of skills and attitudes that would ensure career success and motivation to search for alternative/better employment with other organisations. Gazier (2001, p.9) views this version of employability as “...the marketability of cumulative individual skills...” Thus, the employable person is viewed as an entrepreneur, able to create employment as depicted by Arthur in de Grip et al. (2004). It is clear from this view that employability gradually changed to an influential concept, relevant to every stage of the individual career.

2.2.2.8 Interactive employability

Interactive employability is, as the name suggests, an approach that incorporates policy makers and employers along with the individual as mutual stakeholders in employability (de Grip et al., 2004). This approach emerged in the early 1990s, claiming that the employability of an individual is somewhat relative to the employability of other individuals within the labour market. In de Grip et al. (2004), Outin argues that employability consists of four elements, namely individual characteristics, occupation-related skills, the labour market environment, and government and organisational training policies. These elements influence the probability of becoming and remaining active in the labour market.

Employability imposes mutual responsibility upon government, employers, and the employee (McGrath, 2009). As such, this approach is inclusive of a demand and supply view, taking into consideration local and national demand but not excluding the rules and

institutions governing the labour market. It is from this that the institutional nature of employability is exposed, in which all influencing factors within the labour market are mobilized, with a delicate balance between individual and collective responsibility.

From the above discussion, it is evident that there is widespread contention in the literature with regards to the conceptual meaning of employability. However, it is clear that by the late twentieth century, the concept had become central to the debate on human resources development in the ever globalizing economic climate the world was facing (de Grip et al., 2004). Whether the focus should be on a broader or narrower definition and whether a supply or demand approach should be adopted are still arguable (McQuaid et al., 2005).

2.2.3 Graduate Employability

The work of Yorke and Knight can be seen as instrumental in the field of graduate employability. Their research was ground breaking in terms of identifying a working definition of the concept, which is as follows:

“A set of achievements – skills, understandings and personal attributes – that make graduates more likely to gain employment and be successful in their chosen occupations, which benefit themselves, the workforce, the community and the economy” (Yorke & Knight, 2006, p.3).

This definition implies "generic achievements" that include the full scope of work and personal successes, thus implying continuous improvement. Employability skills can be developed and improved throughout one's career. In this broad view of employability, a person is not limited to that which has been previously learnt. The concept of employability is extended to mean an additional "tool" with which to progress in life, bringing benefit to all spheres and stakeholders in one's life. This definition can be described as a "positive" view of graduate employability, thus presenting the concept as "live" rather than static. The

student is presented with an opportunity for learning and development. The essence of employability is the expectation that individuals will constantly develop and improve in order to adapt to the changing labour market demands. From this point of view, it becomes important to understand the skills required to ensure continued employment. Wickramasinghe and Perera (2010) indicate that there is a lack of available literature that depicts the differences in skills expectations between employers, graduates, and higher education institutions. Indeed, the extant literature divides the focus between these parties and, as such, no concrete knowledge is available.

During the 1990s, a number of studies produced lists of skills that were seen to be essential to employability. These include the Mayer Committee Report of 1992, the Finn Report, the 1997 Dearing Report from the UK, and the report by the Secretary's Commission on Achieving Necessary Skills (USA). The reports identified what could be termed as the core, key, and/or generic skills required in order to be seen as employable (Griesel & Parker, 2009; Knight & Yorke, 2006). The reports were similar in that they did not focus on any specific subject area or educational training programme, but identified a broad spectrum of core/generic skills that were found to be displayed by graduates. This knowledge base was termed "the skills approach/agenda" to employability.

Of course, there are those who are sceptical about the skills approach to graduate employability, including Holmes (2001). His argument is for a new approach termed the '**graduate identity**' approach, which is based on the opinion that the skills agenda is narrowly defined with confusing and overlapping terminology. There is merit in his case, as the terms used in the skills approach broadly overlap and often lack consideration of external factors and context. The identity approach is based on the argument that employers expect a certain level of performance from a graduate, which, in turn, results in the employer's satisfaction with the level of employability. It is argued that the employer should adjust this expectation of performance to be in line with actual employability levels of graduates.

In order to better understand graduate employability, the models pertaining to the construct will be discussed in some depth. As mentioned earlier, Yorke and Knight (2006) provide tremendous insights, with Bridgstock (2009) further conceptualising the skills approach. Lastly, the model developed by Bezuidenhout in an attempt to develop an accurate employability measure, provides a critical look into the South African market.

2.2.4 Psychological Career Resources

Employability as a concept is inclusive of the ability to continuously fulfil, acquire, and/or create work by means of optimal utilization of occupation–related and career meta-competencies, as argued by Coetzee and Bergh (2009).

Career meta-competencies are the range of PCR's that enables individuals to be self-directed learners who are proactive agents when it comes to career self-management, and is critical to career development (Coetzee & Bergh, 2009; Ferreira, 2010). These PCR's are inclusive of attributes and abilities such as self-knowledge, behavioural adaptability, career orientation awareness, sense of purpose, self-esteem, and emotional literacy. PCR's in their purest form consist of those career preferences, career values, attributes, skills, and orientations that are linked to the experience of subjective or intrinsic career success (Gunz & Heslin, 2005). Based on Adler's (1956) explanation of career consciousness (as cited in in Ferreira, 2009), Coetzee states that the PCR's profile of an individual reflects the career awareness of that individual (Coetzee, 2008). As Coetzee states, career consciousness includes individual awareness, career-related cognitions (perceptions, attentiveness, and self evaluations of the individual's calling preferences), attitudes, ideals, skills, and behaviours that are understood and identified by individuals as critical in the realisation of their objectives and the experience of job success. The link here is clear, showing that psychological career resources and the subjective and real experience of career success are closely interwoven.

Coetzee's (2008) groundbreaking research on psychological career resources clearly indicates that the individual's set of PCR's must be in a state of equilibrium in order to ensure proactive career behaviour. This balance is an indication of awareness and independent career behaviour, which are intrinsically driven by the individual's career preferences, career values, career enablers, career drivers, and career harmonisers.

Given the shift in responsibility for career planning and development from the organisation to the employee, it is clear that PCR's affect general employability. Thus, should any one facet of PCR's not be in balance, the ability to facilitate optimal empowering career behaviour is severely hampered. Career preferences, career values, career enablers, career drivers, and career harmonisers are what essentially drives this conscious and self-directed career behaviour, which is evidence of the balance and optimal functioning of an individual's psychological career resources (Coetzee & Bergh, 2009). The interaction of these resources is shown in Figure 2.1 below.

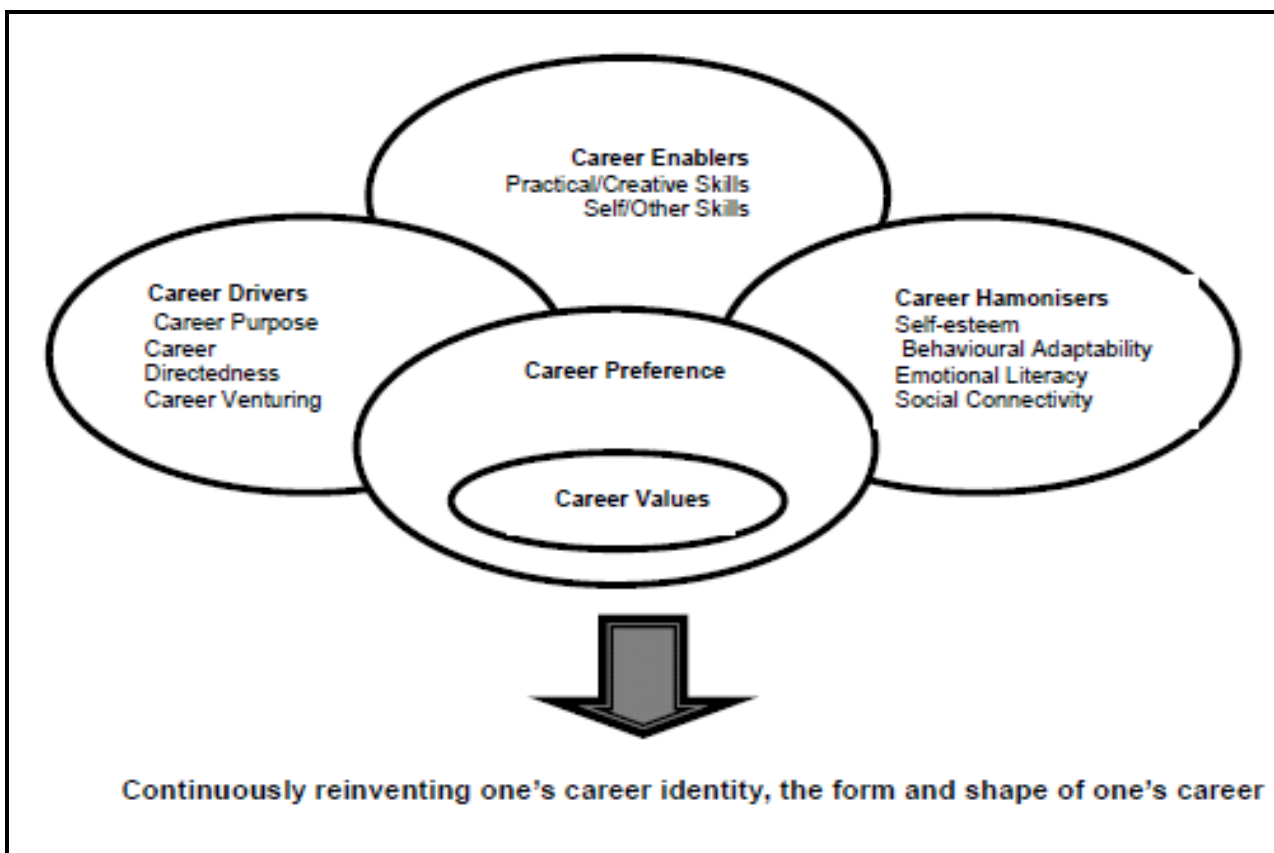


Figure 2.1 Psychological Career Resources Model (Coetzee, 2008)

Each of these PCRs is discussed on some detail below.

2.2.4.1 Career Preferences and Career Values

Each individual has quite unique ideas and beliefs of the path that their career should follow. These beliefs and ideas are underlying to the meaning and implications of the career preferences and values of an employee, or in the case of this study, students.

Career preferences are regarded as the stable cognitive or conceptual structures underpinning the thinking about one's career (Coetzee, 2008), whilst career values are those beliefs that give meaning to specific career preferences. Essentially, these two psychological career resources guide the long-term decisions that individuals make regarding their career, and are the definitive factors in the meaning of a career to an individual. Brousseau in 1990 explains that while career preferences are the guiding force in terms of career moves or decisions, it is career values that determine the motivation pertaining to a specific career preference (as cited in Coetzee & Bergh, 2009).

2.2.4.2 Career Drivers

Coetzee (2009, p. 11) defines career drivers as “the attitudes that energise people and motivate them to experiment with career and employment possibilities that are based on their perceptions of the person they can become and their possible future work roles.”

This psychological career resource consists of people's sense of purpose, career directedness, and career-venturing attitudes. These terms can be further explained as set out by Coetzee and Esterhuizen (2010): Career purpose contributes to job and life

satisfaction. Also, individuals who feel strongly "called" to their careers seem to show much higher levels of overall satisfaction and lower levels of absenteeism. Career directedness refers to the individuals' clarity regarding future goals and career direction. This clarity or certainty refers to the achieving of goals or identifying new employment prospects. Lastly, a career-venturing attitude refers to the individual's willingness to take risks to not only find alternative employment, but also to experiment with new opportunities (Coetzee, 2008, Coetzee & Bergh 2009; Coetzee & Esterhuizen, 2010).

In summary, career drivers influence the life satisfaction of an individual and, when in balance, this experience of satisfaction remains high. Career drivers influence focussed behaviour to determine and experiment with future employment prospects, and also how willing the individual is to venture into an unknown terrain.

2.2.4.3 Career Enablers

Transferable skills (practical and creative skills), self-management, and relationship skills form the basis of career enablers. Coetzee (2008) depicts enablers as those abilities that help individuals to succeed in their careers. These enablers can be related to employability skills, such as technical knowledge, and interpersonal or "soft" skills.

2.2.4.4 Career Harmonisers

Career harmonisers (self-esteem, behavioural adaptability, emotional literacy, and social connectivity) are those psychological attributes that ensure that the career drivers remain in balance. This is essential in ensuring that individuals do not "go overboard" while pursuing and reinventing their careers. In addition to this, career harmonisers include those psychological attributes that act to promote resilience and flexibility (Coetzee, 2008). As

seen in Section 2.3.4.3 of this Chapter, resilience and flexibility form an integral part of graduate employability to ensure proactive, adaptable career-related behaviour.

It is human nature to make and maintain certain self-evaluations, including attitudes of approval/disapproval and the extent to which individuals feels worthy, capable, significant, and effective when compared to their peers (Coetzee & Bergh, 2009). These concepts constitute what is known as self-esteem, the effects of which can be far-reaching.

Behavioural adaptability includes individuals' capability to clearly identify qualities they would need in order to be successful in the future, and also the ability to take note of those personal changes needed to meet their career needs (Hall, 2002).

Emotional literacy is defined as the ability to accept and express a range of affects (emotions). In order to display adaptive career behaviours in the career decision-making process, a number of emotional responses must be facilitated (Emmerling & Cherniss, 2003).

Lastly, social connectivity describes the ability to connect with others and develop and maintain mutually satisfying relationships. The interaction between affect and social connectedness plays a critical role in the career decision-making process as it indicates, to some extent, the risk related to a certain career option. It also plays a role in the amount of time and effort put into the exploration of new opportunities and how such information will be processed (Emmerling & Cherniss, 2003).

Thus, the individual's set of psychological resources can also be defined as “the range of career orientations, values, attitudes and other meta competencies that facilitate proactive agency with regard to career planning and development” (Coetzee & Esterhuizen, 2010, p. 2). Essentially then, career meta-competencies form an important component of general employability, as they allow the individual to proactively develop his/her career in the

desired direction. Employability as defined by Fugate et al. (2004) includes a multitude of person-centred constructs that interactively combine to assist an individual in successfully adapting to a wide range of work-related changes. Employability is seen as a “... psycho-social construct that embodies individual characteristics that foster adaptive cognition, behaviour, and affect, and enhance the individual-work interface” (Fugate et al., 2004, p.15). As was seen in the preceding sections, psychological career resources embody those skills or competencies regarded as core to employability, with the balance between these resources ensuring optimal adaptive functioning. Employability will be discussed in greater detail in the following section.

2.3 MODELS OF EMPLOYABILITY

In the following section, various models of employability will be considered. The focus here is developing a thorough understanding of the development and conceptual knowledge that underpins graduate employability. The models to be considered include Fugate, Kinicki and Ashforth’s 2004 model, which views employability as a psycho-social construct; Fugate and Kinicki’s (2008) dispositional model; Yorke and Knight’s (2006) USEM model; Pool and Sewell’s (2007) Key to Employability model, as well as Bridgstock’s (2009) conceptual model of graduate attributes for employability. The model proposed by Bridgstock is seen as the most comprehensive in terms of graduate employability; however, the most recent explanation of graduate employability is that of Bezuidenhout (2011). The Graduate Employability Model (GEM) is comprehensive in its consideration of past models. Furthermore, it takes into account the conditions of the new world of work, focussing on the South African context specifically. This model will therefore form the basis for the present study.

2.3.1 Fugate, Kinicki, and Ashforth's (2004) model of employability

This model is based on the notion that individual employability encompasses a number of person-centred constructs that are essential in dealing effectively with the career-related changes that are characteristic of the new world of work. Fugate et al. (2004, p. 15) define employability as "... a psycho-social construct that embodies individual characteristics that foster adaptive cognition, behaviour, and affect, and enhance the individual-work interface". This definition refers to the adaptability of the individual to change between positions, both within one organisation and between organisations, the key being active adaptability consisting of three dimensions: personal adaptability, career identity, and social and human capital.

Personal adaptability in this model is used as the conceptual foundation for employability, and can be described as the willingness, capacity, and competence to change. As such, it is an active and continuous process. Fugate et al. (2004) argue that personal traits such as optimism, a propensity to learn, openness, internal locus of control, and generalized self-efficacy combine at a cognitive and an affective level in those individuals who display high employability, leading to the ability to identify and secure work opportunities. Savickas (1997, p.253) uses the root of the word "adaptation" to show its true meaning as being quick to learn or "to fit," thereby also taking on the meaning of "to make more suitable (or congruent) by changing." This implies flexibility and ease of response to environmental demands, which emphasises the interaction between the individual and the environment.

According to Fugate et al. (2004), this interaction between the individual and the work environment reduces anxiety and uncertainty, resulting in improved adaptation outcomes, since the individual now has some form of perceived control over the situation. Personal adaptability is the "glue" in the psycho-social construct of employability, emphasising the importance of personal characteristics. As Fugate et al. (2004, p.18) assert, "... the fundamental premise is that employability is a synergistic collection of individual characteristics that is energized and directed by an individual's career identity."

Career identity relates to specific constructs such as role identity, occupational identity, and organisational identity, referring to how the individual defines him/herself in a certain work context (Fugate et al., 2004). It involves making sense of one's current and past situation, giving clear direction to one's future. Career identity addresses the question of "Who am I?" within the work context, thus allowing for the possibilities of the self at work. As such, career identities can be viewed as the "cognitive compass" of the individual. Career identity therefore serves as a navigational tool (Fugate et al., 2004, p.20) when individuals find themselves outside of the organisational boundaries, which is often the case in the new age protean and boundaryless careers. Thus, career identities are the cognitive schemas that direct, guide, and sustain behaviour in accordance with the desired self (in the working context).

The third and final dimension of employability is comprised of human and social capital. Fugate et al. (2004) argue that both social and human capital form an inherent part of career identities, entrenching it within the employability construct. Human capital refers to a number of personal variables affecting an individual's career advancement. These variables may include age, education, job performance, tenure within an organisation, work experience, and emotional intelligence. The mentioned variables may also be influential in an individual's ability to meet the demands of a specific occupation, thereby contributing to overall adaptability of the individual and the organisation (Fugate et al., 2004). Social capital is representative of the interpersonal aspects of employability (McArdle, Waters, Briscoe & Hall, 2007). It is encompassed in DeFillippi and Arthur's (1994) "knowing-whom" competencies that are concerned with formal and informal career-related networks. The importance of these interpersonal connections or social networks lie in that they shape an individual's self-perceptions and are a source of social support that alleviates the stress associated with the fast-paced change of today's working environment.

Fugate et al. (2004) and McArdle et al. (2007) note that these dimensions are synergistically related, forming reciprocal relationships. The authors go on to contrast the

three dimensions previously described with other constructs, such as proactive behaviour, personal initiative, proactive personality, and career motivation. Fugate et al. further assert that employability consists of cognitive (e.g., career identity), dispositional (e.g., propensity to learn), and market-interactive variables (e.g., social and human capital). It is also argued that employability is explicitly contextualized in work settings, integrating the dispositional and situational aspects of pro-activity. The literature is divided on the inclusion of social and human capital, as it provides for a market-facing dimension that is not found in other constructs such as proactive behaviour, personal initiative, proactive personality, and career motivation.

Thus, employability describes the key importance of adaptability in the workplace, with emphasis on knowing who one is, but also being able to gain access to information and networks that will aid in the identification and realization of new opportunities.

This model was not developed with specific reference to graduates, but may be useful in understanding the dynamism and interaction between the mentioned constructs. With its core being adaptability, this model is highly relevant in the changing career arena that graduates seek to enter. Should they be able to draw on a willingness and ability to adapt their knowledge, skills, abilities, dispositions, and even behaviours, their flexibility will enable them to meet changing environmental demands. Knowing how to gain certain expertise or knowledge, and gaining access to key social connections will further strengthen the employability of a graduate student. **Being certain of one's occupational identity provides the capacity to navigate one's career and seek out the most beneficial opportunities.**

2.3.2 Fugate and Kinicki's (2008) dispositional employability model

Fugate and Kinicki's (2008) dispositional employability model is founded on their work done during 2004 to 2006. Fugate (2006) defines dispositional employability as "a constellation of individual differences that predispose employees to (pro)actively adapt to their work and career environments" (as cited in Fugate and Kinicki, 2008, p. 504). Perceived in this way, employability is fostered by individual characteristics that enable adaptive behaviours and positive employment outcomes.

