

Exploring the self-perceived employability
among final-year undergraduate students at a
South African university

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North-West University

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DECLARATION

By submitting this dissertation electronically, I solemnly declare that I authored the work contained within. The dissertation is submitted in fulfilment of the requirements for the degree Master of Arts in Industrial Sociology at the Potchefstroom Campus of the North-West University.

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ABSTRACT

South Africa suffers from persistently high unemployment, and youth unemployment is seen as one of South Africa's greatest socio-economic threats. Workplaces today require highly qualified and skilled employees who can deal with and adapt to the dynamic, fast-paced and demanding labour market. Therefore, employability skills are critical to securing a job and improving one's well-being. Currently, there are few published studies on the self-perceived employability of tertiary students in South Africa. The lack of scholarly research on student employability and self-perceived employability in South Africa and the role that higher education institutions can play in student employability led to an attempt to fill this gap. Therefore, the aim of this research study was to explore the self-perceived employability among final-year undergraduate students at a higher education institution in South Africa.

This study was conducted within a positivistic research paradigm. The ontological approach of objectivism and the epistemology of empiricism were used to inform the study. The methodology that was used involved a literature review and an empirical study. A quantitative approach was adopted for the empirical study using quantitative methods and techniques for sampling, data collection and data analysis. The research setting was limited to one higher education institution in South Africa; the institution was selected by using convenient sampling. The target population for this study comprised all final-year undergraduate students at the various campuses of the university. Data for the study were collected using a standardised, web-based, self-administered and coded questionnaire. Confirmatory factor analysis, exploratory factor analysis, descriptive statistics, Spearman's rank-order correlations, independent sample t-tests, ANOVA tests, and effect sizes were used to analyse the data.

The results of the exploratory factor analyses confirmed the validity and reliability of the Self-Perceived Employability, Ambition and University Commitment scales. Based on the mean scores obtained for "self-belief", "university reputation" and "external labour market", it can be deduced that, although the students had positive perceptions about their skills, abilities, academic performance and their performance in interviews (self-belief), they were not that positive about the university's reputation and about job opportunities in the external labour market. The results further showed that respondents scored higher on the internal dimensions than on the external dimensions of self-perceived employability. This could be an indication that respondents were aware of the conditions in the South African labour market, which are characterised by high unemployment and limited employment opportunities, especially for young people. Such a trend

can result in high mental and physical health problems and adverse changes that discourage and weaken confidence in employment prospects after graduation as it becomes virtually impossible to find employment.

The results of the independent sample t-tests, ANOVA's, effect sizes and Spearman's rank-order correlation coefficients revealed an association between selected socio-demographic variables (gender, age, campus, mode of study, race, faculty of study, geographical location of origin, parents/guardian's occupation and educational level and financial support, ability to provide in household needs and religiosity) and self-perceived employability, ambition and university commitment. The study showed that Bourdieu's theory of practice and associated concepts of field, capital and habitus is useful in understanding and explaining the association between the socio-demographic variables used in the study and final-year undergraduate students' self-perceived employability.

From the study, it is clear that various measures need to be taken by higher education institutions in South Africa to increase and strengthen students' employability in order to improve career opportunities given the high unemployment rate in the country and to, consequently, promote economic stability in the country.

Key terms:

Employability; final-year undergraduate students; higher education; job readiness; self-perceived employability; South Africa; unemployment.

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CHAPTER 1

INTRODUCTION, ORIENTATION, PROBLEM STATEMENT AND RESEARCH METHODOLOGY

1.1 INTRODUCTION

We are currently living in the era of the Fourth Industrial Revolution (4IR), which poses several social and economic opportunities and challenges (Manda & Dhaou, 2019:244). The term “4IR” was coined by Klaus Schwab, founder and executive chairman of the Geneva-based World Economic Forum (WEF), at the Davos meeting in 2016 (Schulze, 2019). It involves a series of developments in robotics, nanotechnology, genetics and biotechnology, among others (WEF, 2016:v). These new technologies are fusing the physical, digital and biological worlds; affect all disciplines, economies and industries; and also challenge ideas about what it means to be human (WEF, 2016).

The fusion of technologies in global industries and our everyday lives is both exciting and frightening (Xu *et al.*, 2018:92). It leads to new categories of jobs and employment, which alter the nature and conditions of work and change the skills required by organisations in the labour market (Badran, 2019:2). According to the WEF (2016:3), the advancement of technology is currently affecting global industries and has a significant impact on jobs, ranging from significant job creation and job displacement to heightened labour productivity and a widening skills gap. Technological advancements have several economic benefits, such as effective means of communication; improved work performance; increased income; increased skilled job opportunities in the labour market; speeding up of production in workplaces; and improvement of quality of life (Warfield, 2019; Xu *et al.*, 2018). However, these advancements are also accompanied by various challenges, such as potential job losses due to increased use of technology (computers and robotics are replacing most blue-collar jobs); skills shortages due to the incorporation of smart and digital initiatives in workplaces; and changing work dynamics (Manda & Dhaou, 2019:247; Warfield, 2019).

In workplaces, the debate on employability skills and graduate work readiness has increased due to the impact of the 4IR, which penetrates the business and academic communities (Manda & Dhaou, 2019:247; Turner, 2019). Workplaces today require highly qualified and skilled employees who can deal with and adapt to the dynamic, fast-paced and demanding labour market (Organisation for Economic Co-operation and Development [OECD], 2019:25). Skills mismatch and skills redundancy are some of the challenges workplaces are facing due to the changing

nature of work because of advances in technology and manufacturing techniques (Manda & Dhaou, 2019:247). The notion of the 4IR and its accelerating pace of technology transform industries and business models, which changes the skills that employers need while reducing the shelf life of employees' existing skill sets. The transition that has taken place due to the impact of the 4IR has resulted in graduates entering work environments that differ greatly from those of previous generations (WEF, 2016:19). Serious concerns have been raised about the future of work and the efficacy of undergraduate academic programmes to adequately prepare students for employment in the 4IR (Kapareliotis *et al.*, 2019:538). Employees of the 4IR are required to deal with massive amounts of information and data; they need to learn how to find, organise and manage these in order to use them for knowledge and decision-making (WEF, 2019a:22).

It is important to gain an understanding of the way future labour perceives their employability, specifically in the context of the 4IR. Thus far, no study has been conducted on the self-perceived employability among final year undergraduate students at the higher education institution under investigation. This study aimed to address this gap by examining the self-perceived employability among final-year undergraduate students at the selected institution. It contributes to the body of knowledge on undergraduate students' self-perceived employability in South Africa and globally.

1.2 ORIENTATION AND BACKGROUND

Employability is a topic that has been discussed for several years and has been of growing interest over the last decade (Lowden *et al.*, 2011:4). Various authors define employability differently due to the concept changing systematically over time, depending on current labour market conditions and government policies (Rothwell & Arnold, 2007:24).

According to Hillage and Pollard (1998:2), employability can be defined as "having the capability to gain initial employment, maintain employment, and obtain new employment if required". Rothwell and Arnold (2007:23) refer to employability as the extent to which individuals acquire the necessary skills and attributes to secure their desired occupation. Suarta *et al.* (2017:339) describe employability skills as the basic literacy and practical skills that develop throughout an individual's schooling life and that can be transferred to the workplace. Therefore, employability concerns the extent to which people have the "necessary skills and attributes to find and stay in a job" (Rothwell & Arnold, 2007:23).

Employability is a multidimensional concept that includes internal and external dimensions. Internal employability refers to workers' ability to remain employed with their current employer (Juhdi *et al.*, 2010:2). External employability refers to the "ability and willingness" of an individual

to switch to a comparable or a different job in another firm (Juhdi *et al.*, 2010:2). According to Juhdi *et al.* (2010:1), several factors affect internal and external employability. Internal determinants include, among others, academic performance, ambition, self-confidence, communication skills and competency (Harry *et al.*, 2018:3; Juhdi *et al.*, 2010:2). External determinants include, among others, university reputation, the credibility of the field of study and the demand for the field of study in the labour market (Rothwell *et al.*, 2008:10).

The concept of self-perceived employability is closely related to the definitions provided above. Rothwell *et al.* (2008:2) define self-perceived employability as “the perceived ability to obtain sustainable employment that is appropriate to one’s qualification level”. In simple terms, self-perceived employability is individuals’ assessment of their competencies and attributes to be employable. For this study, the definition of Rothwell *et al.* (2008:2) was used to conceptualise self-perceived employability.

According to Rothwell and Rothwell (2017:2), the defining characteristic that is associated with employability is self-sufficiency, which refers to the ability “to realise potential through sustainable employment”. For individuals, employability depends on their acquired knowledge, skills and attitudes and the way they present themselves as assets to the labour market and employers (Rothwell & Rothwell, 2017:2). According to Rothwell and Rothwell (2017:2), employability features are prominent on the agenda of higher education institutions because most students, and their relatives, expect a degree to deliver education and a career pathway. Graduate employability is an ongoing discourse in several Western economies (Tomlinson, 2012:406), as unemployment rates are continually escalating globally (Raty *et al.*, 2018:1). South Africa is no exception to this discourse.

A recent report by Trading Economics (2022a) shows that South Africa’s unemployment rate eased to 34.5% in the first quarter of 2022, the first decline in seven quarters, down from a record high of 35.3% in the fourth quarter of 2021. This represents a 0.8% decrease in South Africa’s official unemployment rate, which has remained high over time and mainly affects the youth. According to Trading Economics (2022b), the youth unemployment rate – measuring jobseekers between 15 and 24 years old – fell to 63.9% in the first quarter of 2022, the lowest in a year, from a record high of 63.5% in the fourth quarter. Concerning graduates, the Quarterly Labour Force Survey (QLFS) (2022) provided by Statistics South Africa (2022) revealed that the unemployment rate among young graduates (aged 15 to 24 years) declined from 40.3% to 32.6%, while it increased by 6.9 percentage points to 22.4% for those aged 25 to 34 years in the first quarter of 2022. The unemployment crisis in South Africa has worsened over the years and is the result of several factors, such as low economic growth, low education levels, low skills and labour market

disruptions related to the 4IR (Ansara & Pretorius, 2019). In addition, the global COVID-19 pandemic exacerbated the situation.

According to the World Health Organization (WHO) (2020:2), COVID-19 is a new virus linked to the same family of viruses as severe acute respiratory syndrome (commonly known as SARS). The United Nations Development Programme (UNDP) (2020) states that the coronavirus, which led to the COVID-19 pandemic, is the defining global health crisis of our time and the greatest challenge we have faced since World War II. The pandemic has affected societies and economies around the globe and will permanently reshape our world as it continues to unfold (WEF, 2020a). The crisis is taking its toll on the world, causing deaths, illnesses and economic despair (The World Bank, 2020). Globally, an economic crisis is encountered due to the shutdown of factories, retail outlets and services provided (WEF, 2020a). According to the International Labour Organization (ILO) (2020a), the economic effect that is imposed on a global scale by the COVID-19 pandemic has a detrimental effect on workers in the informal economy and on hundreds of millions of enterprises worldwide. South Africa's former National Treasury Director-General, Dondo Mogajane, attested to this claim at an interministerial briefing when he announced that South Africa's unemployment rate was expected to reach 40% due to the COVID-19 pandemic (BusinessTech, 2020b). The ongoing pandemic has a significant impact on the African continent, especially among the youth (WEF, 2020b). According to the WEF (2020b), youth unemployment is one of the biggest challenges faced in Africa. The rate of unemployed youths in Africa is twice that of adults, and it is likely to worsen due to the COVID-19 pandemic (WEF, 2020b).