The dispositional approach includes a broad supply-side view. The rationale behind the dispositional approach is the frequency and intensity of change, resulting in high levels of uncertainty and anxiety, and requiring employees (and organisations) to adapt in a proactive manner. Furthermore, employability research assumes that the required knowledge, skills and abilities for a given job have been clearly identified and remain stagnant, an assumption that is deemed too narrow and, as such, unrepresentative of today's turbulent labour market.

Fugate and Kinicki (2008) therefore developed a model that would bridge some of the mentioned gaps. In 1998, Law, Wong, and Mobley (as cited in Fugate & Kinicki, 2008) extended the understanding of employability to that of a multi-dimensional construct – an underlying higher order trait that enhances proactive adaptability. This model shows that employability includes both reactive and proactive individual characteristics, indicating a conceptual readiness for change.

From literature, it was identified that countless personal characteristics could potentially influence an individual's ability to identify and realise career opportunities. Five specific dimensions are deemed critical, due to the active and adaptable nature of dispositional employability. These dimensions were identified from the fields of applied psychology,

careers, management, vocational counselling, and personality research conducted over the years. Fugate and Kinicki (2008) conducted an extensive review process and identified the following five dimensions as critical: (i) openness to changes at work, (ii) work and career resilience, (iii) work and career proactivity, (iv) career motivation, and (v) work identity. Each dimension has its core settled in that of proactive adaptability, which was a prerequisite set by Fugate and Kinicki in their determination of each dimension. These dimensions are briefly discussed below.

Openness to change at work: This dimension is deemed fundamental to dispositional employability as it supports continuous learning, which, essentially, enhances adaptability. This dimension also emphasises flexibility, indicating that people who are open to change are likely to be adaptable and generally positive toward ambiguous or challenging situations and new experiences. Fugate and Kinicki (2008) argue that this openness to change ultimately makes people more employable due to their active adaptability portrayed in any situation;

Work- and career resilience in individuals point to a generally optimistic view of life facets, in other words, having positive expectations of current and future situations. Resilient individuals also show confidence in their ability to deal with adversity or challenges in their career, viewing each as a learning opportunity. Ultimately, work and career resilience are part of work identity, and as such, is representative of dispositional employability;

Career motivation is seen as a determinant of continuous learning, ensuring self-management and future planning. Individuals who are highly motivated tend to persist and are more willing to adapt to changing circumstances, which subsequently influences and determine dispositional employability;

Work- and career proactivity refer to individuals' tendency and actions to gain knowledge regarding the environment, career interests, and even their employer, given that these aspects may potentially influence their career. Work- and career proactivity facilitate the identification and realisation of opportunities. Thus, an employable person is one who purposely seeks out information relevant to his/her personal job interests and potential career opportunities; and lastly

Work identity is how the individual views him/herself in the work environment. It is the cognitive and affective foundation of dispositional employability, relating to the self-perceptions consistent with career-related actions. Career identity drives the career direction and goals needed to manage the boundaryless careers that characterise the new world of work. It is the guiding force for any individual career. A clear path and understanding of oneself in the working context support active adaptability and, as such, employability.

The dispositional model extends well beyond the mere "core" or "generic" skills required to be seen as employable, as is the case with most previous literature on the topic. It is rather easy to become entrenched in the skills needed as opposed to the underlying foundation that ensures sustainable employability. Sustainability is core to the changing work environment of the 21st century. With its innate focus on employability as a disposition, it brings the knowledge of both the reactive and proactive personal characteristics that are essential for meeting environmental demands as well as identifying and securing career opportunities. However comprehensive the model may be, it is lacking in that it does not include relationship building or human capital aspects per say, which have been noted as essential to students in particular. Fugate and Kinicki (2008) and Fugate (2006) have contributed significantly to the knowledge base of employability; however the current study focuses on graduate students and not solely on those individuals who do have work experience.

2.3.3 Pool and Sewell's (2007) Key to Employability Model

The Key to Employability Model is based on the following definition: "Employability is having a set of skills, knowledge, understanding and personal attributes that make a person more likely to choose and secure occupations in which they can be satisfied and successful" (Pool & Sewell, 2007, p. 280).

This model argues for the inclusion of "satisfaction," focussing on individual facets that will allow a student to better adapt in the working context. The model shows that each component is absolutely essential, and asserts that one missing component will significantly lower the employability of the graduate student.

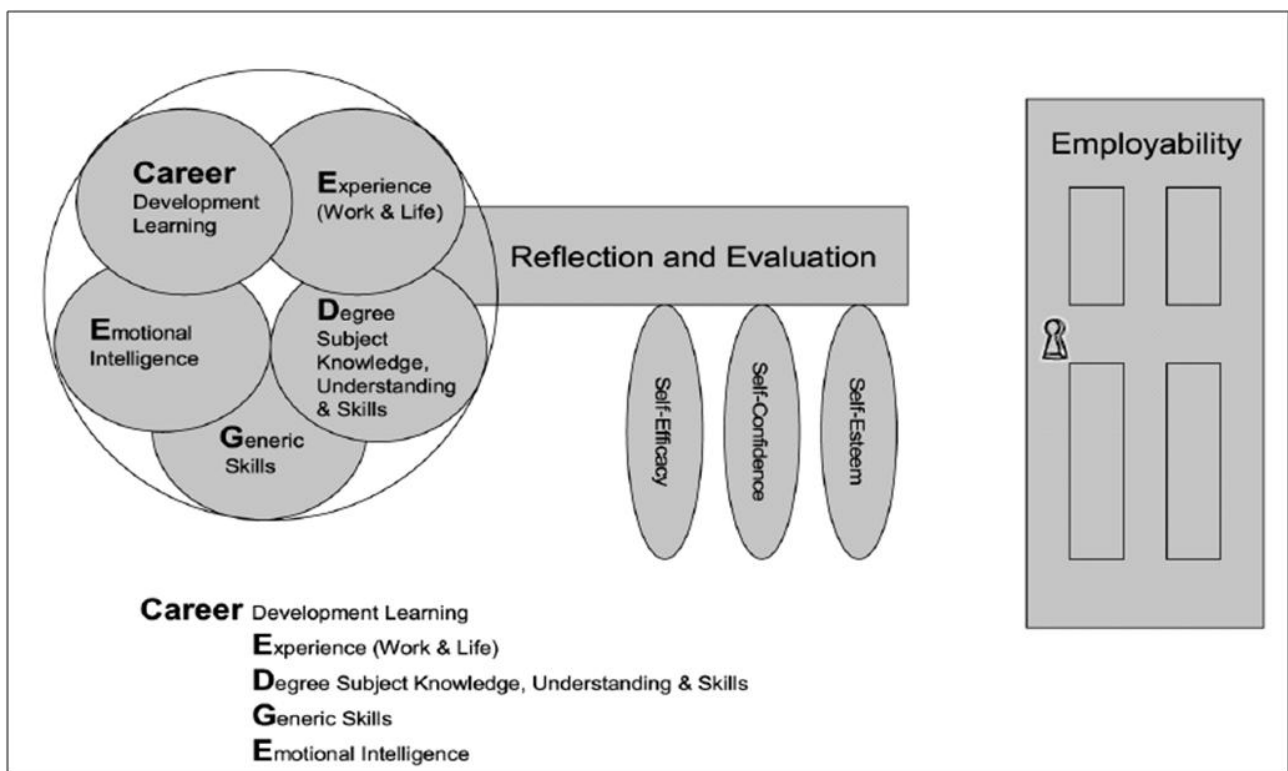


Figure 2.2 Pool & Sewell CareerEDGE Model (2007, p.281)

The authors show five inter-related components in Figure 2.2 above: (i) degree subject knowledge, understanding and skills; (ii) generic skills; (iii) emotional intelligence; (iv) work

and life experience; and (v) career development learning. These five components are also known by the mnemonic of 'CareerEDGE.' Pool and Sewell suggest that, by providing graduates with the opportunity to not only access, but also develop these five components, and then reflect on and evaluate such experiences, ultimately result in development of higher levels of self-efficacy, self-confidence, and self-esteem, which have been shown to be critical in employability (Pool & Sewell, 2007; Yorke & Knight, 2006).

Pool and Sewell (2007) argue that the key benefit of this model lies in its simplicity. It can be explained with ease to any student or lecturer, or perhaps even to a parent. The model has also been useful in the planning of curricula and may in future serve to demonstrate to employers the valued role of higher education institutions, and how both employers and HEIs may contribute to increased employability, consequently benefiting all relevant parties. However, the model's relevance is shown in its continuous aim to ensure adaptability to our changing world of work and, hence, an increased chance of occupational satisfaction and success.

2.3.4 Graduate Employability Models

The previous section presented an elaborate discussion of various employability models. This section will focus on the Bridgstock model for graduate employability, as well as the USEM model of Yorke and Knight (2006). Further, a detailed description will be given of the model constructed by Bezuidenhout (2011), which incorporates the demands of the new world of work when considering graduate employability.

2.3.4.1 Yorke and Knight's USEM model

This model is deemed one of the most widely accepted and influential in terms of employability literature (Pool & Sewell, 2007). The work of Yorke and Knight is seen as

critical to the understanding of graduate employability and how it may be entwined with higher education curricula (Pool & Sewell). The researchers have subsequently introduced a model that suggests that employability is influenced by four broad, yet inter-related components. The model is depicted in Figure 2.3, and shows the interaction between the components.

The term "USEM" is an acronym for the following inter-related components of the model:

Understanding refers to the critical role played by higher education, but is not inclusive of the term "knowledge" due to the implied depth of the term.

Skills refers "skilled practices" or "skilful practice." Critical to this component is an awareness and responsiveness to context. "Skills" should be seen as a wider concept than the traditional "core" or "key" skills, and could more accurately be referred to as "skilful practices."

Efficacy beliefs as a component, differentiates the USEM model from the Bennet et al. (2000) model. Yorke and Knight (2006) point to the work of Dweck, which shows the benefit of a student having malleable rather than fixed self-theories. Malleable self-theories characterise a disposition that views tasks as opportunities for learning, as opposed to mere performance-related opportunities that display competence and skill. This component is key in that it influences the outcome of learning, with those individuals leaning toward malleable self-theories being more likely to believe in their ability to effectively cope with unique and complex challenges.

Metacognition is seen as a key component of employability, and is increasingly being recognised in the literature related to student learning. Yorke and Knight (2006, p. 6) define metacognition as "subsuming elements of 'learning how to learn'; of reflection in, on and for practice; and a capacity for self-regulation."

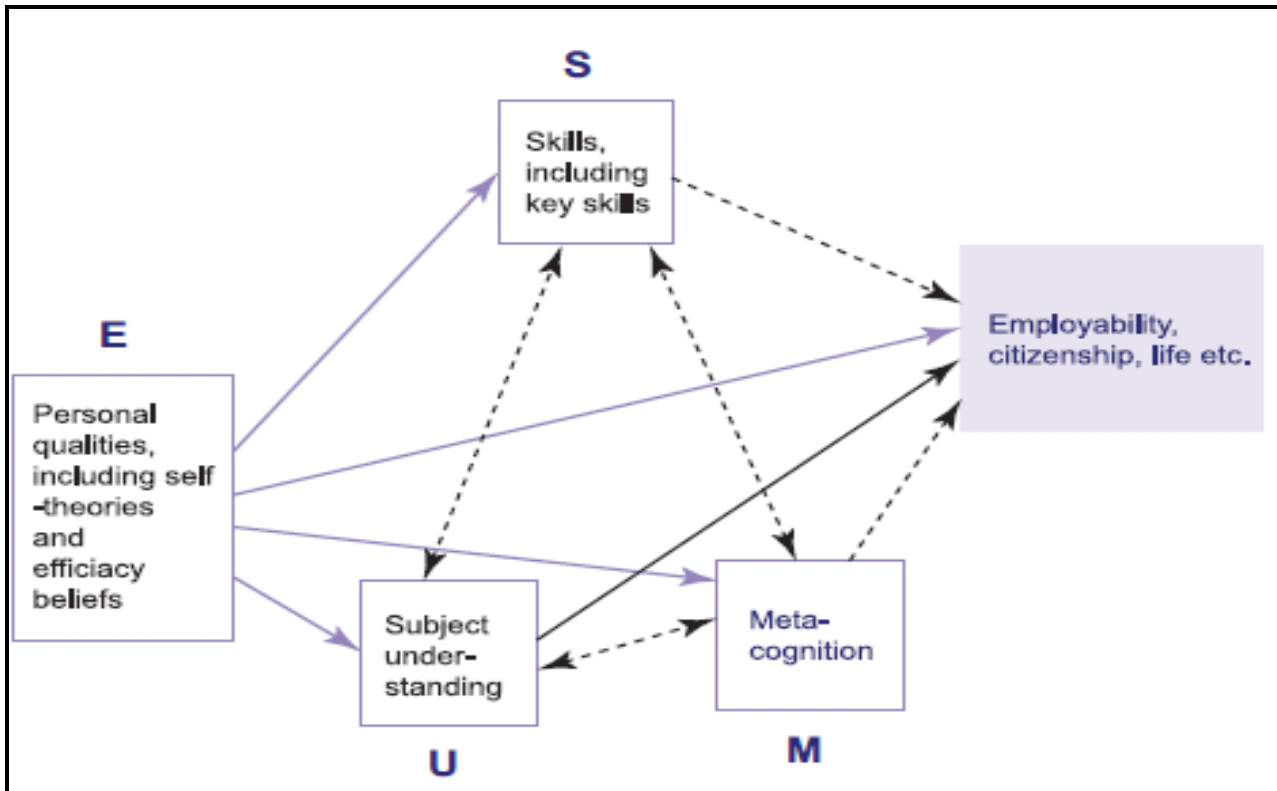


Figure 2.3 USEM Model (Yorke & Knight, 2006, p.5)

The model is grounded in a large amount of research-based scholarly work, and is a useful way of looking at how employability might be enhanced. Yorke and Knight (2006) subsequently developed a list of 39 employability aspects in their *Skills plus* project, with the purpose of helping departments to examine their curricula from an employability enhancement perspective. These 39 aspects were categorised under the headings of personal qualities, core skills, and process skills, and will be further discussed later in this chapter.

In summary, the USEM model has proven very useful in its application within the higher education arena, providing a strong base for educators and students to assess employability. It is critical to possess a thorough understanding of one's subject, along with skilful practices (core skills). More so, a malleable self-theory ensures positive experience

and outcomes in the face of adversity. This model places much emphasis on continuous learning, which has been identified as a requirement of the new world of work.

This model allows all parties to understand the concept of employability and what is required in order to be deemed employable. The following section explains the conceptual model of graduate attributes required for employability (Bridgstock, 2009), which places great emphasis on the inclusion of career management skills.

2.3.4.2 Bridgstock's (2009) conceptual model of graduate attributes for employability

The model developed by Bridgstock (2009) proposes those skills that are critical to the enhancement of graduate employability and the role of career management. Figure 2.4 below shows the relevant skills, namely self-management skills, career building skills, generic skills, discipline-specific skills, employability skills, together with underpinning traits and dispositions.

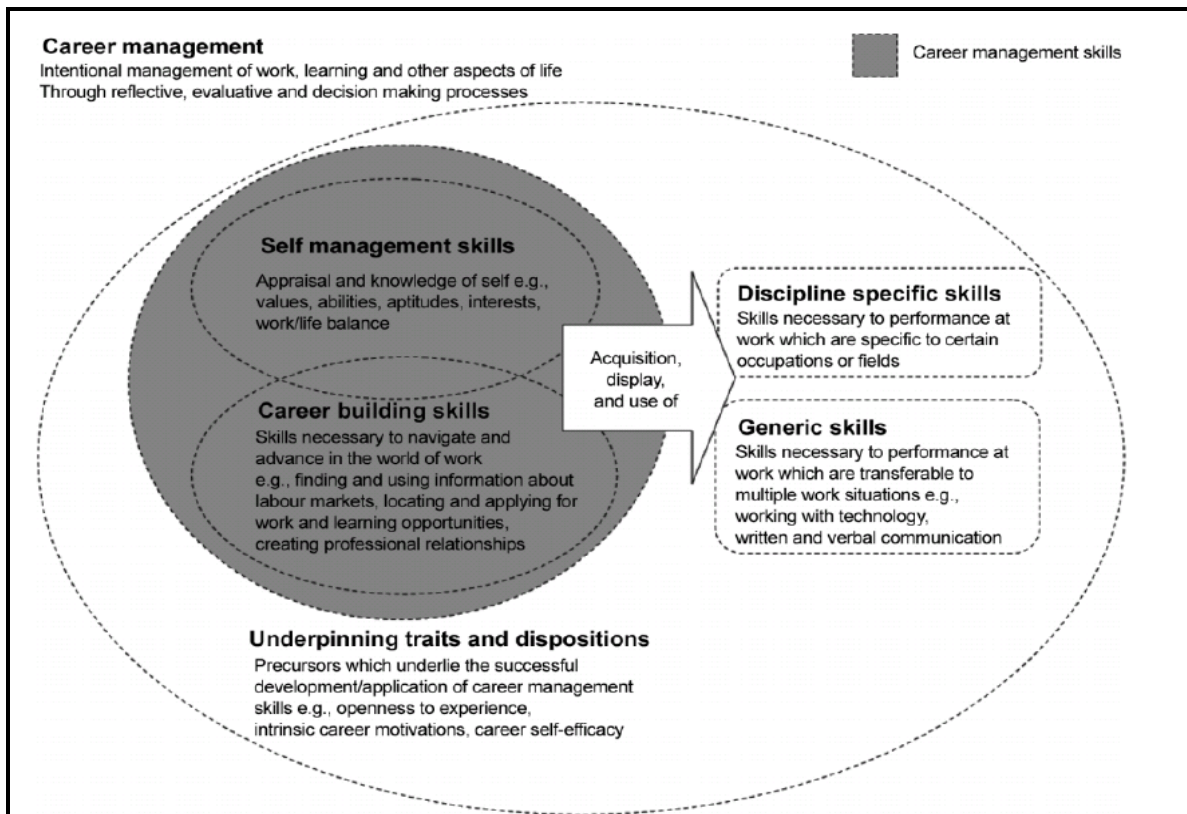


Figure 2.4 Bridgstock's (2009) conceptual model of graduate attributes for employability

Career management can be seen as an ongoing process. One must utilise skills for self-management and career building that are grounded in the underlying traits and dispositions in order to successfully secure, display, and employ generic as well as discipline-specific skills in the new working context. This is inclusive of incessant reflective, evaluative, and decision-making processes. In its purest form, career management allows for the creation of realistic yet personally meaningful goals, identifying and engaging in strategic work decisions and learning opportunities, recognising a work/life balance, and realizing the functional relationships between work, the economy, and society in general. However, career management also includes a more immediate focus on the processes involved in obtaining and maintaining work (Bridgstock, 2009).

Those skills relating to individuals' perception and appraisal of themselves regarding their values, abilities, interests, and goals, referred to as self-management skills in the above

model, are deemed to be closely related to the concept of career identity (Bridgstock, 2009). Bridgstock (2009, p. 62) cites the work of Eby, Butts, and Lockwood, conducted during 2003, indicating that students who displayed a clearly developed concept of their personal career goals as well as a positive and realistic appraisal of their own capabilities (thus, a strong and well defined career identity) reported higher levels of employability than other students.