In addition to the impact of the COVID-19 pandemic, further causes associated with graduate unemployment include lack of work experience, skills mismatch, limited social capital, hiring preferences, and inadequate career guidance and job training (Hwang, 2017:2-5). In South Africa, the education system strictly focuses on subject and functional competencies, which are important to contribute to career and personal development (Bizcommunity, 2018). However, a crucial element of career and personal development is embedded in employability and the skills associated with employment (Bizcommunity, 2018).

The education system has been lacking in promoting aspects of employability in schools and universities, which leaves graduates ill-equipped for the increasingly competitive market. Employers are on the lookout for a range of employability skills that are favourable for their businesses (Rehman & Mehmood, 2014:2). This means that graduates must develop employability skills that enable proactive career behaviour that would enhance future employability (Clements & Kamau, 2018:2281). According to Odewale *et al.* (2019), employment skills such as technical, management and personal entrepreneurial skills are fundamental to the

labour market. Rehman and Mehmood (2014:2) regard communication and technical or professional skills as well as personal attributes such as good personal presentation, personal organisation, leadership or management skills, good work ethic and willingness to learn, among other attributes, as important requirements for employment. They state that employability skills are important because they enable adaptability to and survival on the job for newly employed graduates. Rehman and Mehmood (2014:2) further emphasise that employability serves as an assessment of the economic worth of a graduate at the time of employment.

According to the CDE (2020:1, 3), a sizeable proportion of the population in South Africa has been without work since the 2000s. Economic growth has been too slow to absorb new entrants into the labour market and consequently, unemployment rates have increased. This is greatly affecting the economy, as employment is the most significant driver of human and national development. Owing to the extent of unemployment in South Africa, especially among the youth, the matter of joblessness in South Africa has recently been a subject of interest in presidential summits, non-governmental organisations and government initiatives (CDE, 2020:1). Programme incentives such as skills training, mentoring and coaching in workplaces, which are the most underrated practices in the labour market currently, can help bridge the gap in formal education systems, thereby reducing the unemployment rate (Deloitte, 2018:23). Employment is an important feature in society. Societies have not found any other way of providing decent standards of living for people except by engaging in productive activities (CDE, 2020:1). Employment is an essential element of the economy that facilitates the production of valuable goods and services and allows for people to participate in the consumption of produced goods and services (CDE, 2020:1).

1.3 PROBLEM STATEMENT

In South Africa, the labour market is characterised by significantly high levels of unemployment compared to other emerging-market economies, such as Brazil, China, and Russia, among other countries (Cassim & Oosthuizen, 2014; Trading Economics, 2020b). As indicated in the preceding orientation and background section, South Africa's unemployment rate is currently measured at 34.5% (Trading Economics, 2022a). Youth unemployment is by far the most prominent issue experienced in South Africa (Trading Economics, 2020a). According to Budlender (2017:3), the following factors have contributed to the unemployment crisis in South Africa: previous industrial and social apartheid policies; poor education; poor economic development; and a series of economic setbacks, such as corruption.

Fin24 (2019) reports that the most prominent factor that causes unemployment in South Africa is slow economic growth. Furthermore, the unemployment crisis is worsened by the COVID-19 pandemic (WEF, 2020b). These factors have stricken employment opportunities for the youth, especially for South African graduates (Fin24, 2019).

According to Edgell and Granter (2019:174), unemployment is an inevitable social problem that has unavoidable consequences. Unemployment results not only in financial hardships (loss of income) but also in loss of status or identity, time structure, social contact and a sense of purpose and belonging, which consequently influence psychosocial well-being (Edgell & Granter, 2019:233). Lasting youth unemployment may result in harmful economic and health consequences. Although the financial consequences for young people are less severe compared to adults, at the global level, young people aged 15 to 24 are more likely to be unemployed during a recession compared to adults aged 25 and above (ILO, 2020b). Long periods of unemployment while young “may result in permanent personal scars and have harmful effects on one’s happiness, job satisfaction and health for many years later” (Edgell & Granter, 2019:237). Mortimer *et al.* (2016:1) argue that youth unemployment reduces the capacity to achieve diverse markers of adulthood, potentially undermining the young adult’s sense of confidence and independence. Furthermore, while parents often come to the aid of their unemployed young adult children, such support may also have negative psychological repercussions whereby the experiences of being unemployed and receiving financial aid from parents diminish youth’s personal psychological resources as they make the increasingly lengthy and precarious transition to adulthood (Mortimer *et al.*, 2016:1).

According to the ILO (2015), youth unemployment is associated with the risk of young people participating in violent actions, crime, gangs and rebel movements to compensate for the absence of voice, self-esteem and belonging that a job might otherwise provide. This view is confirmed by Merton’s anomie theory, which suggests that when the harsh realities of inequality of opportunity to achieve success such as employment are blocked, illegitimate means that are available in the social environment of an individual are adopted, such as crime (Merton, 2010:8). Engagement in illegitimate means helps to pursue the common cultural goal of monetary success and accompanying high social status (Merton, 2010:8). Therefore, with the corrosive legacy of youth unemployment, “young people’s integration into traditional patterns of economic life, such as earning, saving and building careers”, is hindered (WEF, 2018).

The inability of the economy to create jobs coupled with high-level entry requirements and skills mismatch are some of the reasons advanced for the persisting youth unemployment crisis in South Africa (BusinessTech, 2019). According to Cassim and Oosthuizen (2014), youth

unemployment in South Africa is characterised by a series of factors deriving from the youth's lack of employability resulting from a range of socio-economic factors. These factors include, among others, low levels of education, having dropped out of school, and invariably not acquiring the necessary literacy, numeracy and communication skills that are required in the labour market (Cassim & Oosthuizen, 2014). Other factors include little work experience, which is a particularly undesirable characteristic for employers, a lack of strong networks or social capital that will enable them to source job opportunities, and insufficient financial resources to enable mobility to areas where there is demand for labour (Cassim & Oosthuizen, 2014).

Labour demand conditions continually change over time, and they often favour more skilled workers over less and unskilled workers (Oosthuizen, 2003:18). The current misalignment of labour supply and demand in South Africa is one of the factors that holds back the country's economic growth (Oosthuizen, 2003:i). According to the IOL (2020a), South Africa is part of the global economies that are both positively and negatively affected by the current industrial revolution (IOL, 2020a). The current impact of the fast-changing environment has posed a significant challenge for South African government institutions to transition with their corporates for meaningful collaboration that would prioritise skills development and reskilling employees (IOL, 2020a). According to Laubscher (2018), the lack of skills and knowledge in the South African labour force is one of the major constraints on economic growth in the country, and with structural adjustment in economies leading to downsizing of the employed, workers are required to improve their skills to get employed.

The structural shifts in the South African economy towards more highly skilled labour have resulted in a shift in the nature of work (Bhorat & Oosthuizen, 2005:33). According to the WEF (2019b), workplaces in the 21st century require the following skills: functional skills (e.g., marketing and customer service); soft power skills (e.g., leadership and management); digital skills (e.g., social media and database management); and value-added skills (e.g., English proficiency and multilingualism). As organisations are grappling with digitalisation, automation and constant change, employers in the 21st century require employees who are able to communicate their ideas in a collaborative and creative manner (WEF, 2019c). In addition, technical expertise and human relation skills are essential skills required by organisations in today's world of work (WEF, 2019c).

Higher education institutions play a key role in the development of graduates' employability skills to ensure that they are competent and competitive (Wakelin-Theron, 2014:2). According to Weber (2019), graduates lack key skills for employment and are not necessarily taught to develop and enhance employability skills in educational institutions. Jacobs (2017) states that university

courses are mainly informed by theoretical content, with little or no practical experience provided to students. The structure of course assignments, tests and examinations are more centred on memorising coursework than on applying theoretical knowledge to different situations. The development of generic employability skills is important because the labour market is intensely competitive and employers are looking for people who are flexible, who can take initiative and who have the ability to undertake a variety of tasks in different environments (Mattis, 2019). Rehman and Mehmood (2014:5) add that the acquisition of employability skills in today's world of work is important because recruiters seek assurance that graduates applying for jobs have at least strong foundation skills and can deploy their knowledge to solve problems, take initiative and communicate with team members rather than just follow prescribed routines. Furthermore, having employability skills is essential not only to gain employment but also to survive on the job (Rehman & Mehmood, 2014:5). If graduates have employability skills, they would be able to respond quickly to situations, offer new ideas and perform more effectively by managing time and work, and adapt and adjust easily to technological changes and organisational restructuring (Rehman & Mehmood, 2014:5).

Currently, there is a paucity of published research on the self-perceived employability of undergraduate students at higher education institutions in South Africa. Therefore, this study aimed to address this gap and investigated final-year undergraduate students' self-perceived employability at a higher education institution in South Africa.

1.4 RESEARCH QUESTIONS

Given the problem statement outlined above, the general and specific research questions are posed below.

1.4.1 *General research question*

The general research question formulated for the study was as follows: What is the self-perceived employability among final-year undergraduate students at a higher education institution in South Africa?

1.4.2 *Specific research questions*

The specific research questions arising from the general research question were as follows:

- What are the existing theoretical approaches to and perspectives on employability and self-perceived employability?

- What are the global and national trends and perspectives relating to students' employability and self-perceived employability?
- What research methodology can be used to investigate the self-perceived employability among final-year undergraduate students at a higher education institution in South Africa?
- What are the results of the empirical study on the self-perceived employability among final-year undergraduate students at the higher education institution under investigation?
- What is the association between selected socio-demographic variables and the self-perceived employability among final-year undergraduate students at the higher education institution under investigation?
- What conclusions and recommendations emanating from the literature review and empirical results can be made regarding the self-perceived employability of final-year undergraduate students at the higher education institution under investigation?

1.5 RESEARCH OBJECTIVES

The general and specific research objectives are provided below.

1.5.1 *General research objective*

The general objective of the study was to explore the self-perceived employability among final-year undergraduate students at a higher education institution in South Africa.

1.5.2 *Specific research objectives*

The specific research objectives emanating from the general research objective are as follows:

- to analyse the theoretical approaches to and perspectives on employability and self-perceived employability;
- to review and document literature pertaining to global and national trends and perspectives relating to students' employability and self-perceived employability;
- to describe the research methodology that was used to investigate the self-perceived employability among final-year undergraduate students at a higher education institution in South Africa;

- to document and analyse the results of the empirical study on the self-perceived employability among final-year undergraduate students at the higher education institution under investigation;
- to determine the association between selected socio-demographic variables and the self-perceived employability among final-year undergraduate students at the higher education institution under investigation;
- to present the conclusions and recommendations emanating from the literature review and empirical findings regarding the self-perceived employability of final-year undergraduate students at the higher education institution under investigation.

1.6 CENTRAL THEORETICAL STATEMENTS

Employability can be studied from four perspectives: the political perspective; the educational perspective; the human resource management perspective; and the individual perspective (Rothwell, 2015, as cited in Vargas *et al.*, 2018:3). The political perspective is adopted by modern-day governments and focuses on reducing unemployment and accompanying social disadvantages (Vargas *et al.*, 2018:3). According to Jackson (2013:33), regarding the political perspective, work placements and liaisons with employers will provide the necessary employability skills. This perspective of employability derived from concerns about the changing nature of work and employment during and after the 20th century (Rothwell *et al.*, 2009:152).

The educational perspective focuses on graduates' access to the labour market and the role employability plays in educational curriculums (Vargas *et al.*, 2018:3). According to Shivorro *et al.* (2018:218), "the perspective assumes that higher education is simply an apparatus for graduates to indicate the capabilities they possess to those who are hiring". Therefore, in view of this perspective, higher education is regarded "as a window to observe inborn qualities" of a graduate "rather than a process of developing knowledge and skills that are needed for productivity in the industry" (Shivorro *et al.*, 2018:218).