Career building skills are closely intertwined with self-management skills, as illustrated in Figure 2.4. Career building skills include the critical ability to research the working environment/landscape, and subsequently locating, securing, and maintaining a job, as well as being able to exploit such employment opportunities to gain advancements or other desirable career-related outcomes. According to Bridgstock (2009), career building skills include the following:

- Knowledge of one's core industry: Students should be well aware of the opportunities, threats, and critical success factors related to their relevant area of expertise. Included in this is knowledge of "the rules of the game," the industry structure, beliefs, norms, values, and culture, and labour market information (mean salaries, unemployment rates, and relevant economic news);
- The ability to successfully identify and choose the best opportunities for future growth prospects relating to geographical location, projects, and position;
- Being able to identify when to start looking at alternative options: This includes the acquisition of new skills, training opportunities, and the ability to act swiftly once a new opportunity arises;
- Being able to represent oneself and one's skills in such a way that any prospective employer will see the value-add that one has to offer. Knowing how to accurately and attractively represent one-self is pivotal to career building; and

- The ability to create strategic personal and professional relationships, as this has been shown to have a direct effect on perceived and real employability.

Generic skills as another component of graduate employability are the transferable skills, key/core competencies, or actual employability skills that ensure graduate employability. As mentioned earlier, it has been widely noted that there is little empirical consensus on the meaning of the term, as well as whether the possession of such skills leads to increased employability (Bridgstock, 2009). However, the inclusion of generic skills as a component of the model remains important, as the literature has indicated that these skills are indeed what employers look for in graduates.

Discipline-specific skills are those skills traditionally incorporated in higher education curricula in order to meet specific theoretical requirements posed by each unique subject-matter area. Discipline-specific skills in conjunction with generic skills, as described above, and self-management and career building skills are thus termed employability skills. Bridgstock (2009, p. 37) goes on to state that career management skills and knowledge are vital to employability since “...they play a large part in determining which, to what extent, in what manner, when and where generic and discipline-specific skills are learned, displayed (e.g., in applying for a job) and used”. Based on this model, it can be said that employability skills indeed ensure that a graduate is able to secure a job.

Bridgstock (2009, p. 36) defines underpinning traits and dispositions as “...those precursors that underlie the successful development and application of career management skills.” Such traits and dispositions may include openness to experience, sociability, agreeableness, initiative, intrinsic motivation, career self-efficacy, and self-confidence, which may result in overall increased work-life satisfaction as well as a smoother transition from studying to the working environment.

As seen in Figure 2.4, much emphasis is placed on career management skills. This is understandable, given the increasing pressure on individuals to assume responsibility for their careers and development as a result of the fast-paced change that characterises today's working environment (Zhiwen & van der Heijden, 2008; Fugate, et al., 2004). From this model, it is clear that employability consists of more than just the mentioned generic skills, and includes many of the variables that are also incorporated in other models, such as Yorke and Knight's (2006) USEM Model and Pool and Sewell's (2007) Key to Employability Model. This model therefore provides a more comprehensive focus on graduate employability.

The models provided must all be considered in terms of the changing career context in which the graduates of today find themselves, as postulated by Bezuidenhout (2011) after an in-depth analysis of the new world of work.

2.3.4.3 Bezuidenhout's Graduate Employability Model

The work of Bezuidenhout has been critical in the development of an employability measure that is specific not only to the South African context, but also to graduate students. The model is also the foundation for the measure utilised in this study and, as such, consideration should be given to the concepts that underlie the measuring instrument.

The Graduate Employability Model is based mainly on the idea of adaptability. Moreover, the model emphasises the notion that employability cannot be seen in isolation from the demands that arise from a challenging new world of work. Bezuidenhout (2011) goes on to show how the work of Fugate et al. (2004) and that of Fugate and Kinicki (2008) have been critical to this conceptualisation, as is evident from the definition that forms the basis of the model. As such, employability is said to be "a psycho-social construct representing a combination of attributes (dispositions, values, attitudes and skills) that promote proactive

adaptability in changing environments and enhance an individual's suitability for employment and the likelihood of obtaining career success" (Bezuidenhout, 2011, p. 78).

It is important to note the role of adaptability in this definition. It is seen as the result of the interaction between one's dispositions, values, attitudes, and skills that brings about proactive behaviour that not only enables an individual to adapt to changing environments but also leads to an increased chance of overall career-related success.

The dimensions of this model are displayed visually in Figure 2.5 and show that the notion of employability relates strongly to that of adaptability. More specifically, the dimensions of career self management drive, cultural competence, and personal dispositions are all shown to encompass adaptability as core to their meaning.

Career Self-Management

Career self-management relates to the idea that the world of work today requires the employee to take charge of his/her own development. This shift is aligned with the new styles of careers, which include the boundaryless and the protean career (Inkson, 2006). These new career styles will be discussed further in the coming sections; however, it is important to note that both emphasise career self-management and adaptability. De Vos and Soens (2008) conducted an in-depth study of the protean attitude and career success, and indicate that it is indeed career self management that makes the difference when it comes to career success. Career self-management is the creation of opportunities, the setting of goals, and the constant search for new information, which add to the adaptable behaviour of any employable individual.

Cultural Competence

Cultural competence plays an integral role in the 21st century, given the globalised environment in which individuals find themselves. A number of studies have shown that

employers value international work experience, and with this comes a multi-cultural working environment. As such, the ability to understand and effectively deal with diversity is a core competency in employability.

Personal Dispositions

The model goes on to indicate how several personal dispositions interact to promote adaptability. These dispositions are further described in terms of career-related self-evaluation, entrepreneurial orientation, sociability, career resilience, proactivity, and an openness to change. Bezuidenhout (2011) argues that the interaction between these dispositions and other attributes may result in an improvement of overall employability and perhaps even career success. These attributes will be briefly discussed in order to fully describe the model that is the basis of the measuring instrument used in the current study.

Career-related core self-evaluations relate to self-esteem, locus of control, generalized self-efficacy, and emotional literacy, i.e. evaluation of one's personal worth in the career context. A positive self-evaluation and the ability to manage one's emotions in a constructive manner should result in adaptive behaviour.

Entrepreneurial orientation refers to an innovative, driven, and proactive approach to one's life and career. It is the propensity to take risks and exploit opportunities whilst being achievement-orientated.

Sociability as described in the context of the model refers to an ability to establish and maintain social connections, but also to feel free to utilise these connections to one's advantage in a career.

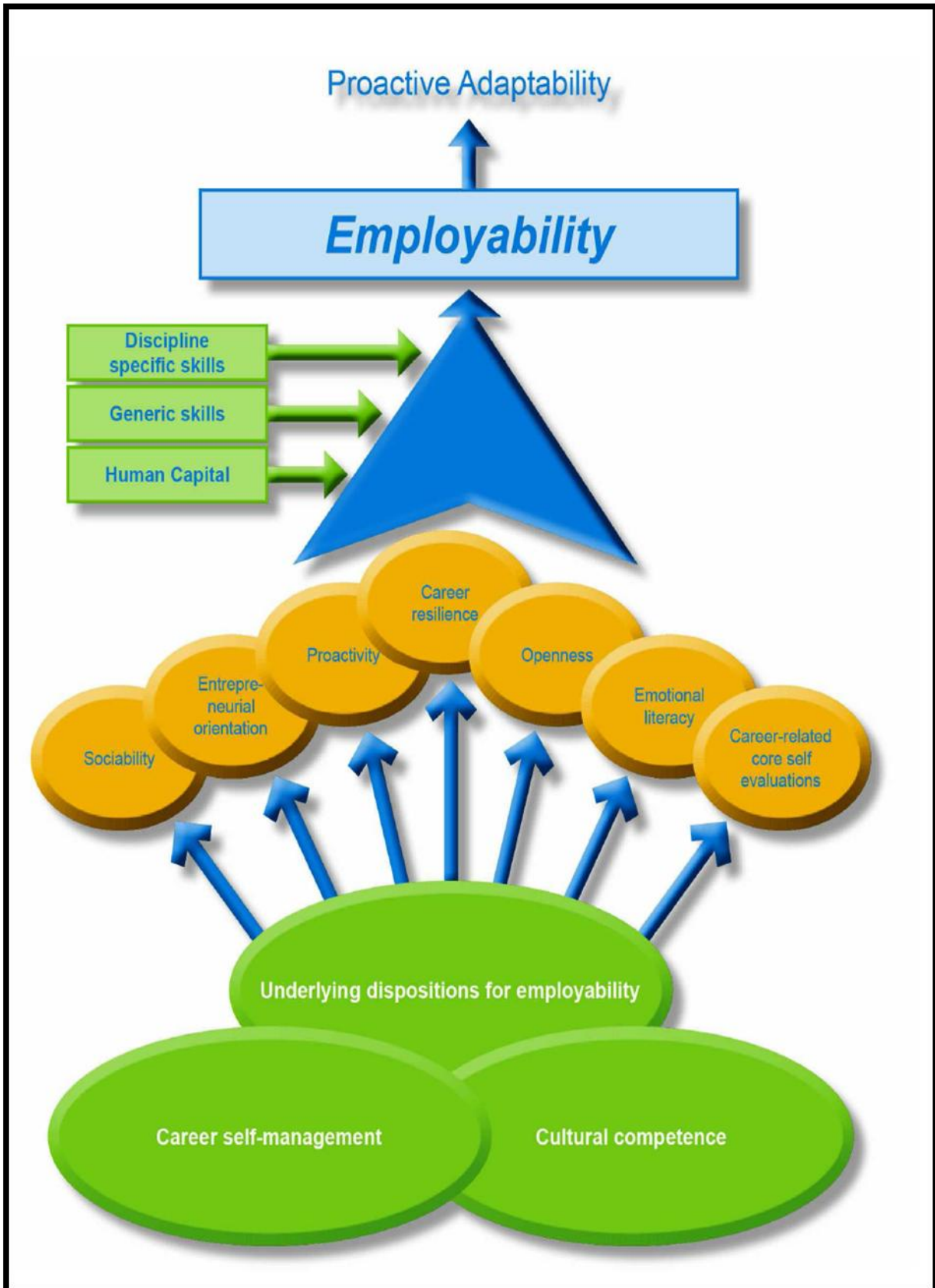


Figure 2.5 The Graduate Employability (Bezuidenhout, 2011, p.80)

Career resilience shows a high level of adaptability, flexibility, self-confidence, and competency, regardless of the adversity of any work-related situation. It is the ability to "bounce back" after a setback.

Proactivity is the active, future-orientated, self-initiated actions that lead to an improvement of a situation or of oneself in general.

Openness to change refers to the willingness to purposefully seek out new experiences, and includes the willingness to explore new ideas.

As with any model, there are the main dimensions that make up the basis or core. However, employability is no simple construct (Clarke, 2008), and includes technical skills (discipline-specific skills), generic skills, and human capital skills, as portrayed in the Graduate Employability Model.

McArdle et al. (2007) set out to investigate the psycho-social model developed by Fugate et al. (2004), based on a sample of 416 unemployed individuals. Human and social capital was identified as one of dimensions of employability in the psycho-social model. It is a construct that refers to aspects such as education, work experience, training, skills, and knowledge that are unique to each person and play a role in career advancement (McArdle et al.). Discipline-specific skills remain critical to many technical positions, and employers continue to value the knowledge that underpins a specific career field. While knowledge is valued, most employers no longer make their recruitment decisions based purely on specific subject matter knowledge. Generic skills are a top priority when it comes to graduate employment. As Bezuidenhout (2011) also indicates, the combination of these skills is widely accepted as increasing employability. Bezuidenhout presents these skills in a manner that makes it safe to assume that they should each be given ample attention when considering graduate employability. However, the model was created to guide the

development of an appropriate measuring instrument for graduate employability and should be considered within this context.

The interaction of all the employability dimensions constitutes graduate employability and, as such, proactive adaptability. Adaptability has become a key requirement in the new world of work, and its importance is highlighted by this model. The changing career context is built into this model and, as such, brief mention will be made of the changes in careers that have taken place over the past decade. Thereafter a discussion will be presented on the graduate skills that have been found throughout the literature, which includes those skills that are present, lacking, and required.

2.4 CHANGING GRADUATE CAREERS

Up until the 1800s, careers were understood in terms of life-long employment, mutual loyalty, and well-defined boundaries. Jobs required little specialisation and were relatively short-lived, making specific skills for a specific project the key to continued employment (Clarke, 2008; Clarke & Patrickson, 2008).

This era of short-term, non-specific employment was followed by the industrial revolution. Growth of the economy and organisations required a new type of career. Far greater structure and direction became necessities (Clarke, 2008). As a result, individuals became specialists in their respective positions. The norm was to start in a specific company, climb the corporate ladder by means of hard work while, in turn, the organisation provided continuous training and job security. This style of career certainly had its place in the economy; however, the new world of work has shifted career theory into a different direction. The 21st century organisation is characterised by decentralisation, fast paced and continuous change, as well as internationalisation. These changes have come about due to downsizing of organisations to be "leaner," delayering, which has given managers a

broader scope of responsibility, and, lastly, a shift to short-term or flexible contractual agreements (Harvey, 2000).

These changes in environment require a much more flexible approach from the employee and employer (Briscoe, Hall & DeMuth, 2006). As a result, career theory has once more shifted its focus (Clarke, 2008). Not only are adaptability and flexibility high on the agenda (Clarke & Patrickson, 2008), but the responsibility for security and personal development now seemingly rests solely on the shoulders of the employee and, for that matter, the graduate. Reference is made to a new structure for careers, including the boundaryless and protean career. These career structures emphasise independence. Individual employees no longer see themselves as bound to the organisation, and the relationship has become somewhat transactional instead.

Arthur and Rosseau (1996) describe the boundaryless career as being characterised by limitless or free movement between organisations, positions, and careers. The Protean career, on the other hand, relates to the independent behaviour of the employee. As such, individuals become self-directed in their career management, with their own value system being a key driver (Briscoe et al., 2006).

Although the changes discussed above relate more to the current workforce, they provide guiding principles for career planning to youngsters seeking entry into the market today. Some changes that have been noted as early as 1995 with specific reference to the graduate job are as follows:

- A smaller proportion of graduates in traditional "graduate jobs";
- Vanishing of the career ladder;
- More graduates are becoming self-employed;

- Graduates are underemployed (lower-level positions perhaps not requiring a degree);
- The concept of jobs for life is seemingly disappearing;
- A lack of clear functional career identity; and
- Fewer income raises and less job security (Stewart & Knowles, 1999).

These changes have impacted graduates in a number of ways. More specifically, graduates are now expected to show flexibility and the ability to work in project teams (Harvey, 2000). Stewart and Knowles (1999) quote the Association of Graduate Recruiters (AGR) survey of 1995 to show that today's world of work and, more so, the graduate job are characterised by an interaction with clients, adding value in all aspects of work, lifelong learning, portfolio careers, self-development, and an extreme need to remain employable. As shown above, there is also very little understanding of what actually constitutes a graduate job, with the AGR being of the opinion that a graduate job is any job that a graduate does (Harvey, 2000). Harvey further argues that graduates of today are required, or rather, expected to "grow" their jobs within the confines of the organisation. As such, continuous learning and development are again at the centre of the employability notion. If one takes ownership for growth and development as well as the work process, then the argument that there are fewer graduate jobs available becomes somewhat irrelevant. If a graduate job is defined as any job that a graduate fills, and the graduate is free to take ownership and grow the position, then purely based on supply versus demand there should not be a lack of available work for graduates.

As Harvey (2000) indicates, many graduates fill positions that may be at a lower level; however, the opportunities are vast should the graduate embrace this new-found emphasis on empowerment, flexibility, learning, and growth. However, concerns regarding the "job-readiness" of graduates have been in the headlines across the world and are ever-present for all relevant parties (Brown et al., 2003). In the South African context, it was reported on 30 June 2009 by Mannak that the unemployment rate for young South Africans between

the ages of 25 and 34 was on the brink of 30% (Mannak, 2009). This in itself is a major concern for the South African economy. Jarzebowski presents statistics from a Career Junction website survey conducted in 2005, which indicate a change in activity among young adults aged 18 – 24 years. This survey showed that there was a 10.53% increase in registration of curriculum vitas on the site, but also that the number of less experienced or more junior candidates far outweighed the number of suitable positions available. With the workplace environment taking a turn towards lifelong employability as opposed to lifelong employment, graduate students and employers of graduates are realising the importance of understanding the labour market and the skills required to become and remain employable today. This is evidenced by the increasing emphasis placed on employability as a key source for informing labour market policy in the UK and the European Union (McQuaid & Lindsay, 2005) and, more recently, South Africa.

The focus of these policies is unclear; however, it is noted that the focus on producing graduates that are work-ready should include graduate attributes that empower these individuals to excel in the new world of work, allowing them to function productively early on in their careers. It is widely accepted that each employer has certain unique requirements for his/her organisation where new recruits are concerned, and the literature here is clear in that there is no one defined or "ultimate" list of skills that would ensure employment (Wellman, 2010). The following section attempts to provide a global view of those skills deemed necessary for graduates to be successful in their careers. As previously indicated, there is a perceived skill gap in the market that needs to be addressed by the relevant authorities. For the purpose of this study this section serves as a starting point to determine some form of employability profile, and determine the underlying psychological career resources related to the employability of graduates.

2.5 GRADUATE EMPLOYABILITY SKILLS

In this section, a closer look will be taken at the specific skills identified in several studies of graduate employability. These skills will be broken up to show those desired by employers, skills that are lacking (gaps), and those skills that employers are most satisfied with. It is also important to consider the views of graduates and what they believe their skills to be, or those required to be successful in the workplace.

Wellman (2010) makes mention of the work done during 2009 by the UK Commission for Employment and Skills, stressing that employability skills must allow and enable any individual to use the more specific knowledge and technical skills acquired through tertiary education. This same commission stresses the fact that employability skills are the distinguishing factor when it comes to being good at a subject and being good at doing one's job. Wellman also notes that the lists of skills that define employability are both exhaustive and confusing.

The work done by Cornford in 2005 (in Wellman, 2010) indicates the difficulty in understanding the terminology used when commenting on graduate employability. It seems that there is great confusion when it comes to core skills, transferrable skills, and then the more generic skills, each taking on a unique meaning in the UK, USA, Canada, Australia, and New Zealand, to mention but a few. However, *generic skills* is an overarching term that includes communication skills, problem-solving skills, computer literacy, information literacy, ability and willingness to learn, as well as team work, among others (Ng, Abdullah, Nee, and Tiew, 2009), and will be used in this discussion within the given boundaries. Organisations that have access to individuals that possess high levels of generic (or employability skills) are able to compete more successfully in the market (Clarke, 2008). In terms of the graduate student, it is argued that these generic skills (which can be learnt) are critical to the facilitation of the transition from university to the working environment (Clarke). Bridgstock (2011) empirically proved that final-year undergraduate students who

believe themselves to have well-developed career-management skills experience higher levels of career success upon graduation.

2.5.1 Graduate Employability Skills and Higher Education

The Dearing Report, as cited by Ng et al. (2009), concluded that the primary purpose of any higher education institution is to prepare their students for the world of work. More so, the argument is that students should be given the opportunity to develop additional (generic) skills to enhance the application of their technical/subject-specific knowledge. As is noted by Maher (2004), employers are more interested in what a graduate can do, as opposed to what the graduate knows. This is highlighted by the survey conducted by Clarke (Clarke, 2008; Ng et al., 2009) among 40 Chief Executives in 1997, whereby it was determined that employers are increasingly on the look for employees who have attributes such as a focus on life-long learning, flexibility, and adaptability to change. These affective skills, which also include leadership, were rated as the top requirements for new employees.

Knoblauch and Greman, as early as 1989, identified enthusiasm, self-starting ability, working with others, oral communication and overall job-readiness as key attributes for Applied Economics and Business Management graduates of the University of Cornell (as cited in Ng et al., 2009).

Another survey conducted in 2007 by the Institute of Directors in the UK (as cited in Wellman, 2010) published its own unique list of 28 skills, attributes, and abilities, whilst the Higher Education Association (2006) (as cited in Wellman, 2010) in the UK presented a list of fourteen graduate skill requirements, as listed below in Figure 2.5, with the emphasis on marketing graduates. It is evident that there is, as yet, little consensus regarding what attributes/skills are in actual fact at the core of graduate employability. It is noted by Wellman that employability skills may, of course, vary from industry to industry, from

employer to employer, and even from one country to the next, making the statement that no one list is definitive all the more true.