The perspective of human resource management and the psychology of work and careers relates to the notion of employability "based on skills and personal flexibility acquired through employment, often promoted by employers as an alternative to job security" (Rothwell *et al.*, 2009:153). According to Akkermans *et al.* (2019:1, 8), the human resource perspective is based on employer-led enhancement of employees' employability and workplace commitment that is beneficial to organisational needs.

The individual perspective centred on “each person’s own capacity to find and keep a job of an appropriate level” (Vargas *et al.*, 2018:4). According to Nilsson (2010:545), the individual perspective is central to employability, as it relates to an individual becoming employed. Shivor *et al.* (2018:218) argue that education is central to the individual perspective and mainly focuses on increasing individual knowledge, skills and productivity, which consequently enhances job performance.

Moreover, the individual perspective includes three main approaches: competence-based employability; trait-based individual employability; and self-perceived employability (Vargas *et al.*, 2018:4). According to Katz (2015), competence-based employability is defined as the evaluation of individuals’ behavioural attributes, skills and knowledge that facilitate job-finding opportunities. According to Moolman (2017:35), the competence approach followed in France, Germany and South Africa demonstrates the potential of a multidimensional/holistic view of competence. This holistic approach to employability recognises the necessary qualities required on the supply side of the labour market and the multidimensional factors or barriers to work that graduates face when seeking employment (Moolman, 2017:30).

Employability qualities relate to personal attributes or traits that characterise a person (Coetzee *et al.*, 2019). According to Moolman (2017:28), the conception of employability is dependent on the development of generic, transferable or non-contextualised attributes of graduates. Traits play a vital role in securing employment. Thirunavukarasu *et al.* (2020:2) argue that personal traits substantially influence the individual graduate’s possibilities of acquiring a professional career. Traits such as finding jobs, networking, unpaid labouring and training are some of the factors that are assessed by the trait-based individual employability perspective when proactive graduates seek to secure employment (Thirunavukarasu *et al.*, 2020:1). According to Sannadan *et al.* (2015:112), employers are looking for graduates who are dedicated, can take charge and who are able “to use higher-level skills”, which include “analysis critique, synthesis and multilayered communication to facilitate innovative teamwork in catalysing the transformation of their organisation”. Therefore, in addition to discipline-specific knowledge and skills, the qualities and abilities of graduates are important for individuals when looking for and seeking to keep a job and for employers too when it comes to hiring graduates (Shivor *et al.*, 2018:217).

In keeping with the tenets of the three approaches discussed, it should be clear that the self-perceived employability approach focuses not only on internal personal factors related to individuals’ perception of their own capacities and skills to find a job but also on structural and external factors, such as individuals’ perceptions of the impact of the external labour market and the importance of their qualifications when trying to find a job (Vargas *et al.*, 2018:4). As regards

the individual perspective, self-perceived employability is the most comprehensive approach, as it includes internal and external dimensions of self-perceived employability. The two dimensions are intrinsically linked due to the reciprocal interaction of both dimensions whereby internal and external factors mutually influence an individual's work life (Batistic & Tymon, 2017:377; Fugate *et al.*, 2004:23).

Rothwell *et al.* (2008) developed a model (see chapter 2, figure 2.9) to measure the self-perceived employability among university students. The model was proven "to produce an overall measure of employability" based on four components that are represented in a matrix, namely self-belief, my university, my field of study, and the state of the external labour market (Rothwell *et al.*, 2008:3). Thus, the self-perceived employability of university students is measured in terms of the following (Rothwell *et al.*, 2008:3):

- perceptions of self-belief in terms of ambition, skills and abilities;
- perceptions of the reputation of the university attended;
- perceptions of the status and credibility of one's chosen field of study;
- perceptions of the state of and opportunities in the external labour market.

The self-perceived employability model developed by Rothwell *et al.* (2008) was used to determine and explain the self-perceived employability among final-year undergraduate students at the higher education institution under investigation. The model is elaborated on in chapter 2.

In addition, the study explored Bourdieu's notion of field, capital and habitus and its implications for employability. The interplay between agency and structure has been a topic of interest in recent employability studies. Consequently, the study explored the interplay between individual characteristics and initiatives, on the one hand, and structural factors and contingencies, on the other, and their implications for employability. The theory is elaborated on in chapter 2.

1.7 RESEARCH METHODOLOGY

According to Babbie (1998), research is a systematic inquiry to describe, explain, predict and control an observed phenomenon. It entails the planning of a scientific inquiry, including the research approach, methodology and strategy (Babbie & Mouton, 2006). Creswell (2014:3) argues that the selection of a research approach is dependent on the nature of the social problem the study aims to investigate.

This study was conducted within a positivistic research paradigm. According to Bryman (2012:28), positivism advocates for the application of the methods of the natural sciences to the study of social reality and beyond. Moreover, the ontological approach of objectivism and the epistemology of empiricism were used to inform the study. Objectivism is an ontological position that contends that social phenomena and their meanings have an existence that is independent of or separate from social actors (Bryman, 2012:33). Empiricism suggests that “only knowledge gained through experience and the senses is acceptable” (Bryman, 2012:23). In other words, “ideas must be subjected to the rigours of testing before they can be considered as knowledge” (Bryman, 2012:23). Furthermore, the concept refers to “a belief that the accumulation of facts is a legitimate goal in its own right” (Bryman, 2012:23).

A positivistic research paradigm serves as a philosophical position that is adequately equipped to guide the procedure of quantitative research (Sarantankos, 2012:33). For this study, a quantitative research approach was used to determine the self-perceived employability among final-year undergraduate students at a higher education institution in South Africa. Quantitative research is a research approach that entails the collection of numerical data (Bryman, 2012:160) and emphasises quantification in the collection and analysis of data (Bryman, 2012:35). It shows a view of the relationship between theory and research as deductive (Bryman, 2012:160). According to Mouton (1996:76), deductive research is based on utilising existing theory to plan and define a study. Babbie (2010:23, 51) states that the mode of inquiry for a deductive approach moves from the general to the specific, whereby deductive research begins with a theory from which we may derive hypotheses that are then tested through observations. In this study, deductive reasoning was used by means of a literature study that was used, first, to scrutinise theoretical approaches to employability and self-perceived employability and, second, to explore global and national trends and perspectives relating to students’ employability and self-perceived employability. The researcher aimed to discover certain patterns that were tested through observations (empirical study).

Furthermore, quantitative research is based on principles such as precision in accuracy, measurement, reliability, validity, objectivity, replication, representativeness and generalisability (Sarantankos, 2012:114). According to Bryman (2012:164), there are three distinct reasons for the concern with measurement in quantitative research. First, measurement allows us “to delineate fine differences between people” as regards the characteristic in question; second, it gives us a “consistent device for making such distinctions”; and lastly, it provides “the basis for more precise estimates of the relationship between concepts” (e.g., through correlation analysis) (Bryman, 2012:164).

Reliability measures the quality of measurement and “tests the quality of indicators and research instruments”. It “measures objectivity, stability, consistency and precision” (Sarantakos, 2012:107). A method is reliable if it produces the same results whenever it is repeated, independent of the researcher, of the research conditions and the respondents (Sarantakos, 2012:99). Validity, on the other hand, measures the quality of measurement and “tests the quality of indicators and research instruments”. It measures relevance, precision and accuracy (Sarantakos, 2012:107). It therefore informs the researcher “whether an instrument measures what it is supposed to measure and whether the measurement is accurate and precise” (Sarantakos, 2012:99).

The methodology that was used in this study involved a literature review and an empirical study, which are discussed in the following sections.

1.7.1 *Literature review*

A literature review is a critical examination of existing research relating to the phenomenon of interest and of relevant theoretical ideas (Bryman, 2012:14). Simply put, it is how researchers demonstrate that they are able to engage in scholarly review based on their reading and understanding of the work of other researchers in the same field of study (Bryman, 2012:98). According to Yin (2011:62), there are two types of reviews, namely a selective review and a comprehensive review. A selective review is the most needed review in literature because it enhances researchers’ preliminary considerations regarding their topic of study, method and data source. A comprehensive review is based on the assumption of broader perspectives and reports what is known about a topic (Yin, 2011:62).

The literature review of this study included secondary sources to provide credible and relevant information on the topic under investigation. The following secondary sources were consulted to conduct the literature review:

- accredited journal articles;
- books;
- scientific reports;
- global and national trends in graduate employability;
- newspaper articles;
- theses and dissertations.

Furthermore, to obtain literature for the study, several search engines, such as Google Scholar, ResearchGate, EBSCOhost and SA ePublications, were consulted.

1.7.2 *Empirical study*

The subsections below discuss the research design, data collection instrument and sampling method used in the study.

1.7.2.1 Research design

Babbie and Mouton (2001:55) state that a research design can be considered as a blueprint that is used while one anticipates the execution of one's study. According to Bryman (2012:46), it "provides a framework for the collection and analysis of data". Mouton (1996:107) argues that the main purpose of a research design is "to enable the researcher to anticipate what the appropriate research decisions are likely to be and to maximise the validity of the eventual results". The choice of a research design is dependent on the importance given to a range of elements of the research process, such as expressing the causal relations between variables and the generalisation of larger groups of individuals, among others (Bryman, 2012:46).

A quantitative research approach was employed in this study to gather data from final-year undergraduate students at a higher education institution in South Africa regarding their self-perceived employability. A quantitative approach was deemed appropriate for this research, as such an approach entails a systematic investigation of the research topic; quantifiable data can be collected from a large group; the data captured can be analysed using statistical and computational techniques, which saves energy and resources; and the findings can be generalised to a large group (Eyisi, 2016:94; Gorard, 2001:3). The replicability of results is a beneficial outcome of the use of a quantitative research approach because it proves that the results are reliable, valid and applicable to real-life situations (Eyisi, 2016:94).

1.7.2.2 Sampling, data collection and measuring instrument

The sampling and data collection methods and measuring instrument used in the study are discussed below.

1.7.2.2.1 Sampling

The researcher was required to be clear as to which sampling techniques were to be used for gathering data. It was physically impossible for the researcher to obtain information from the entire population; therefore, the researcher had to limit the study to a part of the population, as also

recommended by Taherdoost (2016:18). The method used to study a representative group in research is referred to as “sampling”, which refers to the act, process or technique of choosing a suitable sample, or a representative group of a population, for the sole purpose of defining parameters of the entire population (Mugo, 2002:1). According to Hanlon and Larget (2011:7), a population comprises all the individuals or units of interest to the study; however, data are not typically available for almost all of the individuals in a population. A sample, on the other hand, is a subset of individuals in a population; data are typically available for individuals in a sample group (Hanlon & Larget, 2011:7). Put simply, a sample can be defined as a set of respondents who are chosen from a wider population for the purpose of a survey study (Mugo, 2002:1).

There are two types of sampling, namely probability sampling and non-probability sampling (Bryman, 2012:187-201). Probability sampling is based on the random selection of a sample “so that each unit in the population has a known chance of being selected” (Bryman, 2012:187). Thus, “it is generally assumed that a representative sample is more likely to be the outcome when this method of selection from the population is used” (Bryman, 2012:187). According to Bryman (2012:174), “the aim of probability sampling is to keep sampling error to a minimum”. Sampling error is based on the error that is found in the results of the study due to the difference between a sample and the population from which it is selected. Non-probability sampling, on the other hand, refers to samples that have not been selected per the principles of probability sampling. This “implies that some units in the population are more likely to be selected than others” (Bryman, 2012:187).

For this study, the research setting was limited to one South African university. The university was selected on an availability basis (convenient sampling). The target population of this study comprised of all final-year undergraduate students at the different sites of delivery of the University. For this study, a final-year undergraduate student was considered as a student who was at the time enrolled in the final or last year of their three- or four-year degree course at the university. This may have also included students who took more than the normal number of years to complete their studies. A comprehensive survey of the target population was undertaken, but as not all students participated in the research, it resulted in a non-probability sample. Convenience sampling (also known as accidental or availability sampling) was used to collect data from the population members who were conveniently available to participate in the study (Sarantakos, 2013:177). To gain access to the final-year undergraduate students at the university, permission was obtained from the University’s Research Data Gatekeeper Committee (RDGC reference no: [REDACTED]-GK-21-005).