- Graduate Skill Requirement
- Imagination/creativity
- Adaptability/flexibility
- Willingness to learn
- Independent working/autonomy
- Working in a team
- Ability to manage others
- Ability to work under pressure
- Good oral communication
- Communications in writing for varied purposes/audiences
- Numeracy
- Attention to detail
- Time management
- Assumption of responsibility and for making decisions
- Ability to plan, co-ordinate, and organise

Figure 2.6 Composite List of Graduate skill requirements (as cited in Wellman, 2010)

Wellman (2010) indicates that although the list in Figure 2.5 may seem simple and nearly complete, it is, indeed, far from perfect. This list of skills was based mostly on data from the UK, the USA, and Australia, lacking input from South Africa, or the whole of Africa, for that matter. A comparison made between various employability skills lists indicates the only commonalities to be those of **communication, teamwork, and self-management**. Thus, it

is safe to say that the identification of employability skills may be more complex than was initially thought. There is, however, broad consensus that these so-called soft skills are critical to any graduate seeking employment in the new world of work, and that most employers are becoming more aware of the critical impact of these skills in securing the competitive edge (McQuaid & Lindsay, 2005). Brian Kleinsmith, Programme Director of the UCT Graduate School of Business (GSB) short course, argues that soft skills should be elevated to the status of critical skills, stating that these are the distinguishing attributes of a truly capable, technically able individual (Siebritz, 2010). Soft skills include communication, leadership ability, negotiation, entrepreneurship, team building, and interpersonal skills, with Navarro (2008) arguing that these skills are just as important as data analysis and rigorous application of analytical management tools. Both employers and graduate recruiters consistently emphasise the value of these soft skills as key to the selection process, but also in the attainment of long-term career success (Pittenger, Miller & Mott, 2004; Clarke & Patrickson, 2008).

Croucher, Canning, and Gawthrop (2007) conducted research among graduates from the Humanities Department at the University of Southampton in order to gain an understanding of their employability and entrepreneurial skills. These graduates were all self-employed and thus the research was focussed around the skills that made them successful and whether they would have benefited from more support during their studies. The researchers state that graduates from this department are often perceived as having more unclear career paths than those graduating from a professional course such as medicine or law. The research was conducted from the point of view of the graduate, and it became clear that the graduates were all satisfied with their academic, analytical and research skills, as well as their ability to solve problems. The graduates did indicate, however, that they felt less able in areas relating to finance and professional bodies, leaving them at a disadvantage (Croucher et al., 2007). Graduates also indicated that, although they lacked business acumen, their levels of adaptability and creative thinking far exceeded those of graduates from other disciplines. As such, they saw their overall employability as well developed, only at a different level.

It is clear from the above that graduates view their time at university as critical to learning more than just the subject-related knowledge. There is an expectation of support in order to develop in a manner so as to gain meaningful employment once entering the job market. Many similar studies and surveys have been conducted in the continued pursuit of defining one specific list that would guide graduate employment, possibly across the globe, as is presented in the following section.

Skills of University of Buea Graduates (Cameroon)

The study conducted by Lyonga, Endeley, Tanjong, and Sikod (2002) over the period of 1996 to 1999 took into consideration various departments of the university. The study can thus be considered representative of graduates from Cameroon. The study not only looked at skills, but argues that employability shapes policy and thus, policy should move society forward. Most graduates were able to secure employment with small private sector companies within one year of graduating, but most did not work in their field of study.

Especially significant from this study is that the knowledge acquired from the Faculty of Social and Management Sciences was indicated as most-used by graduates. The skills expected of graduates included a sense of responsibility, self confidence, adaptability, and the ability to co-operate. These graduates were least expected to display skills such as unconventional thinking, independence, and the ability to work under stress. Lastly, it seems that nearly a third of the 1000 graduates surveyed were employed in positions deemed to be inappropriate to their level of education.

Yorke & Knight's Employability Skills

Yorke and Knight (2006), among others, compiled an extensive list of 39 dimensions of employability, which were further grouped into 3 categories, namely personal qualities, and

core and process skills. These dimensions, shown in Table 2.1 below, are said to be useful in the design and analysis of higher education curriculum (Yorke & Knight, 2006). These employability skills and qualities should be embedded in learning, thereby producing an overall employable graduate upon completion of a course.

Table 2.1 Dimensions of Employability

A. PERSONAL QUALITIES
Malleable self-theory: (belief that attributes, e.g., intelligence are not fixed, and can be developed)
Self-awareness: (awareness of own strengths and weaknesses, aims, and values)
Self-confidence: (confidence in dealing with the challenges of employment and life)
Independence: (ability to work without supervision)
Emotional intelligence: (sensitivity to others' emotions and the effects that the emotions can have)
Adaptability: (ability to respond positively to changing circumstances and new challenges)
Stress tolerance: (ability to retain effectiveness under pressure)
Initiative: (ability to take action unprompted)
Willingness to learn: (commitment to ongoing learning to meet the needs of employment and life)
Reflectiveness: (the disposition to reflect evaluatively on the performance of oneself and others)
B. CORE SKILLS
Reading effectiveness: (the recognition and retention of key points)
Numeracy: (ability to use numbers at an appropriate level of accuracy)

Information retrieval: (ability to access different sources)
Language skills: (ability to speak more than a single language)
Self-management: (ability to work in an efficient and structured manner)
Critical analysis: (ability to "deconstruct" a problem or situation)
Creativity: (ability to be original or inventive, and to apply lateral thinking)
Listening: (focused attention in which key points are recognised)
Written communication: (clear reports, letters etc written specifically for the reader)
Oral presentations: (clear and confident presentation of information to a group)
Explaining: (orally and in writing)
Global awareness: (in terms of both cultures and economics)
C. PROCESS SKILLS
Computer literacy: (ability to use a range of software)
Commercial awareness: (understanding of business issues and priorities)
Political sensitivity: (appreciation of how organisations work and acting accordingly)
Ability to work cross-culturally: (both within and beyond the UK)
Ethical sensitivity: (appreciating ethical aspects of employment and acting accordingly)
Prioritising: (ability to rank tasks according to importance)
Planning: (ability to set achievable goals and structure action)
Applying subject understanding: (use of disciplinary understanding from the HE programme)
Acting morally: (having a moral code and acting accordingly)
Coping with ambiguity and complexity: (ability to handle ambiguous and complex

situations)
Problem solving: (ability to select and use appropriate methods to find solutions)
Influencing: (ability to convince others of the validity of one's point of view)
Arguing for and/or justifying a point of view or a course of action
Resolving conflict: (both intra-personally and in relationships with others)
Decision making: (ability to choose the best option from a range of alternatives)
Negotiating: (discussion to achieve a mutually satisfactory resolution of contentious issues)
Team work: (ability to work constructively with others on a common task)

SOURCE: Adapted from Yorke, 2006

The skills presented in the above table indicate what is seen in the literature to be ideal or necessary in order to achieve fulfilment and career success. All things being equal, should a graduate have these skills and qualities he/she can be said to be employable, and should be more likely to gain employment.

Yorke and Knight (2006) further cite the work of John Brennan and colleagues to show that UK graduates consider the top ten employability skills or competencies required as:

- Working under pressure;
- Oral communication;
- Accuracy;
- Attention to detail;
- Working in a team;
- Time management;

- Adaptability;
- Initiative;
- Working independently;
- Taking responsibility for decisions; and
- Planning, co-ordinating, and organising.

Based on the USEM model of Yorke and Knight (2006), graduates from the Department of Hospitality, Leisure and Tourism Management were given the opportunity to rate the skills identified under the categories of personal qualities, core skills, and process skills. Self confidence and the ability to prioritize were rated as most important, whilst adaptability, independence, explaining, listening, planning, and computer literacy were all rated nearly equal. Many of the skills indicated here correlate closely to those indicated as required by employers, as will be seen later in this chapter.

University of Teeside & University of Columbia Employability Skills

Helyer (2007) is of the opinion that employability is a complex mix of various elements, which may vary from position to position. What is also interesting about this research is that Helyer takes note of the fact that most individuals will have more than one position and possibly even more than one career path during their life. She indicates that one therefore needs to be adaptable and multi-faceted as an employee, whilst also being able to continuously re-invent oneself. Other specific skills mentioned in this research that cut across all specific disciplines, includes coping with competition, teamwork, negotiation, independence, communication, project management, research skills, and using theory in practice.

Humanities faculties, according to Helyer (2007), are generally able to offer students a good base for the development of softer skills. According to the research conducted by Allen

(1998), it is expected then that graduates from this discipline should display a high level of employability. Allen's research was based on graduates from the Humanities, Social Sciences, and Education faculties at the University of British Columbia (Canada). It was clear that graduates from these areas were readily able to secure positions that were fairly high-paying. As such, these graduates were generally seen as employable.

Summary

The researcher is of the opinion that no one person could possess all these skills at any one given time. A combination may certainly exist, but these lists of skills and the literature in general seem to exclude context, environmental factors, as well as individuality. Moreover, it is often the determination with which one sets out to secure employment that is the differentiating factor. Although these skills provide a solid basis, one cannot exclude or ignore other factors that may be of critical importance.

The following section takes a look at those skills that employers across the world have identified as desired

2.5.2 Skills Desired by Employers

Garvin and Datar (2009) in their Summit Report of Business Education in the 21st century took a serious look at why MBA programme popularity is on the decline at the Harvard Business School. Their findings included an array of issues, but it was highlighted that the emphasis on education is too great, and little is done to promote skills learning. They further identified the skills and practical qualities that recruiters and employers want, including leadership, global exposure, communication and presentation skills, problem identification abilities in ambiguous environments, and self-awareness. These skills were defined further, but each encompasses the idea that organisations are changing and

therefore require adaptable, innovative employees who are able to reflect on different issues and continuously improve.

The University of Portsmouth in the United Kingdom has devoted an entire department to employability. It has put forward a strategy for employability (2009) that includes a list of skills that have been identified by the Association of Graduate Recruiters (AGR) as core to its strategy. These skills are shown in the table below.

Table 2.2 Employability Skills (AGR, 2009)

Skills		
Team working	Flexibility	Problem solving
Enterprise	Numeracy	Second language
Oral communication	Commercial awareness	Analysis and decision-making
Planning & organisation	Leadership	Cultural sensitivity
Computer literacy	Written communication	Project management
Customer focus	Risk-taking	

This list shows a good balance, incorporating both soft and technical skills, as indicated by previous models as dimensions of employability. Much in line with the above is the research conducted by the Department of Education in Victoria, Australia. The research was published by the Australian Chamber of Commerce (ACCI) and presents an Employability Skills Framework that is exclusively focussed on the views of employers with regards to desired skills of employees. The paper states that it is evident that technical skills are no longer the only consideration, but that employers are increasingly focussing on employing individuals with a range of attributes and personal abilities. The definition used for employability skills in the mentioned research is: “skills required not only to gain employment, but also to progress within an enterprise so as to achieve one’s potential and

contribute successfully...” (Employability skills: An Employer..., 2002, p.3). This definition implies self-employment and, more importantly, continuous learning and skills development.

The Employability Skills Framework incorporates the following key and personal skills:

Table 2.3 Employability Skills Framework (ACCI, 2002)

Key Skills (Groups)	Personal Attributes
Communication	Loyalty
Team work	Commitment
Problem solving	Honesty and integrity
Initiative and enterprise	Enthusiasm
Planning and organising	Reliability
Self-management	Personal presentation
Learning skills	Common sense
Technology	Positive self-esteem
	Sense of humour
	Balanced attitude to work and home life
	Ability to deal with pressure
	Motivation
	Adaptability

It is evident from Table 2.3 that skills can and should be separated into skills and personal attributes. When compared, it seems that Tables 2.1, 2.2, and 2.3 include a number of the same skills/attributes, implying that employers from the UK and Australia require many of

the same skills in a new employee at graduate level. The one universally required skill is that of flexibility, also known as adaptability. These terms are used interchangeably in the literature. Thus, further support is presented for the Graduate Employability Model of Bezuidenhout (2011), which places great emphasis on adaptability.

Further studies on what employers actually want and require from job-seekers at graduate level include the work of R. Hansen and K. Hansen (n.d.). These researchers attempted to present a comprehensive list of skills by joining various other studies. Although the skills are soft skills, they are critical employability skills. These skills are as follows:

- Communication skills
- Analytical/Research skills
- Computer/Technical literacy
- Flexibility/Adaptability/Managing multiple priorities
- Interpersonal abilities
- Leadership/Management skills
- Multicultural sensitivity/awareness
- Planning/Organizing
- Problem solving/Reasoning/Creativity
- Teamwork
- Honesty/Integrity/Morality
- Dedication/Hard-working/Work ethic/Tenacity
- Dependability/Reliability/Responsibility
- Loyalty
- Positive attitude/Motivation/Energy/Passion

- Professionalism
- Self-confidence
- Self-motivated
- Willingness to learn

The skills are presented in the research as inclusive of personal skills. Hansen and Hansen (n.d.) show these skills to be necessary for the 'quintessential career,' and are considered to be universally desired by employers.

A 2008 survey conducted by collegegrad.com (Ingbretsen, 2009) shows that the combination of degree/major and skills set is what an employer seeks when hiring graduates. This survey also shows that a positive attitude, leadership skills, and a display of work ethic play a key role in employment decisions. Furthermore, the National Association of Colleges and Businesses (cited in Ingbretsen, 2009) states that communication skills, a strong work ethic, teamwork skills, initiative, and analytical skills rank among the top five personal skills sought by employers. From this research, it is once more evident that a degree alone is no longer the only factor considered.

Another study conducted by Hodges and Burchell (2003) focussed on the competencies of business graduates in Auckland, New Zealand, from the employer's point of view. This study presents a comprehensive summary of those research studies that have identified skills that are required or expected of graduate students. Those studies, cited in Hodges and Burchell, all note communication skills, problems solving, and learning, as well as a positive disposition, as important to possess and display. Based on these findings, Hodges and Burchell distributed a questionnaire survey among 1303 employers in Auckland. Only 154 were returned completed, but the data still provided much insight into what employers rate as important competencies in graduates. What is critical in terms of the results is that the ability and willingness to learn was rated as the most important competency. Of the 25

competencies rated, technical expertise was among the bottom 5, along with organisational awareness, impact and influence on others, leadership, and developing others. The International Bureau of Education (IBE) in 2007 conducted a survey that was more representative in its approach, as it included businesses from various industries, and of different sizes and origins. This survey indicated that the most desirable skills include, firstly, the soft skills, followed by a degree (subject-matter knowledge) and IT skills. This evidence indicates, once again, that approaches to employing individuals may vary, but that the requirements and expectations of employers remain quite similar.

The emphasis on ability and willingness to learn correlates to the idea that individual employees today must take responsibility for their own continued development. Thus, if employability also refers to the ability to continuously create new opportunities while updating skills and adapting to change, then learning becomes the core ingredient (Hodges & Burchell, 2003).

This section has provided some idea of what it is that employers require of new graduates. It seems clear that communication and learning, along with more personal attributes such as adaptability are important to most, if not all employers. The current study's researcher is of the opinion that, although complex and difficult to define, the required employability skills may not be as different from one employer to the next as has been described in the literature. Of course, one must pay attention to the different demands that arise depending on position, business type, and even country (economic) demands, but there are some basics that all employees need in order to maintain success throughout their careers. Zhiwen and Van der Heijden (2008) indicate that internationalisation requires people to think globally and be able to communicate effectively cross-culturally. If the world has become so inter-related and inter-dependant, a common set of attributes or skills might no longer be that difficult to establish.

In order to gain a full and clear picture of the skills that are available and desired in the market, it is important to take note of those skills said to be lacking when it comes to graduate-level employees. These are shown in the following section.

2.5.3 Lacking Graduate Employability Skills

The Skills Needs Assessment for Health and Fitness (2005) is comprehensive in its account of skills lacking and desired by employers. The report indicates the percentage of specific skills required by employers across England who experience skill shortages:

Team work (31%), communication (38%), technical and practical (50%), customer handling (36%), problem solving (29%), relevant qualifications (4%), management (19%), literacy (23%), personal attributes (5%), general IT (11%), numeracy (19%), and foreign languages (7%).

Only 11% of employers indicated they do not experience any particular skill shortage with regard to graduate employees.

According to Bowers and Mercalf (2008), graduates today are not adept at dealing with the complex uncertainties that form part of the decentralised organisation of the 21st century. This statement has been substantiated by countless researchers, as indicated by Bowers and Mercalf, and gives a clear indication that, despite the level of technical skill graduate students qualify with, there are a number of other areas in which they are lacking. It is these areas that now top the list of priorities of employers. In most cases, graduates have the technical knowledge but lack the practical ability to use that knowledge (Zhiwen & Van der Heijden, 2008).

Hamilton, McFarland, and Mirchandani (2000) indicate that the delayed organisation consist of structures that hinge on team-oriented and collaborative functioning. Many higher education institutions offer a curriculum that is more suited to the traditional hierarchically structured organisation, thus limiting the graduate students' thinking and functioning when they commence with work. It is therefore clear that, given this mentality, graduates are lacking in the application of their theoretical knowledge within the cross-functional environment in which they find themselves. A total of 53% of the Chief Financial Officers surveyed in 2008 by Robert Half Management Resources (as cited in Bowers & Mercalf, 2008) indicated that they would rather hire a graduate with less technical knowledge, but with well-developed soft skills. This implies that the lacking ability in knowledge application may in part be attributable to underdeveloped soft skills.

Ng et al. (2009) conducted research on Business Graduates of the University of Curtin (Australia). The research was based on the graduates of the University's first off-shore campus in Malaysia. According to the university's policy, students are expected to develop nine specific attributes to ensure work-readiness and employability. The exploratory research showed that these graduates were highly capable in terms of technological skills, ethical principles, and communication of the academic curriculum. However, their greatest shortcoming was the inability to think globally (seeing the "bigger picture") and considering all alternative options during problem-solving. Another area that raised some concern was that graduates do not take responsibility for their own learning and development, thus not taking the stance of life-long learning. Employers also indicated a considerable lack of creative thinking and analytical problem-solving in these graduates. Lastly, the research brought to light the fact that graduate students are not applying their specific discipline knowledge as well as was hoped, nor are they bringing leadership skills to the work environment. Ng et al. (2009) indicate that these results correlate with a study conducted at the MARA University of Technology in Sarawak, with the greater number of graduate employees indeed acknowledging their lack in these mentioned areas.

Duke (as cited in Wellman, 2010) conducted a skill-gap analysis during 2002 in order to determine the gap between desired and actual graduate skills. The results were indicative of gaps in the categories of interpersonal, leadership, and communication skills, awareness of the international economic situation, and knowledge of business practices. Maher (2004) of Oxford Brookes University indicates that the largest gaps between competencies required and those present in graduates include:

- Coping with ambiguity and complex situations;
- Emotional intelligence;
- Initiative;
- Stress tolerance; and
- Self-confidence.

Bowers and Metcalf (2009) support the fact that an increasing number of graduates are struggling when having to cope with ambiguity and complexity. The researchers also state that graduates' soft skills are not adequately developed. In fact, a survey in 2004 conducted by GMAC Corporate Recruiters indicated that graduates from the MBA programmes were lacking in communication skills (written and oral), interpersonal skills, as well as leadership skills.

In another study, conducted by Beaven and Wright (2006), it was determined that the skills found to be most lacking in graduates (but which employers seek) include experience, self-management, coping under pressure, and "real world knowledge." It is clear from this evidence that there is a perception that graduates lack communication skills specifically, and that this skill is critical in overall work success (Bowers & Metcalf, 2006; Beaven & Wright, 2006).

In summary then, there is very little consensus on nearly every aspect of employability, except that it is already an important concern for all relevant stakeholders. Developing certain skills in order to become and remain employable is central to career success, and also to a competitive advantage in the labour market. The present study will investigate the employability of graduate students based on the model of Bezuidenhout (2011) and will make use of the instrument that was developed in South Africa with specific reference to the South African student. The instrument focuses on career self-management, sociability, cultural competence, and personal dispositions (career-related core self-evaluations, entrepreneurial orientation, career resilience, pro-activity, and openness to change).

The South African context has many unique requirements regarding employment in general and the skills a young graduate needs to survive in this complex environment. There is still a lack of scientific research on the skills that ensure employability within the South African context, but there is some knowledge available as to what skills are lacking in South Africa in general (Jarzebowski, 2005). Jarzebowski (2005) reported in Bizcommunity that the job seeker must realise that South Africa consists of a dual economy (developed and developing) and, as such, job creation and unemployment are at the highest level of importance.

The increasing levels of importance mentioned above add to the necessity of the present study. In order to inform the labour market and graduates alike, it is critical to investigate and understand graduate employability and those psychological career resources that possibly influence overall employability.

2.6 INTEGRATED MODEL

The acknowledgement of the contribution made by one's knowledge, transferable skills, distinctive attributes, experience, and achievements is core to the notion of employability.

Employability is viewed by Coetzee (2008) as the inherent capability of gaining access to the workplace, and adjusting to and making a productive contribution to the workplace. Thus, in order to be successful and continuously able to meet the requirements of the new world of work, individuals must utilise their psychological career resources or career meta-competencies effectively. These psychological career resources encourage self-directed learning and a proactive approach to career self-management, which subsequently contribute to general employability.

When considering the influences on graduate employability, it is clear that personal attributes/context is often not considered; however, employability in its simplest form relates to the ability to attain and keep a job. Since employers have realised that the competitive edge in the 21st century lies in the adaptability and flexibility of their workforce, they have also realised that their role in obtaining such resources has also changed. The recruitment of graduate students is as yet an untapped avenue, and employers are increasingly focusing on this form of sourcing. Graduates are assumed to have learnt valuable transferrable or generic skills throughout their studies toward a degree (Pool & Sewell, 2007). It was discussed in the previous section that, although no one list of skills exists at the present time, it is clear that the required skills relate to the softer skills, such as communication, interpersonal relationships, leadership, openness to change and adaptability, a learning attitude, and creative problem solving. However, proactive career behaviour is what, to a large extent, facilitates the acquisition of such skills.

Psychological career resources are “career-related orientations, values, attitudes, abilities and attributes that lead to self-empowering career behaviour and promote general employability” (Coetzee & Roythorne-Jacobs, 2007, p.47). The dimensions of psychological career resources (career preferences, career values, career enablers, career drivers, and career harmonisers) relate to and influence the dimensions of graduate employability as described by Bezuidenhout (2011). According to Coetzee (2009), proactive career behaviour relates to the ability to use a range of psychological career resources (as seen in Figure 2.7 below), including being adaptable and flexible, being able

to deal with career-related stressors, and the ability to identify viable alternative career opportunities.

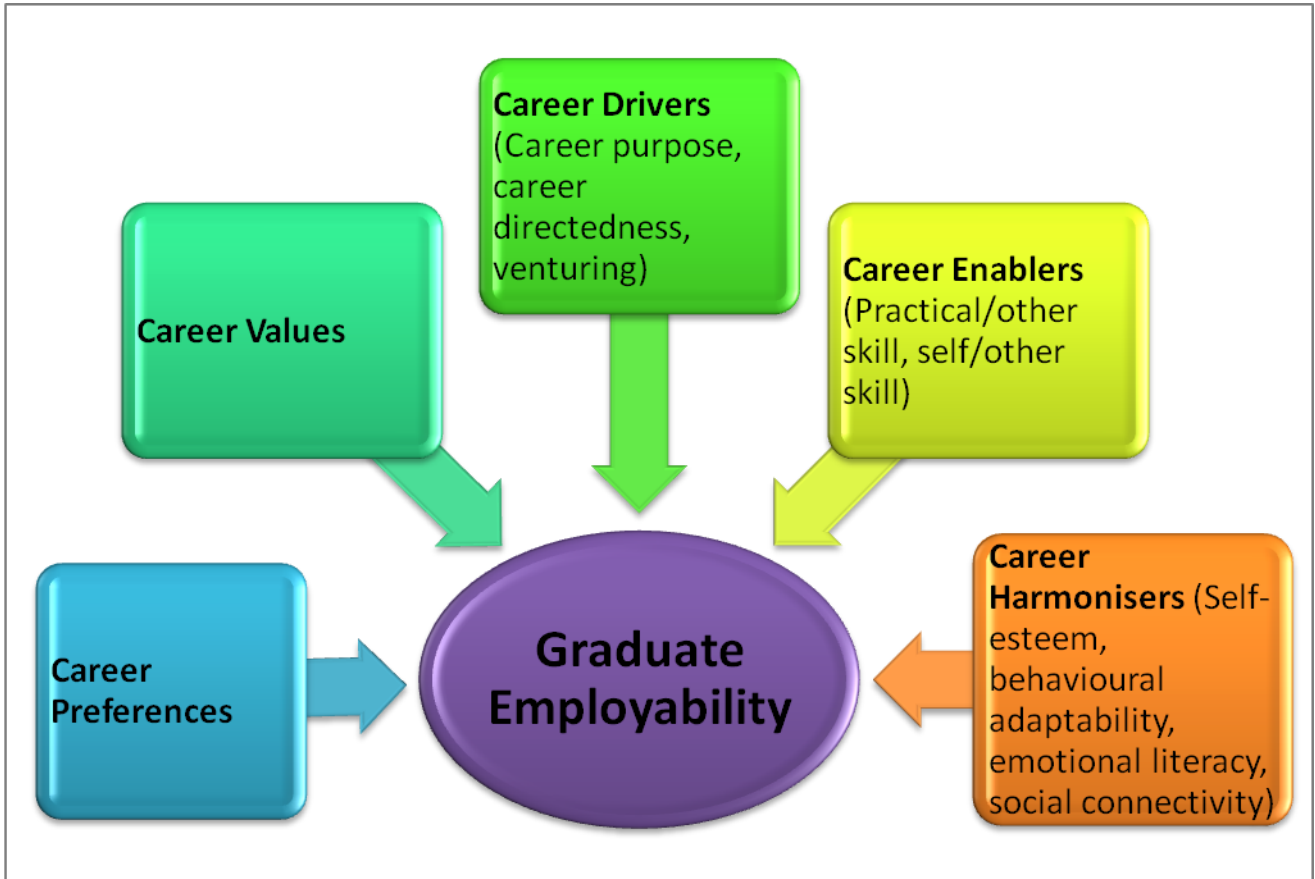


Figure 2.7 Integrated Model

Psychological career resources encompass inherent meta-competencies that enable a person to adapt to changing working situations and to further shape a career in a manner that ensures success (Coetzee, 2008). It is noted in the literature that an individual with a vast number of psychological career resources can be seen as more employable (Coetzee, 2008, Fugate et al., 2004). Should the resources be well developed and balanced, the individual will be better equipped to enact proactive career behaviour and also career management. The next chapter will therefore focus on the research strategies engaged to better assess the psychological career resources and employability of graduate students, as well as the relationships between these dimensions.

2.7 CONCLUSION

Chapter 2 provided a review of the literature that has thus far shaped the understanding of graduate employability and psychological career resources. Several models regarding the conceptualisation of employability were presented in this chapter. Given the scope of the study, those sources deemed most relevant to graduate employability were utilised in order to identify the skills that are seen in graduates at university level, those desired by employers, and those that are lacking according to employers. From the literature, it is evident that there is indeed little consensus on the construct of employability, but that its importance in the 21st century cannot be overstated. This chapter also indicated that psychological career resources have been shown to contribute to general employability by means of the meta-competencies they encompass. Chapter 3 provides insight into the specific research methodology used to conduct the research.

CHAPTER 3: RESEARCH DESIGN AND METHODS

3.1 INTRODUCTION

According to Bergh and Theron (2003, p.21), research design denotes a “specific, purposeful, and coherent strategic plan to execute a particular research project in order to render the research findings relevant and valid.” This chapter deals with the research methodology of the current study, and includes a description of the population and sample, and a detailed consideration of the measuring instruments (rationale, dimensions, validity, reliability, and interpretation). The study is exploratory in nature; however, hypotheses will be set to determine any statistically significant relationships between graduate employability and psychological career resources.

In order to aid the achievement of the research objectives, a survey design was utilised. This method brings with it several advantages, including a considerable saving in time and money, no interview prejudice, precise results, and increased confidentiality, along with the fact that the sample size need not be as large in relation to the population. However, the disadvantages of this approach need to be kept in mind in order to accurately interpret results, with the main disadvantage being that results cannot be generalised to the greater population. Furthermore, the survey design may result in bias due to the motivation of the respondent to respond in a socially desirable manner (Salkind, 2006). Should there be a need to generalise the results of the current study to those not included in this study, a wider and more diverse population selection would be required.

3.2 DETERMINATION AND DESCRIPTION OF SAMPLE

Bless et al. (2006) suggest that one of the main objectives of sampling is to draw inferences from the data collected about the greater population. In the present study, the researcher

investigated the employability and psychological career resources of the sample of students, as well as possible relationships between the constructs.

One of the most important considerations in sampling is what the size of that sample should be. It is generally known and accepted that studying the entire population would be the ideal situation; however, not only is this costly, but collecting the data and analysis thereof may take so long that it may become outdated, and thus irrelevant. Bless et al. (2006) argue that the main factor to consider when deciding on sample size is whether the sample will be representative of the population. Maree and Pietersen (2007) (as cited in Maree, 2007) indicate that sample size generally depends on the planned types of statistical analyses, the degree of accuracy required, and the overall characteristics of the population.

In the current study, purposive sampling was used, with the sample considered to have been representative of the greater population, as described by Bless et al. (2006). The students within the sample are referred to as the "units of analysis." The sample was determined in two stages. Firstly, the population of students registered in the Faculty of Economic and Management Sciences, and specifically in the programme for Human Resource Management/Industrial Psychology were identified. Secondly, a random sample of 113 students who were attending a human resources management class was selected from the total population of 230 students. These students were soon to graduate and enter the job market. Employability skills were therefore of critical importance to this group. Each member of the population had an equal chance of selection for participation in this study. The sample of 113 students was used as a representation of the population and, with the assistance of the lecturer, a time slot was allocated during which an explanation was given of the purpose and method for completion of the survey, with 100% response rate being achieved from the sample.

3.2.1 Biographical Composition of Sample

The sample of 113 graduating students from the Faculty Economic and Management Science was requested to indicate their biographical details regarding gender, age, and race on the questionnaire. These biographical details were used to establish differences between gender groups on the GEM and PCRI dimensions.

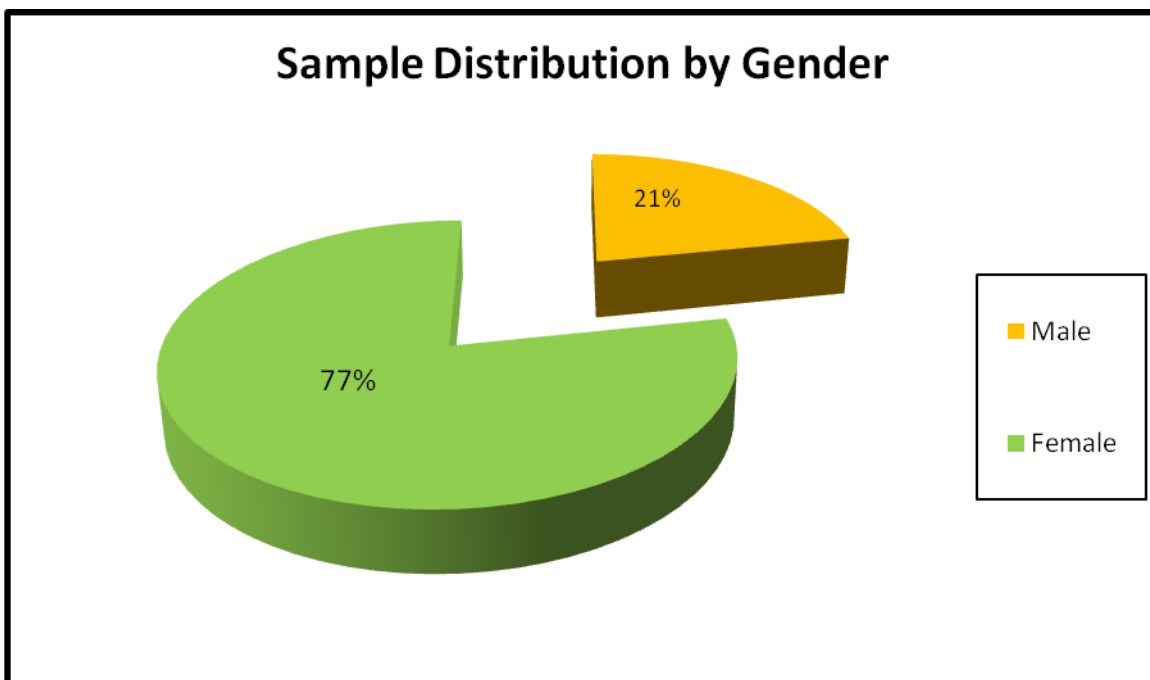


Figure 3.1 Gender group distribution of Sample (N=113)

The sample consisted of mostly female respondents, as indicated in Figure 3.1, with this gender group constituting 77% (N=86) of the sample. Men represented only 21% of the sample (N=24). Furthermore, the race distribution was made up of mainly white individuals (70%), but also included African (16%), Coloured (3%), and Indian (8%) students. Lastly, the sample was, as expected, made up of students aged 25 years and younger (95%). These details rendered the sample distribution rather skewed, which may be seen as a limitation to the study. This will be discussed in greater detail in Chapter 5. No other

analysis was conducted in terms of biographical details, given that such analysis would have required a normal distribution.

3.3 THE MEASURING INSTRUMENTS

The measuring instruments used in this study include:

The Psychological Career Resources Inventory (referred to as the PCRI) developed by Coetzee (2008), which measures the psychological career resources of a sample; and

The Graduate Employability Measure (referred to as the GEM) developed by Bezuidenhout (2011), which measures the various dimensions of graduate employability.

The relevance, reliability, and various dimensions of each instrument will now be discussed.

3.3.1 Psychological Career Resources Inventory (PCRI)

This measure, developed by Coetzee (2008), is a self-rated measure that contains 64 items measuring five sub-scales. The measure is based on the model of psychological career resources designed by Coetzee in 2008 (refer to page 28 of this document for the model).

3.3.1.1 Rationale and Purpose

The purpose of the PCRI is to measure the psychological career resources relating to general employability of individuals. The PCRI was considered an appropriate measure for use in the current study, as it is psychometrically sound and was developed specifically for

the South African context. The use of this instrument was expected to result in an overall view of graduate student psychological career resources that are present, or lacking.

3.3.1.2 Dimensions of the PCRI

Summarised in Table 3.1 below are the dimensions of the PCRI, along with the number of items per dimension. Also included is the purpose or a description of what is measured by each dimension.

Table 3.1 Dimensions of Psychological Career Resources Inventory (PCRI)

DIMENSION	MEANING / MEASUREMENT
Career Preferences (17 items) & Career Values (8 items)	The stable cognitive or conceptual structures underpinning the thinking about one's career, with the career value identifying the reason for that preference.
Career Enablers (8 items)	Transferable skills (practical and creative skills), self-management, and relationship skills that form the basis of career enablers.
Career Drivers (10 items)	Consists of people's sense of purpose, career directedness, and career-venturing attitudes.
Career Harmonisers (21 items)	Those psychological attributes that ensure that the career drivers remain in balance.

The dimensions are made up of a total of 64 items and collectively give a good view of those meta-competencies that contribute to employability. Each item is self-rated and is discussed in the following section.

3.3.1.3 Interpretation

Items were rated on a six-point Likert-type scale to determine both existing and preferred responses. The ratings ranged as follows:

1 = never

2 = rarely

3 = sometimes

4 = often

5 = almost always, and

6 = always.

Respondents were expected to indicate one rating per item. This type of scale allows for the organised collection of data and was used for all items included in the questionnaire. The model developed by Coetzee (2008) was used as the basis for further interpretation.

3.3.1.4 Administration

The PCRI is a self-administered questionnaire and is completed independently. Clear instructions for completion were provided during the administration session, and these instructions were repeated on in the questionnaire to ensure that respondents were comfortable with what was expected of them and were able to refer back to it in cases of uncertainty. The respondents were requested to rate the statements on the six-point Likert-type scale on the basis of their observations of their psychological career resources. Incomplete questionnaires were discarded, leaving only completed questionnaires to be included in the research study.

3.3.1.5 Reliability and Validity of the PCRI

Coetzee makes use of a 6-point Likert-type scale to avoid neutral responses. Overall, 15 constructs are measured by the PCRI. Table 3.2 below shows the number of items per construct and the Cronbach alpha value per construct.

In the current study, Exploratory factor analyses indicated that the PCRI not only satisfied the “psychometric criteria of both convergent and discriminant validity” (Coetzee, 2008, p. 13), but also that the contact was appropriate in terms of the theoretical constructs that were to be measured. The reliability of the PCRI as determined by Cronbach alpha coefficients is shown in Table 3.2 below.

Table 3.2 Descriptive statistics: Cronbach’s alpha coefficients, means, and standard deviations (PCRI) (N=2 997)

PCRI scale	Cronbach’s Alpha	Mean	Standard Deviation
Career Preferences			
Stability/Expertise	0.73	3.52	0.48
Managerial	0.75	2.84	0.77
Variety/Creativity	0.70	3.17	0.71
Freedom/Autonomy	0.62	2.81	0.70
Career Values			
Growth/Development	0.74	3.58	0.46
Authority/Influence	0.61	2.84	0.71

Career Enablers			
Practical/Creative skills	0.68	2.41	0.69
Self/Other skills	0.63	3.40	0.53
Career Drivers			
Career purpose	0.66	3.62	0.41
Career directedness	0.63	3.01	0.68
Career venturing	0.70	2.92	0.85
Career Harmonisers			
Self-esteem	0.77	3.30	0.51
Behavioural adaptability	0.73	3.22	0.54
Emotional literacy	0.70	3.05	0.60
Social connectivity	0.67	3.33	0.55

Source: Coetzee (2008, p.13)

For a reliability coefficient to be desirable, it should fall between 0.80 and 0.90, as determined by Anastasi in 1967 (as cited in Coetzee, 2008). For the PCRI, the Kaiser-Meyer-Olkin measure of sampling adequacy and the Bartlett test of sphericity were also used in order to confirm the reliability results, as recommended by Coetzee (2008) as in Table 3.2. The results indicated that the averages for the KMO measure were between 0.79 and 0.92, and that the Cronbach alphas were between 0.71 and 0.88. The PCRI was therefore considered a reliable measure.

3.3.1.6 Motivation for Use

The PCRI measuring instrument was designed to measure psychological resources specifically in a South African context, which was an important consideration in the present investigation.

The current study investigated broad trends and possible relationships between variables, and was not solely aimed at making individual predictions, which made the PCRI a useful instrument. Lastly, the PCRI is supported sound psychometric properties, the need for which as was highlighted previously.

3.3.2 Graduate Employability Measure (GEM)

This measure was developed by Bezuidenhout (2011) for the purpose of evaluating graduate employability. The measure is a self-administered questionnaire consisting of 54 items and 9 sub-scales.

3.3.2.1 Rationale and Purpose

The GEM is a measure of graduate employability on nine sub-scales. The instrument was developed in the South African context, specifically for graduate students, and gives a good overall view of an individual's employability.

3.3.2.2 Dimensions of the GEM

Table 3.3 below indicates the subscales of the GEM and includes an explanation of each dimension. The measure consists of nine dimensions of employability and is based on the Graduate Employability Model developed by Bezuidenhout (2011), which incorporates the context and demands of the new world of work.