1.7.2.2.2 Data collection and measuring instrument

Data collection is the “process of gathering and measuring information on variables of interest in an established systematic manner”, which enables the researcher(s) to answer stated research questions and to conduct tests to prove the hypothesis and evaluate the outcomes of the study (Bryman, 2012:14; Kabir, 2016:202). There are various means of collecting data, including face-to-face interviews, surveys, and focus groups.

An online structured survey (questionnaire) was used as the data collection strategy in this study. According to Bryman (2012:676), online surveys are the best mode of collecting information from research participants compared to traditional survey forms. This is because online surveys are less costly to administer, they tend to be returned considerably faster than questionnaires sent by post, various stylistic formats for presenting the questionnaires can be used, they can be combined with postal questionnaire surveys so that participants have the option of replying by post or online, and there are no constraints as regards geographical coverage (Bryman, 2012:676).

Structured surveys are set to standardise the way in which the researcher presents the research questions and recorded responses from voluntary participants (Bryman, 2012:154). A survey provides a quantitative description of trends in the attitudes and beliefs of a population by studying a drawn sample (Creswell, 2014:201). According to Blackstone (2012:134), survey methods have the benefit of gathering a bulk of information concerning a population from a drawn sample of individuals. The use of surveys enables the researcher to speed up the research process and gather a larger sample at a less costly price. Surveys are cost-effective and save time for researchers when conducting and collecting data from a sample group (Blackstone, 2012:134).

For the purpose of this study, an online survey was used to obtain biographical information (such as gender, faculty of study, previous work experience, parents' level of education and geographical location growing up) as well as perceptions of the self-perceived employability of final-year undergraduate students at a South African university. The Statistical Consultation Services of the university under investigation assisted in creating the information leaflet (including the informed consent letter) and questionnaire and provided the link that was used to distribute the survey. The assistance of the Corporate Relations and Marketing section of the university was sought to publish the invitation to the questionnaire on the relevant electronic platforms of the university. (The invitation banner to the questionnaire was also created by the Corporate Relations and Marketing section of the university.)

The measuring instrument developed by Rothwell *et al.* (2008) to determine university students' self-perceived employability was used. The measuring instrument consists of 16 items and includes external and internal dimensions of employability. External dimensions of employability include respondents' perceptions of the state of the external labour market, their perception of the strength of the university's brand, and the status and credibility of their field of study. Internal dimensions include respondents' perceptions of self-belief (i.e., their confidence in their skills and abilities). Cronbach's alpha coefficient for the 16-item scale measured 0.75 and 0.76 for external employability, which are above the required 0.7, showing high reliability and internal consistency (Rothwell *et al.*, 2008:7). The Cronbach's alpha coefficient for internal employability measured 0.66 (Rothwell *et al.*, 2008:7), which is acceptable, according to Field (2005:668). The Cronbach's alpha coefficient should preferably be above 0.7 (Field, 2009:675). In addition, the questionnaire included the six-item Ambition Scale developed by Rothwell *et al.* (2008), adapted from Nabi (2001:464) and Greenhaus *et al.* (1990:86), and the eight-item University Commitment Scale developed by Rothwell *et al.* (2008), adapted from Tsui *et al.* (1997). The scales have acceptable reliability and construct validity; the Cronbach's alpha values obtained for the scales were 0.76 and 0.87, respectively (Rothwell *et al.*, 2008:4). For all the scales, responses were recorded using a five-point Likert scale ranging from strongly disagree (1) to strongly agree (5), as recommended by Rothwell *et al.* (2008:4).

1.7.2.3 Data analysis

Data analysis is a stage that includes data reduction of either primary or secondary data. It is concerned with reducing the large corpus of information that researchers have gathered so that they can make sense of it (Bryman, 2012:13). It involves two steps: first, reducing manageable proportions of the wealth of the data that are available or collected and second, identifying patterns and themes from the data (Mouton, 1996:xii). According to May (2011:122), the analysis of survey data can be structured into three distinctive phases. The first phase involves the description of the sample survey data using tables, graphs and descriptive statistics. In the second phase, statistical techniques are used to estimate population parameters, assess group differences, measure associations, and assess statistical significance. In the final phase, more sophisticated statistical modelling techniques are used to extend the multivariate analysis and enable, where appropriate, predication.

Data obtained by the online survey was analysed with the support and assistance of the Statistical Consultation Services (SCS) of the university under investigation. The data were processed with SPSS. A confirmatory factor analysis was done to validate the factor structure of the employability

construct and the reliability of the Cronbach's alphas. In addition, descriptive statistics, correlation analyses, independent samples t-tests, analysis of variance (ANOVA) and effect sizes were used to measure the association between the biographical variables (such as gender, faculty of study, previous work experience, parents' level of education, and geographical location growing up) and the self-perceived employability of final year undergraduate students. These techniques are briefly explained below and elaborated on in chapter 4.

1.7.2.3.1 Confirmatory factor analysis

Factor analysis is a multivariate technique that is used for "identifying whether the correlations between a set of observed variables stem from their relationship to one or latent variables in the data, each of which takes the form of a linear model" (Field, 2013:875). The broad purpose of factor analysis is to summarise data so that relationships and patterns can be easily interpreted and understood (Yong & Pearce, 2013:79). Factor analysis is normally used to regroup variables into a limited set of clusters based on shared variance (Yong & Pearce, 2013:79). Hence, it helps to isolate constructs and concepts (Yong & Pearce, 2013:79). Confirmatory factor analysis (CFA) is referred to as a "multivariate statistical procedure that is used to test how well the measured variables represent the number of constructs" (Harrington, 2008, as cited in Imandin, 2015:16). It is a form of factor analysis in which "hypotheses about the structure and relations between the latent variables that underlie the data are tested" (Field, 2013:872). In CFA, "the researcher specified the required number of factors to be tested in the data and also which of the observed variable(s) are related to which of the latent variable(s)" (Imandin, 2015:16). Consequently, the relationships are tested or confirmed. CFA can thus be used as "a tool to confirm or reject the measurement model" (Imandin, 2015:17).