Table 3.3 Dimensions of Graduate Employability Measure

GEM Subscale	Original description
Career self-management drive (CSD)	<i>Career self-management drive</i> refers to a tendency to proactively manage one's career by regularly collecting career-related information so as to enhance knowledge of the self and the external environment, including the world of work.
Cultural competence (CC)	<i>Cultural competence</i> refers to a person's effectiveness in understanding of and working with different people.
Personal disposition: Openness to change (OC)	<i>Openness to change</i> refers to the extent to which individuals seek out new experiences and are willing to consider new ideas.
Personal disposition: Proactivity (P)	<i>Proactivity</i> refers to one's disposition towards engaging in active role orientations, and implies future-orientated and self-initiated action to change and improve oneself or one's situation.
Personal disposition: Sociability (S)	<i>Sociability</i> refers to being open to establishing and maintaining social contacts and utilizing formal and informal networks to the advantage of one's career.
Personal disposition: Career resilience (CR)	<i>Career resilience</i> is a personal disposition that facilitates a high degree of adaptability, flexibility, self-

	confidence, and competence, regardless of adverse career circumstances.
Personal disposition: Entrepreneurial orientation (EO)	<i>Entrepreneurial orientation</i> refers to a preference for innovation and creativity, a propensity to take risks, a need for achievement, tolerance for ambiguity, and a preference for autonomy in exploiting opportunities that exist in the career environment.
Personal disposition: Emotional literacy (EL)	<i>Career-related core self-evaluations</i> is a broad, higher-order trait consisting of (a) self-esteem, (b) locus of control, (c) generalized self-efficacy, and (d) emotional literacy, and relates to the basic evaluations that people make of themselves regarding their self-worth within the career context.
Personal disposition: Generalized self-efficacy (GSE)	<i>Emotional literacy</i> in this context is the adaptive use of emotions, and refers to the extent to which individuals perceive themselves as able to recognize, understand, and manage emotions in themselves and others.

Source: Adapted from Bezuidenhout (2011, p. 178)

The dimensions include a total of 56 items, and the overall mean scores give some indication of the level of employability of a graduate student. As is set out in the following section, the measure is self-administered and each item is rated on a Likert-type scale.

3.3.2.3 Interpretation

The GEM is a self-administered questionnaire consisting of 56 items or questions, and interpretation is based on a six-point Likert-type scale that was used to rate both existing and preferred responses to the questionnaire.

The rating options were as follows:

1 = never true

2 = rarely

3 = sometimes

4 = often

5 = almost always, and

6 = always true.

Respondents were expected to indicate one rating per item. This scale is the same type of scale as is used in the PCRI, and again allows for organised and logical data collection, thereby simplifying the analysis and the interpretation thereof.

3.3.2.4 Administration

The GEM is a self-administered questionnaire and is completed independently. Clear instructions for completion were provided during the administration session, and these instructions were also presented in the questionnaire to ensure that the respondents clearly understood what was expected of them. The respondents had to rate the statements according to the six-point Likert-type scale according to their perceptions of their psychological career resources. Incomplete questionnaires were discarded.

3.3.2.5 Reliability and Validity of the GEM

This section indicates that the GEM is psychometrically sound as a measure of graduate employability.

Table 3.4 Reliability and Validity scores of the Graduate Employability Measure (GEM)

Factors	Cronbach Alpha	Number of items in scale	Mean	Standard Deviation
Factor 1: Personal disposition: Openness to change	.808	7	5.47	0.13
Factor 2: Career self-management drive	.884	10	5.28	0.22
Factor 3: Cultural competence	.829	6	5.55	0.11
Factor 4: Personal disposition: Generalized self-efficacy	.802	6	5.41	0.03
Factor 5: Personal disposition: Proactivity	.851	6	5.52	0.12
Factor 6: Personal disposition: Sociability	.738	5	5.26	0.13
Factor 7: Personal disposition: Emotional literacy	.796	6	5.46	0.16
Factor 8: Personal disposition: Entrepreneurial orientation	.797	5	5.36	0.14
Factor 9: Personal disposition: Career resilience	.806	5	5.39	0.12
Total Scale	.968	56		

Source: Bezuidenhout (2011, p.164-166)

As indicated in the table above, the GEM indicated satisfactory psychometric characteristics. The alpha coefficients ranged from 0.82 to 0.93, which can be considered most satisfactory (Bezuidenhout, 2011). Given this high level of internal consistency, it is clear that the GEM is a psychometrically sound measure.

3.3.2.6 Motivation for Use

The GEM was designed to measure graduate employability specifically among graduate students in the South African context. It was therefore considered appropriate for use in the present study to investigate the employability of graduate students. It is one of the few measures currently available to investigate graduate employability in an objective manner, allowing for suggestions to be made.

3.4 DATA COLLECTION

The data collection procedure was as follows:

A paper-based questionnaire was handed out to the random sample of final-year students of the Faculty of Economic and Management Sciences. The questionnaire included written instructions for the completion of the questionnaire. Although the questionnaire contained a biographical information section, respondents were assured of confidentiality.

The respondents were given ample time to complete the two questionnaires, with the researcher and lecturer being available if respondents required assistance.

Responses were captured in an Excel spreadsheet, and the SAS statistical software program was used for analysis. The following section gives more detail on the methods used to analyse the collected data.

3.5 DATA ANALYSIS

The data collected were analysed through descriptive and inferential statistics using the SAS statistical analysis program (Statistical Analysis System). The process of data analysis can be described as one which "dissects" the data in order to obtain answers to the research questions and to test the hypotheses set for the study (Fouché in De Vos, Strydom, Fouché & Delpont, 2002).

For data analysis to take place, Trochim (2006) suggests the following three steps:

- Cleaning and organising the data for analysis;
- Describing the data; and
- Testing the hypotheses and models.

The process of cleaning and organising the data involves an examination thereof, checking the data set for accuracy, organising the data logically, and entering the data into a statistical program whereby it may be transformed for use in answering the questions posed by the study.

The second stage, describing the data, depicts the basic characteristics of the data. In order to accurately describe these characteristics, descriptive statistics were used. This kind of presentation merely points out and describes what is evident from the data. Finally,

the use of inferential statistics enabled the researcher to test hypotheses and models, and ultimately allowed the researcher to draw certain inferences from the data.

3.5.1 Descriptive Statistics

Descriptive statistics is used to describe the collected data, and plays an important role in understanding the results of inferential statistics and any possible correlations. For the purpose of this study, the following descriptive statistics were utilised: means, standard deviation, and frequency distribution, as set out in the following section.

3.5.1.1 Means, Standard Deviations, and Frequency Distribution

Mean and standard deviation are measures of central tendency and distribution respectively. These statistics were used to describe the most central or prevalent factors in the employability and psychological career resources of the students. The mean indicates the profile, while the standard deviation indicates how far scores lie from the mean. The results showed a high mean across all fields and a relatively low standard deviation, resulting in a coherent profile.

The purpose of determining frequency distribution was to organise categorical data such as the biographical information of the respondents and the organisational data, as the measuring instruments included categorical data. It was furthermore used to indicate existing perceptions and preferences of respondents regarding their employability and psychological career resources. The respondents' perceptions were categorised as follows: Never, rarely, sometimes, often, almost always, and always. The frequency distributions were used to determine the respondents' perceptions of their employability, as well as current and preferred psychological career resources.

3.5.2 Inferential Statistics

The use of inferential statistics enables a researcher to make inferences regarding the population, based on the sample that was drawn from that population. Thus, the researcher is essentially trying to reach conclusions that reach beyond what is shown by the data at first glance. Inferential statistics is used to generalise findings from the sample to the larger population (Struwig & Stead, 2001). The statistics used in the current study included correlation statistics, the t-test, and regression analysis.

3.5.2.1 Correlation Statistics

Correlation statistics measures the degree to which a relationship exists between variables (Trochim, 2006), which is denoted by the symbol 'r.' Pearson's product-moment correlation was used to accept or reject the hypotheses that had been formulated for the study. The correlation identifies both the direction and the strength of the relationships between the variables, with correlation always between +1.00 and -1.00.

For the purpose of this study, a cut-off point of 0.30 (medium effect) was used to determine the practical significance of the correlation coefficients, as recommended by Cohen (1988) to ascertain the relevance of possible relationships with the regard to graduate employability and psychological career resources.

Hypotheses that relate to this section are:

H01: There is no statistically significant relationship between *graduate employability dimensions* and *psychological career resources* (career preference, career values, career enablers, career drivers, and career harmonisers).

H02: There are no significant differences between men and women regarding *employability* and *psychological career resources*.

3.5.2.2 t-Test

The t-test was used to investigate any statistically significant differences between the mean scores for men and women in the sample. It is useful to compare this information with previous research, and may provide a basis for future research regarding either construct.

The hypotheses that relate to this section are:

H1: There is a statistically significant relationship between *graduate employability dimensions* and *psychological career resources* (career preference, career values, career enablers, career drivers, and career harmonisers).

H2: There are significant differences between men and women regarding *employability* and *psychological career resources*.

3.5.2.3 Regression Analysis

During the analysis process, a stepwise multiple regression analysis was carried out to establish the percentage of variance in *graduate employability* (dependent variable) that can be forecast by the *psychological career resources* (independent variable) of final-year students.

For the purpose of this research, it was decided to separate the regression analysis for each of the nine employability dimensions, given the diverse nature of each of the subscales. Also, it was important to the objectives of the study to determine the most suitable combinations of psychological career resources that may forecast the variance in graduate employability.

3.5.2.4 Statistical Significance

The significance level is used for rejecting or accepting the null hypothesis. Traditionally a 95% confidence level ($\alpha = 0.05$) or 99% confidence level ($\alpha = 0.01$) is deemed acceptable. This significance analysis was used to determine the "correctness" of rejecting or accepting the null hypothesis, and gave the researcher confidence in the findings.

3.6 CONCLUSION

This chapter provided insight into the statistical strategies to achieve the objectives outlined in Chapter 1 of this study. The research design related the description and determination of the sample, and the measurement instruments, including the rationale for their use, their reliability, validity, and dimensions. Furthermore, this chapter outlined the data collection procedure and data analyses methods utilised. Chapter 4 subsequently reports, interprets, and integrates the research findings of the study, allowing for conclusions and recommendations to be made in the chapters thereafter.

CHAPTER 4: RESULTS OF EMPIRICAL STUDY

4.1 INTRODUCTION

This chapter reports on the empirical results of the study. Furthermore, the empirical findings will be integrated with the literature review to form a comprehensive understanding of the results that were obtained. The results will be depicted by means of descriptive and inferential statistics.

4.2 DESCRIPTIVE STATISTICS

The use of descriptive statistics was warranted by the fact that it describes the data in a manner that is simple and understandable. For this reason, means and standard deviations were determined. This data will be presented in the form of tables, and will be interpreted and discussed in the following section.

4.2.1 Item Reliability and Cronbach Alphas

As mentioned earlier, a reliability coefficient should fall between 0.80 and 0.90, as determined by Anastasi in 1967 (as cited in Coetzee, 2008). The Cronbach alpha coefficients (0.61 – 0.89) shown in Table 4.1 below indicate that both measures were psychometrically sound for use in the study. Coetzee found similar results in previously conducted research using the PCRI.

Table 4.1 Cronbach Alpha Coefficient

PCRI Dimension	Cronbach Alpha Coefficient
Career Preferences	0.83
Stability/Expertise	0.61
Managerial	0.81
Variety/Creativity	0.79
Independence/Autonomy	0.66
Career Values	0.72
Growth/Development	0.80
Authority/Influence	0.66
Career Enablers	0.79
Practical/Creative skills	0.71
Self/Other skills	0.75
Career Drivers	0.73
Career purpose	0.69
Career directedness	0.73
Career venturing	0.81
Career Harmonisers	0.89
Self-esteem	0.80
Behavioural adaptability	0.69
Emotional literacy	0.81
Social connectivity	0.80
EMPLOYABILITY	
PD: Openness to change	0.71

Career self-management drive	0.72
Cultural competence	0.80
PD: Generalized self-efficacy	0.50
PD: Proactivity	0.72
PD: Sociability	0.72
PD: Emotional literacy	0.68
PD: Entrepreneurial orientation	0.70
PD: Career resilience	0.63

It should be noted that, in terms of the GEM, the Cronbach alpha scores ranged from 0.63 to 0.80, with the exception of Personal Dispositions: Generalized self-efficacy (0.5). However, no adjustments were made here, given that it is one scale. The GEM is a newly established measuring instrument, with Bezuidenhout (2011) finding similar results in the research conducted during construction of the measure. Overall, the present study found the GEM to be a psychometrically sound measuring instrument.

4.2.2 Means and standard deviations

Means and standard deviations were used to describe the distribution of the results obtained from the sample. The descriptive information of each of the subscales of the GEM and PCRI is presented in Table 4.2 below. The scores were obtained by calculating the mean score across individual scores per subscale or dimension.

Table 4.2 Means and Standard Deviation for the Sample (N=113)

Variable	Minimum	Maximum	Mean	SD
PSYCHOLOGICAL CAREER RESOURCES				
Career Preferences	3	6	4.72	0.58
Stability/Expertise	3	6	5.17	0.55
Managerial	2	6	4.8	0.9
Variety/Creativity	3	6	4.54	0.9
Independence/Autonomy	2	6	4.27	0.89
Career Values	4	6	5.03	0.61
Growth/Development	3	6	5.34	0.67
Authority/Influence	2	6	4.72	0.84
Career Enablers	3	6	4.85	0.62
Practical/Creative skills	3	6	4.44	0.84
Self/Other skills	3	6	5.17	0.63
Career Drivers	3	6	4.73	0.56
Career purpose	3	6	5.23	0.68
Career directedness	3	6	4.61	0.79
Career venturing	1	6	4.23	1.05
Career Harmonisers	3	6	4.85	0.62
Self-esteem	3	6	4.88	0.85
Behavioural adaptability	3	6	4.85	0.67
Emotional literacy	3	6	4.68	0.94
Social connectivity	3	6	4.99	0.75

EMPLOYABILITY				
PD: Openness to change	3	6	4.86	0.59
Career Self-management drive	3	6	4.62	0.65
Cultural competence	3	6	4.33	0.77
PD: Generalized self-efficacy	4	6	4.8	0.55
PD: Proactivity	3	6	4.59	0.62
PD: Sociability	1	6	4.16	0.91
PD: Emotional literacy	3	6	4.71	0.69
PD: Entrepreneurial orientation	3	6	4.27	0.74
PD: Career resilience	3	6	4.94	0.63

Table 4.2 above shows the distribution of the mean scores allocated when completing the questionnaires. Respondents were asked to respond on a six-point Likert scale, with six (6) being the highest and one (1) being the lowest score that could be selected. Choosing a rating of six meant that the specific statement is always true and applicable to the respondent, with one meaning that it is never true.

It is clear from Table 4.2 that there exists a prevailing perception among students that their employability is high. They believe that all psychological career resources are important, and are being utilised. The mean rating was above 4.0 across all dimensions.

Psychological Career Resources:

The *stability/expertise* (mean = 5.7; SD = 0.55) dimension was rated the highest among the career preferences, whilst *growth and development* (mean = 5.34; SD = 0.67) was rated the highest in terms of the career values. *Self/other skills* (mean = 5.17; SD = 0.63) and *career*

purpose (mean = 5.23, SD = 0.68) were rated as the highest career enabler and career driver respectively. In terms of the career harmonisers, *social connectivity* stood out (mean = 4.99; SD = 0.75). These findings are in line with those of Coetzee and Esterhuizen (2010), who found similar results.

Of interest in these findings is that this sample had a high level of awareness of social interaction or ability to build relationships, whilst still having a strong desire for growing and developing their careers, possibly within one organisation. This is evidenced by the fact that the *independence/autonomy* career preference was rated as one the least preferred (mean = 4.27; SD = 0.89). These findings may point to the fact that, although graduates are aware that they may change jobs several times throughout their career, they still value some form of security and the ability to utilise their expertise as much as possible in an organisation. The fact that the graduates value *stability/expertise* highly is interesting, as the literature points to a move away from life-long employment/mutual commitment to a more short-term, transactional employment relationship. However, the need for development and growth is in line with the literature stating that continuous learning is critical to career success.

Graduate Employability:

In terms of the employability dimensions, *career resilience* (mean = 4.94; SD 0.75) was deemed the strongest. This may indicate that students believe themselves to be open to new situations and opportunities, but also as having a high level of control over their circumstances. Based on the definition of *career resilience* (Bezuidenhout, 2011) it can be said that the sample see themselves as adaptable and able to achieve their objectives through their own independent efforts

Interestingly, the *openness to change* dimension was rated the second highest (mean = 4.86; SD = 0.59), which indicates that the students view themselves as adaptable and flexible in ambiguous situations, and also as able to deal with adversity. As seen in Table

4.2, all other GEM dimensions were also rated highly, with mean scores ranging between 4.33 and 4.94. Thus, it can be said that there exists a prevailing perception among the students that their employability is at a high level.

Sociability as an employability dimension received the lowest rating (mean = 4.16; SD = 0.91). This dimension relates to one's openness to social interaction and feedback from others in order to improve one's career in some or other way. This finding is interesting, given that graduates value their *self/other* psychological career resources highly. This may indicate that graduates realise the value of social connections and the role that positive relationships play in the working environment. However, they may also feel that, at present, this is an area that may only be further developed once they are actually employed.

De Cuyper, Van der Heijden, and De Witte (2011) found in their study among Belgian organisations that individuals who are highly employable were more satisfied with their lives in general. The prevailing positive perception among the graduates of the present sample that they are highly employable may therefore be to their advantage in terms of general life satisfaction. Their prospects for the future and their careers are good, and are underpinned by strong career resilience, which facilitates a high degree of adaptability, flexibility, self-confidence, and competence, despite difficulties experienced.

4.3 INFERENCE STATISTICS

In order to further investigate the relationship between the GEM and PCRI variables, inferential statistics was implemented. By means of the correlation statistics, t-Test for gender, and multiple regression analysis, the researcher was able to draw certain inferences from the data, as is set out in the following section.

4.3.1 Correlation Statistics

Pearson product-moment correlations were used to calculate the relationship between the variables. The correlations were used to identify both the strength and the direction of any relationship overall or between specific variables. The statistical significance level of the study was set at a 95% confidence interval level ($p \leq 0.05$).

4.3.1.1 Discussion of Correlation Statistics

From Table 4.2 it is evident that there exists a significant positive relationship between the majority of PCR dimensions and GEM dimensions. These will be discussed in the following section.

Career Preferences and Graduate Employability

In terms of career preferences, there exists a significant relationship with all nine dimensions on the GEM, suggesting that one's specific career preferences are closely linked to one's employability. However, Table 4.2 also reveals that the *managerial* career preference does not have a significant relationship with the *career resilience* dimension of the GEM. Also, there is also no significant relationship indicated between the *independence/autonomy* career preference and the *cultural competence* GEM dimension.

Career Values and Graduate Employability

Career values relate to the reason behind a certain career preference. The *growth/development* career value has a significant positive relationship with all GEM dimensions (between $p \leq 0.269 - 0.0001$), excluding *career resilience*, as is illustrated in Table 4.2.

In terms of *authority/influence* career values, the only noted relationships are with *generalized self-efficacy* ($r = 0.34$; $p \leq 0.0002$), *proactivity* ($r = 0.26$; $p \leq 0.0049$), *sociability* ($r = 0.26$; $p \leq 0.0064$) and *entrepreneurial orientation* ($r = 0.29$; $p \leq 0.0019$).

Career Enablers and Graduate Employability

Career enablers consist of *practical/creative skills* and *self/other skills*. As seen in Table 4.2, these career enablers showed a significant positive relationship with all dimensions of the GEM, with the exception of *openness to change*.

Career Drivers and Graduate Employability

As a whole, career drivers have a significantly positive relationship with all graduate employability dimensions, though, again, excluding *openness to change*. In terms of the specific career drivers, *career purpose* showed a significant positive relationship with *career self-management* ($r = 0.37$; $p \leq 0.0001$), *proactivity* ($r = 0.26$; $p \leq 0.0061$), *sociability* ($r = 0.36$; $p \leq 0.0001$), *emotional literacy* ($r = 0.32$; $p \leq 0.0006$), *entrepreneurial orientation* ($r = 0.26$; $p \leq 0.0053$), and *career resilience* ($r = 0.26$; $p \leq 0.0061$). *Career directedness* was shown to have a significant positive relationship with all GEM dimensions except *openness to change* and *cultural competence*. The *career venturing* PCR dimension was shown to have a significant positive relationship with all but one GEM dimension, that of *openness to change*.



Table 4.3 Pearson product-moment correlations: GEM and PCRI

Pearson Correlation Coefficients, N = 113 Prob> r under H0: Rho=0;										
		(PD):Openness to change	Career Self-management drive	Cultural Competence	PD: Generalized self-efficacy	PD: Proactivity	PD: Sociability	PD: Emotional Literacy	PD:Entrepreneurial Orientation	PD: Career Resilience
Career Preferences	r	0.57	0.47	0.30	0.51	0.50	0.42	0.37	0.57	0.35
	Sig	<.0001**	<.0001**	0.0015**	<.0001**	<.0001**	<.0001**	<.0001**	<.0001**	0.0002**
Stability/Expertise	r	0.46	0.37	0.35	0.35	0.41	0.37	0.24	0.49	0.32
	Sig	<.0001**	<.0001**	0.0001**	0.0001**	<.0001**	<.0001**	0.0119*	<.0001**	0.0006**
Managerial	r	0.32	0.22	0.26	0.29	0.30	0.26	0.20	0.27	0.12
	Sig	0.0006**	0.0194*	0.0055**	0.0019**	0.0016**	0.0051**	0.0327*	0.0034**	0.2153
Variety/Creativity	r	0.59	0.55	0.21	0.47	0.52	0.38	0.41	0.62	0.30
	Sig	<.0001**	<.0001**	0.0264*	<.0001**	<.0001**	<.0001**	<.0001**	<.0001**	0.0014**
Independence/Autonomy	r	0.28	0.23	0.07	0.35	0.24	0.22	0.20	0.29	0.29
	Sig	0.0025**	0.0133*	0.4818	0.0002**	0.0093**	0.0178*	0.0344*	0.0023**	0.0021**
Career Values	r	0.46	0.34	0.22	0.49	0.42	0.38	0.19	0.47	0.15
	Sig	<.0001**	0.0002**	0.019*	<.0001**	<.0001**	<.0001**	0.0435*	<.0001**	0.1182
Growth/Development	r	0.48	0.40	0.21	0.46	0.44	0.38	0.21	0.50	0.17
	Sig	<.0001**	<.0001**	0.0269*	<.0001**	<.0001**	<.0001**	0.0258*	<.0001**	0.0662
Authority/Influence	r	0.28	0.18	0.16	0.34	0.26	0.26	0.11	0.29	0.08
	Sig	0.28	0.0565	0.0987	0.0002**	0.0049**	0.0064**	0.2416	0.0019**	0.4123
Career Enablers	r	0.28	0.55	0.33	0.46	0.58	0.51	0.52	0.58	0.49
	Sig	0.28	<.0001**	0.0004**	<.0001**	<.0001**	<.0001**	<.0001**	<.0001**	<.0001**



Practical/Creative skills	r	0.28	0.46			0.47	0.31	0.35	0.59	0.36
	Sig	0.28	<.0001**	0.0088**	<.0001**	<.0001**	0.0009**	0.0002**	<.0001**	<.0001**
Self/Other skills	r	0.28	0.48	0.32	0.26	0.52	0.58	0.55	0.40	0.48
	Sig	0.28	<.0001**	0.0006**	0.006**	<.0001**	<.0001*8	<.0001**	<.0001**	<.0001**
Career Drivers	r	0.28	0.59	0.22	0.32	0.51	0.50	0.49	0.50	0.41
	Sig	0.28	<.0001**	0.0183*	0.0005**	<.0001**	<.0001**	<.0001**	<.0001**	<.0001**
Career purpose	r	0.28	0.37	0.18	0.14	0.26	0.36	0.32	0.26	0.26
	Sig	0.28	<.0001**	0.0546	0.1297	0.0061**	0.0001**	0.0006**	0.0053**	0.0061**
Career directedness	r	0.28	0.59	0.08	0.27	0.37	0.41	0.49	0.33	0.34
	Sig	0.28	<.0001**	0.3956	0.0044**	<.0001**	<.0001**	<.0001**	0.0004**	0.0002**
Career venturing	r	0.28	0.23	0.19	0.24	0.40	0.26	0.19	0.41	0.23
	Sig	0.28	0.0165*	0.0396*	0.0119*	<.0001**	0.0053**	0.0426*	<.0001**	0.0163*
Career Harmonisers	r	0.28	0.49	0.30	0.34	0.43	0.57	0.57	0.39	0.58
	Sig	0.28	<.0001**	0.0016**	0.0002**	<.0001**	<.0001**	<.0001**	<.0001**	<.0001**
Self-esteem	r	0.28	0.42	0.21	0.31	0.39	0.43	0.58	0.28	0.57
	Sig	0.28	<.0001**	0.0271*	0.001**	<.0001**	<.0001**	<.0001**	0.0024**	<.0001**
Behavioural adaptability	r	0.28	0.45	0.17	0.22	0.35	0.50	0.49	0.41	0.50
	Sig	0.28	<.0001**	0.0653	0.0183*	0.0001**	<.0001**	<.0001**	<.0001**	<.0001**
Emotional literacy	r	0.28	0.28	0.20	0.26	0.23	0.38	0.31	0.21	0.30
	Sig	0.28	0.0031**	0.0379*	0.0056**	0.0128*	<.0001*	0.0007**	0.025*	0.0014**
Social connectivity	r	0.28	0.38	0.36	0.28	0.38	0.49	0.39	0.33	0.44
	Sig	0.28	<.0001**	0.0001**	0.0024**	<.0001**	<.0001**	<.0001**	0.0003**	<.0001**

**p ≤ 0.01 *p ≤ 0.05

Career Harmonisers and Graduate Employability

From Table 4.3, it is clear that *self-esteem*, *behavioural adaptability*, *emotional literacy* and *social connectivity* were significantly positively related to the majority of the GEM dimensions. However, none were shown to have a significant relationship with *openness to change*. Interesting to note is also that the *behavioural adaptability* career harmoniser was not significantly linked to *cultural competence*.

In summary, a number of significant relationships emerged from the correlation analysis. The PCR dimensions are strongly related to the Graduate Employability dimensions. It is evident then that one influences the other, and the regression analysis discussion in the following sections will give a more precise idea of the percentage of variance in graduate employability attributable to PCRs. It is important to note that Coetzee (2008) states that one's psychological career resources facilitate proactive career behaviour, which, in turn, facilitates general employability. The findings suggest that this sample's positive perception of their employability may indeed be as a result of the influence of their well developed psychological career resources.

The decisions made regarding the set hypothesis are therefore as follows:

H01: There is no statistically significant relationship between <i>graduate employability</i> and <i>psychological career resources</i> (career preference, career values, career enablers, career drivers, and career harmonisers).	Rejected
H1: There is a statistically significant relationship between <i>graduate employability</i> and <i>psychological career resources</i> (career preference, career values, career enablers, career drivers, and career harmonisers).	Accepted

4.3.2 Discussion of Regression Analysis

This section will discuss the results obtained from the stepwise multiple regression analysis, which was conducted since the researcher's interest did not lie in finding the best prediction equation for graduate employability. These results gave the researcher a clear picture of those PCRs that best describe or account for a percentage of variance in the dependent variable, in this case *graduate employability*. The significance level was set at a 95% confidence interval level ($p \leq 0.05$), whilst the adjusted R^2 value was used to interpret the results, as is illustrated in Table 4.4 below.

Table 4.4 Regression Analysis (GEM variables and PCRI variables)

Variable	Step	Parameter Estimate (β)	Partial squared	R-Model squared (R^2)	R-
Openness to change					
Career enablers	1	0.32	0.36	0.36***	
Career preferences	2	0.32	0.06	0.423**	
Career harmonisers	3	0.13	0.01	0.436	
Variety/Creativity	1	0.25	0.35	0.353***	
Self/Other skills	2	0.25	0.10	0.448***	
Managerial	3	0.08	0.01	0.464	
Growth/Development	4	0.13	0.01	0.477	
Career self-management drive					
Career drivers	1	0.42	0.34	0.34***	
Career enablers	2	0.22	0.05	0.38**	
Career preferences	3	0.18	0.02	0.40	
Career-directedness	1	0.36	0.35	0.351***	

Variety/Creativity	2	0.22	0.12	0.471***
Growth/Development	3	0.14	0.02	0.48
Cultural competence				
Career enablers	1	0.30	0.11	0.108**
Career harmonisers	2	0.20	0.02	0.13
Social connectivity	1	0.37	0.13	0.127***
Stability/Expertise	2	0.41	0.06	0.191**
Career-directedness	3	-0.17	0.02	0.21
PD: Generalized self-efficacy				
Career preferences	1	0.23	0.26	0.256***
Career values	2	0.20	0.04	0.299*
Career enablers	3	0.17	0.02	0.32
Practical/Creative skills	1	0.25	0.27	0.273***
Authority/Influence	2	0.11	0.04	0.3159*
Variety/Creativity	3	0.14	0.03	0.3432*
Emotional literacy	4	0.12	0.02	0.37
Career purpose	5	-0.14	0.02	0.3894*
PD: Proactivity				
Career enablers	1	0.33	0.33	0.332***
Career preferences	2	0.23	0.04	0.3689*
Career drivers	3	0.20	0.02	0.3871
Variety/Creativity	1	0.17	0.27	0.269***
Self/Other skills	2	0.28	0.10	0.3711***



Career venturing	3	0.13	0.04	0.4128**
Growth/Development	4	0.14	0.01	0.4268
PD: Sociability				
Career harmonisers	1	0.59	0.32	0.322***
Career enablers	2	0.28	0.05	0.3768**
Career preferences	3	0.24	0.01	0.3917
Self/Other skills	1	0.57	0.33	0.334***
Behavioural adaptability	2	0.31	0.06	0.395**
Emotional literacy	3	0.16	0.03	0.423*
Authority/Influence	4	0.13	0.01	0.437
PD: Emotional literacy				
Career harmonisers	1	0.45	0.32	0.321***
Career enablers	2	0.35	0.06	0.38**
Career values	3	-0.26	0.02	0.39
Career preferences	4	0.21	0.01	0.41
Self-esteem	1	0.31	0.33	0.335***
Self/Other skills	2	0.15	0.08	0.417**
Variety/Creativity	3	0.40	0.02	0.441*
Growth/Development	4	-0.20	0.02	0.461*
Emotional literacy	5	0.15	0.02	0.5
Social connectivity	6	-0.23	0.02	0.496*
Behavioural adaptability	7	0.15	0.01	0.5
PD: Entrepreneurial orientation				
Career enablers	1	0.35	0.33	0.33***



Career preferences	2	0.42	0.08	0.41**
Career drivers	3	0.19	0.01	0.42
Variety/Creativity	1	0.28	0.39	0.39***
Practical/Creative skills	2	0.20	0.07	0.46**
Career venturing	3	0.15	0.03	0.49**
Growth/Development	4	0.15	0.02	0.51*
Stability/Expertise	5	0.19	0.01	0.52
Independence/Autonomy	6	-0.10	0.01	0.53
PD: Career resilience				
Career harmonisers	1	0.45	0.33	0.33***
Career enablers	2	0.27	0.04	0.37*
Career values	3	-0.29	0.03	0.40*
Career preferences	4	0.22	0.02	0.42
Self-esteem	1	0.27	0.32	0.32**
Behavioural adaptability	2	0.25	0.06	0.39*
Independence/Autonomy	3	0.10	0.02	0.41*
Self/Other skills	4	0.31	0.02	0.42
Growth/Development	5	-0.27	0.02	0.44
Career purpose	6	-0.20	0.02	0.46
Practical/Creative skills	7	0.17	0.02	0.47
Emotional literacy	8	0.10	0.01	0.49
Career-directedness	9	-0.13	0.01	0.50

***p≤0.001 **p<0.01 *p<0.05

Table 4.4 shows the regression of the selected PCRI variables on the GEM dimensions. Each GEM dimension was regressed separately to determine the model that provides the best explanation of variance.

The PCRI variables (career enablers) produced a statistically significant model ($F(61.5) = 0.35$; $p \leq 0.001$), on *openness to change*, accounting for 36% of the variance. *Variety/Creativity* (career preference) and *Self/Other skills* (career enablers) also showed statistically significant models on *openness to change*, accounting for 35% and 44% of the variance respectively. These results are in concurrence with the intercorrelation results reported in Table 4.2.

In terms of *career self-management drive*, career drivers and career enablers of the main dimensions showed the most positive statistically significant model, whilst *career directedness* (career driver) and *variety/creativity* (career preference) accounted for 35% and 47% of the variance respectively. However, career drivers overall indicated a significantly larger potential positive influence ($\beta = 0.42$; $p \leq 0.01$) on *career self-management drive*.

Table 4.4 also indicates the regression of the selected PCRI variables (career purpose, career values, practical/creative skills, authority/influence, variety/creativity, and career preferences) on *generalized self-efficacy*. Career preferences showed the greater potential positive influence ($\beta = 0.25$; $p \leq 0.001$) of the main dimensions, whilst this was the case for *practical/creative skills* (career enablers) ($\beta = 0.25$; $p \leq 0.001$) when considering the subscales.

Proactivity was found to be significantly influenced by *variety/creativity* (career preferences) and *self/other skills* (career enablers), with *career enablers* ($\beta = 0.33$, $p \leq 0.001$) and *career venturing skills* (career drivers; $\beta = 0.28$, $p \leq 0.001$) obtaining the largest beta values. The

PCRI dimension of career enablers was further found to have a statistically significant impact on *cultural competence*, *proactivity*, *sociability*, *emotional literacy*, *entrepreneurial orientation*, and *career resilience*, as is illustrated in Table 4.4. The second dimension of the PCRI that had statistically significant models that positively influenced the GEM dimensions *cultural competence*, *sociability*, *emotional literacy*, and *career resilience* was career harmonisers.

The variance found in terms of the *sociability* dimension may be attributable to career harmonisers, career enablers, Self/other skills, behavioural adaptability, and emotional literacy. It is, however, clear from Table 4.4 that *career harmonisers* ($\beta = 0.59$, $p \leq 0.001$) and *self/other skills* (career enablers) ($\beta = 0.52$, $p \leq 0.001$) contribute more significantly to this variance.

Emotional literacy's variance was best explained by the significant positive influence of career harmonisers and career enablers. Specific subscales including *growth/development*, *variety/creativity*, *self/other skills*, *self-esteem*, and *social connectivity* were also found to contribute to the variance in *emotional literacy*. Most significant though, were the contributions of career harmonisers ($\beta = 0.45$, $p \leq 0.001$) and, more specifically, *variety/creativity skills* ($\beta = 0.40$, $p \leq 0.001$). This was similar for *entrepreneurial orientation* and *career resilience*, with the variance most significantly attributed by career harmonisers and career enablers.

It is clear from Table 4.3 that there are a number of statistically significant models that indicate the percentage variance attributable to specific GEM dimensions, all of which are not discussed in this section. The most prominent observations are, however, mentioned and it can be seen that the majority of these show a positive influence. There are, nonetheless, some variables that negatively influence the variance in the GEM dimensions, which is in contrast with the intercorrelations indicated in Table 4.2. These dimensions include: *career purpose*, *career values*, *social connectivity*, and *growth/development*. *Career*

purpose ($\beta = -0.14$; $p \leq 0.05$) negatively influenced the variance found in terms of *generalized self-efficacy*. The career value *growth/development* ($\beta = -0.20$; $p \leq 0.05$) and the career harmoniser *social connectivity* ($\beta = -0.23$; $p \leq 0.05$) acted as suppressers in terms of *emotional literacy*. Lastly, *career values* ($\beta = -0.29$; $p \leq 0.05$) was found to negatively influence the variance in terms of *career resilience*.

It is clear that PCRs account for most of the variance seen in the graduate employability dimensions. Coetzee and Esterhuizen (2010) found that PCRs accounted for much of the variance in individuals' coping resources, which positively influence well-being. What is furthermore clear from the results is that all career resources had some or other influence upon the employability dimensions. This, in turn, supports the fact that psychological career resources, if in balance, facilitate active, adaptable career behaviour driven by career preferences, values, career enablers, career drivers, and career harmonisers, resulting in increased employability.

4.3.3 Discussion of t-Test for Gender

This analysis was aimed at determining whether the sample differed in mean scores with regards to the overall construct, variables, and all subscales when taking gender into consideration.

From table 4.5 below it is evident that there are no significant differences between men and women regarding the various dimensions of the GEM and the PCRI dimensions and subscales. From these results it is clear that this pre-selected group of graduate students have an equal perception of their employability and psychological career resources.

Table 4.5 T-test for gender on PCRI and GEM (N=113)

Mean Scores for Females and Males (PCRI & GEM)								
Variables	Male		Female		F	t	df	Sig
	Mean	SD	Mean	SD				
PCRI Scale								
Career Preferences	4.7	0.51	4.7	0.59	1.33	0.24	41.85	0.81
Stability/Expertise	5.0	0.58	5.2	0.53	1.19	-1.71	34.69	0.10
Managerial	4.8	0.78	4.8	0.94	1.46	0.35	43.89	0.73
Variety/Creativity	4.6	0.87	4.5	0.92	1.12	0.68	38.79	0.50
Independence/Autonomy	4.4	0.60	4.2	0.96	2.57	1.28	59.93	0.21
Career Values	5.1	0.64	5.0	0.65	1.12	0.51	35.43	0.61
Growth/Development	5.4	0.77	5.3	0.64	1.43	0.12	32.66	0.91
Authority/Influence	4.8	0.86	4.7	0.84	1.04	0.66	36.45	0.52
Career Enablers	4.8	0.64	4.8	0.62	1.08	-0.15	84	0.88
Practical/Creative skills	4.5	0.81	4.4	0.85	1.11	0.48	38.56	0.64
Self/Other skills	5.1	0.67	5.2	0.62	1.2	-0.73	34.59	0.47
Career Drivers	4.7	0.61	4.7	0.55	1.21	-0.61	34.47	0.55
Career purpose	5.1	0.81	5.3	0.65	1.56	-1.15	31.82	0.26
Career-directedness	4.5	0.88	4.6	0.78	1.3	-0.61	33.66	0.54
Career venturing	4.3	0.92	4.2	1.10	1.44	0.59	43.6	0.56
Career Harmonisers	4.8	0.66	4.9	0.61	1.16	-0.52	34.96	0.60
Self-esteem	5.0	0.76	4.8	0.87	1.33	1.22	41.96	0.23
Behavioural adaptability	4.8	0.77	4.8	0.65	1.4	-0.07	32.84	0.95

Emotional literacy	4.3	1.08	4.8	0.89	1.46	-1.75	32.41	0.09
Social connectivity	4.9	0.83	5.0	0.75	1.28	-0.63	33.82	0.54
GEM Scale								
Personal Disposition (PD): Openness to change	5.0	0.54	4.8	0.61	1.26	1.32	40.91	0.19
Career Self-management drive	4.6	0.64	4.6	0.66	1.07	-0.25	38.05	0.81
Cultural competence	4.3	0.68	4.4	0.81	1.41	-0.37	43.11	0.72
PD: Generalized self-efficacy	4.9	0.62	4.8	0.54	1.34	0.83	33.33	0.41
PD: Proactivity	4.8	0.56	4.5	0.64	1.33	1.74	41.88	0.09
PD: Sociability	4.0	0.88	4.2	0.92	1.09	-0.79	38.28	0.43
PD: Emotional literacy	4.8	0.64	4.7	0.71	1.22	0.72	40.21	0.61
PD: Entrepreneurial orientation	4.3	0.69	4.2	0.77	1.24	0.56	40.56	0.58
PD: Career resilience	5.1	0.55	4.9	0.65	1.39	1.12	42.77	0.27

**p ≤ 0.01

*p ≤ 0.05

Men did, however, achieve slightly lower mean scores on the *emotional literacy* career harmoniser (men: $m = 4.3$; women: $m = 4.8$); however, as mentioned, this cannot be seen to be a significant difference. In terms of employability, the only slight difference observed (although not significant) was in the *proactivity* dimension, with men perceiving themselves as more proactive ($m = 4.8$) and women perceiving themselves as slightly less so ($m = 4.5$). Essentially then, the employability and PCRs profile of the graduate students of the University of Pretoria's Economic and Management Science Faculty is viewed as favourable, with no significant difference between men and women.

The results from the study pose an interesting question in terms of the differences in the development of men and women, which is often a topic of debate. In many ways, the

research findings contradict those of Coetzee (2008) and Bezuidenhout (2011), who both determined that there are some significant differences between the genders. In terms of the PCRI dimensions, Ferreira (2010) reported women obtaining higher scores than men in terms of *career venturing*, *self-esteem*, *behavioural adaptability*, *emotional literacy*, and *social connectivity*.

Sturges, Conway, and Liefoghe (2010), however, found no significant differences between men and women regarding any career-management activities. Rothwell, Jewell, and Hardie (2009) similarly found no significant differences in terms of gender and self-perceived employability.

The present study suggests that both men and women possess qualities relating to employability in equal measure, and that they utilise their psychological career resources in a similar manner. These findings are supported by research conducted by Rothwell and Arnold (2005), who conducted a study among 200 Human Resources professionals and found that gender is not a significant predictor of employability. Therefore one's gender does not render one more or less employable.

Subsequently, the decisions made regarding the hypotheses set out earlier in the study are as follows:

H02: There are no significant differences between men and women regarding employability and psychological career resources.	Accepted
H2: There are significant differences between men and women regarding employability and psychological career resources.	Rejected

4.5 SUMMARY OF RESEARCH FINDINGS

The current study set out to investigate the employability and psychological career resources of graduate students by means of statistical methods. A secondary aim was to determine whether there are any statistically significant relationships among dimensions of the GEM and PCRI, also taking note of any differences between the genders.

The sample consisted of graduate students from the Economic and Management Sciences faculty from the University of Pretoria. The sample consisted of mostly white female students registered for the Human Resources/Industrial Psychology degree. The reliability analysis of the GEM and PCRI yielded satisfactory Cronbach alpha values, indicating acceptable levels of internal consistency for the measuring instruments used in the study.

The researcher set out to investigate the employability and psychological career resources of graduates and, as such, can present some form of profile. It is clear that graduates are eager to learn and develop, value social interaction, but prefer a career that offers some stability and opportunity to display their expertise. An examination of the mean item and overall dimension scores indicates career values (*growth/development, authority/influence*) as the dominant psychological career resources of the sample. These resources relate to the reason for a specific career reference, which, by implication, may mean that students are highly conscious of the driving force behind their career decisions. Coetzee and Schreuder (2009) accordingly state that individuals in their early career stages (such as graduates) strongly value growth and development.

The graduates further showed a preference for *stability/expertise*, indicating a desire for a steady career that allows them to develop and utilise their expertise. *Social connectivity* and *self-other skills* are preferred resources for this sample and, as Coetzee and Esterhuizen (2010) indicate, this may relate to a perception that, as graduates, they are

able to build strong, supportive social networks. In terms of the GEM, however, *career resilience* and *openness to change* proved to be the dominant graduate employability dimensions. These graduates view the ability to persevere and remain flexible, as well as the ability to explore new opportunities and ideas as their strongest and most valued employability skills. Pool and Sewell (2007) cite research conducted over 25 years by The Pedagogy for Employability Group (2004) and indicate that employers expect graduates to have skills such as adaptability/flexibility, willingness to learn, independent working/autonomy, and enterprising skills. Thus, the graduates in the current study are well aligned with such expectations. It should be made clear, however (Brown et al., 2003), that one can be employable and still be unemployed due to labour market conditions and other factors.

The results yielded by the current study further make for some interesting reading in terms of the differences between men and women. Bezuidenhout (2011), in her pilot study of the Graduate Employability Measure, found significant differences between men and women, with women achieving higher scores on all dimensions. However, the present results indicate that there are no significant differences between men and women. This correlates with the findings of Rothwell and Arnold (2005) who, as mentioned, found that gender is not a predictor of employability. It is clear then that more research needs to be conducted in this regard, but also that the results, to some extent, level the playing field for men and women. From the results of the current study, it is clear that men and women are equally likely to be proactively involved in the management of their careers in order to develop the skills required to be seen as employable.

Lastly the overall results suggest significant positive relationships between the majority of employability dimensions and PCRs. The results indicate that career preferences and values, career enablers, career drivers, and career harmonisers correlate significantly with most dimensions, as measured on the GEM. The regression analysis also showed that there exists positive statistically significant regression models for the most part, with the exceptions of *career purpose*, *career values*, *social connectivity*, and *growth/development*

having a negative influence. The fact that some individuals were willing to explore and consider new ideas and opportunities is mostly attributable to *self/other skills* (career enablers) and *variety/creativity* (career preferences), which indicates that graduates feel that strong social connections and exposure to various situations will enable them to better identify and assess career opportunities that may be to their benefit. The dimension of *openness to change*, which relates to the willingness to explore alternative career opportunities (Bezuidenhout, 2011), was shown to have significant relationships with only career preferences and some career values. This would indicate that individuals who have clarity in terms of their sense of career direction and the reason behind such preferences would still be willing to experiment and ponder alternative options, and that they are aware of and comfortable with their motivation for exploring. Bezuidenhout, however, indicates that *openness to change* has been linked to career success, and that it is seen as an essential trait in the ever-changing new world of work.

Career self-management drive (proactive career management) was largely influenced by career drivers – the attitudes that motivate individuals to experiment with possibilities as they perceive their abilities to engage in such opportunities in the future as defined by Coetzee (2008). From the results it is clear that the PCRI variables influence the dimensions of employability, specifically career enablers, career harmonisers, and career preferences. This indicates the graduates' views regarding their career paths, their transferable skills (practical/creative skills, self/other skills) as well as their self-esteem, behavioural adaptability, emotional literacy, and social connectivity to be some of the strongest driving forces behind their perception of their well-developed employability.

Coetzee and Esterhuizen (2010) state that the ability to build interpersonal relationships and social connections may contribute to self-confidence and optimism, while Griffin and Hesketh (2005) regard continuous learning as adding to adaptive behaviour. Furthermore, career harmonisers enable flexibility and resilience (Coetzee, 2008), which was evident in the current sample. It is also argued (Fugate et al., 2004; Griffin & Hesketh, 2005) that individuals with a well-developed range of psychological career resources are more

adaptable to changing career situations, and subsequently enjoy higher levels of employability.

As such, the psychological career resources of the sample, which may be seen as balanced, facilitate the adaptive, proactive career behaviour that influences their general employability (Coetzee, 2008). This result validates the high mean scores on all employability dimensions in the current study.

In conclusion, there are statistically significant relationships between graduate employability and psychological career resources dimensions. Furthermore, it was statistically determined that there are no significant differences between men and women regarding employability and psychological career resources. Recommendations regarding these findings will be discussed in Chapter 5.

4.6 CONCLUSION

The purpose of this chapter was to report the findings of the study. The result relate to the main objectives set out by the study and answered these questions as set out in Chapter 1. The results from the study were presented by means of descriptive and inferential statistics, and displayed in tabular form. The research results were integrated with the findings from the literature review in order to put the result into perspective. Chapter 5 will discuss the conclusions, limitations, and recommendations in terms of the present study as well as future studies.

CHAPTER 5: INTERPRETATION, CONCLUSIONS, AND RECOMMENDATIONS

5.1 INTRODUCTION

The importance and increasing relevance of employability and, more specifically, graduate employability have been highlighted throughout the study. It is clear that there is little consensus on the conceptual meaning of employability (McQuaid & Lindsay, 2005), with even less consensus on what skills truly constitute an employable graduate. What is evident, is that employability is certainly not "just another buzz-word" (Clarke, 2008); instead it can be seen as a guiding concept for policy-makers, employers, and those entering or moving within the job market. Given the contention around the concept of one list of graduate employability skills and the apparent lack of information regarding such skills in the South African market, the present study set out to investigate the employability and psychological career resources of graduate students of the Faculty of Economic and Management Sciences at the University of Pretoria. Statistical analysis of the data gathered by means of a self-administered questionnaire was reported in Chapter 4, and the final chapter will draw conclusions regarding the achievement of the research objectives, implications of the findings, and will discuss limitations of the study as well as recommendations for future research.

5.2 ACHIEVEMENT OF STUDY OBJECTIVES

This section discusses conclusions and achievement of the research objectives as they relate to the literature review and the empirical study respectively.

5.2.1 Conclusions Regarding Literature Review Research Questions

The aims set out in terms of the literature review relate to understanding the constructs of graduate employability and PCRs, as well as the potential influences, strengths, and development areas of the mentioned constructs. Lastly, the study sought to determine whether there are any relationships between the constructs that can be identified from the literature. Chapter 2 subsequently answered these questions with a full review of the most relevant literature available.

Graduate employability can be defined as “a set of achievements, understandings and personal attributes that make individuals more likely to gain employment and be successful in their chosen occupations” Yorke and Knight (2004, p. 5). Being successful in one’s career is largely dependent on adaptability and proactive career behaviours that may be the result of one’s repertoire of PCRs (Gunz & Heslin, 2005). This adaptable, proactive behaviour is especially important in the new world of work with decentralisation of organisations, globalisation, and a highly volatile labour market. Adaptable pro-active career behaviour is facilitated by the use of PCRs (Coetzee, 2008) and directly contributes to general employability. The rise in importance of employability as opposed to employment can be largely attributed to changes in the world of work, since a volatile environment requires a workforce that is adaptable and resilient, taking responsibility for their own development in order to remain both relevant and desired in the market.

It was determined from literature that some of the core skills desired by employers include communication, leadership, innovation, problem-solving, and adaptability, along with technical skills. Those skills indicated as development areas in the literature include the ability to think globally, communicating cross-culturally, as well as taking responsibility for one’s own learning and development (Ng et al., 2009). Additionally, it was clear from the literature review that there is indeed little consensus regarding the conceptual meaning of employability, as well as the various skills required or lacking in this regard. Despite the

terminology broadly overlapping, the understanding thereof is vastly different, depending on the context in which it is used. Nonetheless, communication skills, problem-solving skills, and adaptability (often referred to as "soft skills") are commonly mentioned, and rank highly among employers and students alike. It was thus concluded from the literature review that employability is about active adaptability and taking a pro-active approach to one's own career path and development. Coetzee (2008) indicates that the proactive career behaviour of an individual aids in development/improvement of general employability, and is supported by the balanced use of one's set of psychological career resources (career preferences and values, career enablers, career drivers, and career harmonisers). Fugate et al. (2004) and Griffin and Hesketh (2005) indicate that individuals with a well-developed range of psychological career resources are more adaptable to changing career situations and, subsequently, display higher levels of employability. There is a strong link between such resources and active career management, which, in turn, adds to employability. This evidence from the literature supports the results of the current empirical study, which further investigated the employability and PCRs of graduate students.

5.2.2 Conclusions Regarding Empirical Research Questions

The empirical study was conducted with the aim of further investigating the employability and psychological career resources by means of a self-administered questionnaire, which was made up of the Psychological Career Resources Inventory (PCRI) and the Graduate Employability Measure (GEM). The sample consisted of 113 final-year students, and a 100% response rate was obtained. Statistical analysis of the data considered mean scores, any significant correlations, and differences in terms of gender regarding the respective constructs.

5.2.2.1 Conclusions regarding Mean Scores

The mean scores achieved on all dimensions of both the GEM and the PCRI indicated a strong, positive profile in terms of student's employability/psychological career resources.

These students prefer a stable career, but also desire growth and development in their careers. Similarly, Coetzee and Bergh (2009) found *stability/expertise* and *variety/creativity* to be the dominant career preferences in a study conducted among young working adults in South Africa.

Furthermore, students value their interpersonal skills and having a clear purpose, which have been shown to contribute to job and life satisfaction. In terms of career harmonisers, *social connectivity* received a high rating. This trait results in advanced flexibility and resilience (Bezuidenhout, 2011). The students in the current study also believe themselves to be open to new situations and opportunities, but also feel that they have a high level of control over their circumstances. Further, they see themselves as adaptable and able to achieve their objectives through their own, independent efforts.

Employers seek well-rounded individuals who can “hit-the-ground-running” (Pool & Sewell, 2007). For this to occur, graduates need to have a well-balanced repertoire of PCRs, which, along with other factors, adds to their employability. As such, it can be concluded from the results of the current study that the graduates are employable and ready to enter the job market. Given the present lack of consensus on a set employability profile, it is difficult to compare the results of the current study with those of other studies. Despite this, the GEM and PCRI were developed specifically for the South African context, and subsequently it can be said that the students in the sample drawn from the Faculty of Economic and Management Sciences (University of Pretoria) have a well-balanced PCR profile and a strong employability profile, which should enable them to meet the demands set by the new world of work in the South African context.

5.2.2.2 Conclusions regarding the Relationship between Graduate Employability and Psychological Career Resources

From the empirical results, it can be concluded that graduates' psychological career resources significantly influence their graduate employability. Coetzee and Bergh (2009) conducted an in-depth review of the literature, and indicate that, indeed, one's PCRs influence one's general employability and other career-related concepts, such as career adaptability, life satisfaction, and entrepreneurial activity, to mention a few. It is clear that graduates need to have developed the skills required by the employer in order to be successful in their career (Bennett, Dunne & Carré, 2000; Yorke & Knight, 2004; Bridgstock, 2009). These skills can be gained by means of career self-management, which is brought about by one's specific set of psychological career resources. As such, the results from the present sample indicate that the graduates are fully aware of the impact these resources may have on their employability, and also believe that they are well developed in all aspects related to employability.

There was a preference for the *career values* resource, which indicates that these graduates are highly aware of the reasoning behind their chosen/proposed career path. Their career decisions are therefore motivated, which relates to the desire for a more secure, stable career that allows utilising and developing of their expertise. The sample also indicated a preference for *self/other skills* (career enablers) and *social connectivity* (career harmonisers), which again emphasises that these graduates believe in the importance of creating strong social networks.

Overall, there were significant relationships between the majority of the psychological career resources dimensions and graduate employability dimensions. This again substantiates the fact that one's set of PCRs influences one's general employability. The most significant contributors to the variance in the employability dimensions were brought

about by career enablers, career harmonisers, and career preferences; however, not to the exclusion of other dimensions.

In essence, the graduates believe their transferrable skills, perceptions of their career paths, as well as self-esteem, behavioural adaptability, emotional literacy, and social connectivity to be the greatest contributors to their strong employability profile. These resource preferences relate positively to the desire for growth displayed by the graduates. There is a prevailing positive and consequently well-balanced set of psychological career resources utilised by these graduates. This may be indicative of a high degree of self-awareness, and perhaps more importantly, an awareness of the demands of the labour market for an adaptable employee who is willing to learn continuously in order to remain competitive.

The study further points to the fact that individuals from the Human Resources field can be viewed as, and consider themselves to be, self-reliant in the labour market (Rothwell & Arnold, 2005). This optimistic view of PCRs and employability may further indicate that, although they may prefer an organisational career with some stability, their ability to be forward-thinking and engage in new opportunities is equally strong. These findings are supported by Rothwell and Arnold, who indicate that a sample of HR professionals may be as capable as other professionals of securing employment in the market, but are also able to engage in and develop their own opportunities.

5.2.2.3 Conclusions Regarding Gender Differences

It can be concluded that no significant differences exist in terms of gender for the GEM and PCRI dimensions. This finding contradicts that of Coetzee (2006) and Bezuidenhout (2011), who both determined that there are significant differences between men and women. Bezuidenhout found that women are more proactively involved in their careers compared to their male counterparts. However, Sturges et al. (2010) found no significant

differences between men and women regarding any career-management activities. Similarly, Rothwell et al. (2009) found no significant differences in terms of gender regarding self-perceived employability.

5.2.2.4 Conclusions regarding Central Hypothesis

The main purpose of the study was to conduct an investigation; however, hypotheses were formulated as additional aims and tested by means of statistical analysis. The central hypothesis stated that psychological career resources (career preference, career values, career enablers, career drivers, and career harmonisers) are significantly associated with graduate employability. Given the empirical support provided by the findings of the study, this hypothesis is accepted.

Secondly, the study endeavoured to determine if any significant differences exist between men and women in terms of graduate employability and psychological career resources. By means of statistical analysis it was determined that there are no significant differences, and the null hypothesis is therefore accepted.

The implications of the findings of the study are discussed in the following section.

5.3 IMPLICATIONS OF THE RESEARCH FINDINGS

The present study contributes valuable knowledge regarding the skills required in order to be considered an employable graduate. As such, the global view taken in this study indicates that there are certain commonalities when referring to employability skills. The

results of this study also provide valuable information to the South African employer and Higher Education Institutions.

Furthermore, the University of Pretoria is now able to critically evaluate the employability and psychological career resources of their students. The sample in the current study proved to be adequately employable according to their own views, which may indicate to the university that it is providing ample opportunity for the acquisition of such skills. However, as will be seen in the next section, these results cannot be generalized to the greater population and should be used with caution.

The results of this study may assist human resource practitioners and psychologists in career development and career counselling by assisting students in the identification of employability developmental areas, including those psychological career resources which, when in balance, assist in promotion of employability. Lastly, students may use the information contained in this study to better plan their career paths by ascertaining their level of employability and any possible development areas.

5.4 LIMITATIONS OF THE STUDY

The findings of this study are limited to the context of graduating students from the Economic and Management Sciences Faculty. Given that the study was of an exploratory nature with a survey design, the findings do not allow for explicit conclusions to be drawn, and the findings cannot be generalized to the greater population. In order to do so, the study would need to be conducted on a more diverse sample from across South Africa in order to make it more representative. Selecting a larger, more diverse sample may also counter any potential bias that may result from a self-administered questionnaire.

Lastly, the number of respondents per biographical category was mostly insufficient to conduct further statistical analysis. These categories were therefore not used. Future research should attempt to identify a sample for which the categories are normally distributed. However, the main aim of the study did not relate to differences among groups, and this limitation may therefore be viewed as admissible in the context of the present study.

5.5 RECOMMENDATIONS FOR FUTURE RESEARCH

Recommendations for future research relate mainly to the selection of a larger sample that cuts across all faculties and includes students from a number of universities in South Africa. This will provide better insights into the employability and psychological career resources of graduates that are about to enter the South African job market. This will further allow for the generalisation of results to the greater population.

Future studies may also seek to investigate perceptions of South African employers regarding those skills that cause an individual to be seen as more employable, which could, in turn, inform South African Higher Education Institutions. Lastly, alternative methodologies may be considered for conducting future research.

5.6 CONCLUSION

The purpose of this study was to investigate graduate employability and psychological career resources. In an in-depth literature review, both constructs were discussed, along with a look at the skills relevant to graduate employability and the relevant development areas. From the empirical study, it can be concluded that the respondents see themselves as employable, with no difference between men and women regarding this view. Strong positive relationships were displayed between the majority of dimensions of the PCRI and GEM. “Employability is a lifelong issue and nobody is ever perfectly employable” (Pool & Sewell, 2007, p.288). This statement indeed puts the findings of this study into context – although the students did not display clear development areas, the labour market may change again and different demands may arise once more. The results of this study make a valuable contribution to the field of career development/guidance, individual students, employers, and higher education institutions, and the study is deemed to have been successful.

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