1.7.2.3.2 Descriptive statistics

Descriptive statistics quantitatively describe the main features of a collection of information (Mathur & Kaushik, 2014:1188). It provides simple summaries about the sample and the observations that have been made (Mathur & Kaushik, 2014:1). It therefore organises and summarises the results of the study (Rodrigues *et al.*, 2017:620). According to Mathur and Kaushik (2014:1188), the procedure deals with the display of numerical facts or data, in either table or graph format, and with the methodology of analysing the data. Hence, descriptive statistics characterise the shape, central tendency and variability within a set of data, often with the intent to describe a sample or a population (Portney, 2020:318).

1.7.2.3.3 Correlation analysis

A correlation test, in the broadest sense, is a measure of an association that tests whether a relationship exists between two variables (Schober & Boer, 2018:1763). A correlation test indicates both the strength of the association and its direction (Schober & Boer, 2018:1763). The association between two variables is either, first, as the value of one variable increases, so does the value of the other variable or, second, as the value of one variable increases, the value of the other variable decreases (Schober & Boer, 2018:1763). Hence, in correlated data, the change in the magnitude of one variable is associated with a change in the magnitude of another variable, either in the same or in the opposite direction (Schober & Boer, 2018:1763). In other words, higher values of one variable tend to be associated with either higher (positive correlation) or lower (negative correlation) values of the other variable, and vice versa (Schober & Boer, 2018:1763). Correlation tests are useful for describing the relative strength of a relationship between two variables (Portney, 2020:440). The Pearson product-moment correlation coefficient or Spearman's correlation coefficient is used to measure the strength of association between two variables (Field, 2009:170, 179, 783). This study used Spearman's correlation coefficient to measure the strength of association between two (ordinal or continuous) variables. According to Field (2013:276), Spearman's correlation coefficient – which is denoted by the symbol r_s – is a non-parametric statistic based on ranked data and can be used when the data have violated parametric assumptions such as non-normally distributed data (Field, 2013:165, 276).

1.7.2.3.4 The independent samples t-test

The independent samples t-test is a statistical procedure used to compare the means of two different groups (e.g., male and female) on a continuous variable (e.g., self-perceived employability) (Pallant, 2016:244). This statistical procedure can only compare the means of two groups and cannot make comparisons between more than two groups (Kent State University, 2022).

1.7.2.3.5 Analysis of variance (ANOVA)

Analysis of variance (ANOVA) is a statistical technique that is used to show the difference between two or more means or components through significance tests (Kim, 2014:74). ANOVAs can be applied in three ways: one-way ANOVA; two-way ANOVA; and N-way ANOVA (Statistics Solutions, 2013). A one-way ANOVA evaluates the impact of a single factor (one independent variable) on a single response variable (dependent variable). It determines whether the observed differences between the means of independent groups are statistically significant. A two-way

ANOVA tests the effect of two independent variables on a dependent variable. An N-way ANOVA tests the effect of more than two independent variables on a dependent variable (Statistics Solutions, 2013). An ANOVA test is used when a researcher is attempting to determine whether there is a statistically significant difference among groups. If there is indeed a difference, further examination will have to take place to determine where the group differences lay (Statistics Solutions, 2013).

1.7.2.3.6 Effect sizes

Effect size can be defined as the magnitude of the difference between two intervention groups (Sullivan, 2012:283). McLeod (2019) argues that the effect size is an estimate of the strength of association between two or more variables in and of itself. The effect size is the most important finding in quantitative research that helps the researcher to determine whether the effort, time and cost of an intervention are justified by the magnitude of the effect (Sullivan, 2012:283). Effect size is not an indication of causality but rather a tool that is used to measure the strength of a relationship between two variables. Therefore, in statistical inference, the larger the effect size, the stronger the relationship between two variables (McLeod, 2019).

1.8 ETHICAL CONSIDERATIONS

Ethics is concerned with the attempt to formulate codes and principles of moral behaviour (May, 2011:61). According to Mouton (2001:238), the ethics of science involves what is wrong and what is right when conducting research. It is the principle by which to evaluate behaviour as good or bad due to its concern with what is regarded as right or wrong as prescribed to people regarding what they ought to do and ought not to do (Snellman, 2015:343). According to Sarantakos (2012:17), the main objective of employing ethics in research is to uphold professional integrity; demonstrate responsibility, competence and propriety; evade the fabrication of data; and avoid the falsification of data, to name a few. There are basic ethical standards in social research to which the researcher should adhere, such as properly identifying the researcher and the sponsor; providing clear information as to the type of questions that participants are expected to answer; and assuring the right to anonymity, privacy, confidentiality and informed consent to avoid physical, mental and legal harm to the participants (Sarantakos, 2012:18).

Ethical standards require that researchers should not put research participants in a situation where they might be at risk of harm (physical and psychological) because of their participation. Researchers should guarantee research participants that their identity is not to be infringed. According to Struwig and Stead (2001:70-71), the most prominent ethical conduct to which a

researcher should adhere is that of recognising other researchers' published work from which information was drawn by the researchers and applied in their work.

This research study was guided by the ethical principles provided by the Faculty of Arts Ethics Committee which adheres to the NWU Ethics Policy of the Senate Committee for Research Ethics (SCRE) (NWU, 2018:1). Among other ethical principles, the Ethics Council states that researchers should minimise harm to participants while maximising the benefits of conducting their research. Furthermore, researchers must promote distributive justice (equality) and respect (dignity and autonomy) among the research participants (NWU, 2018:1). Therefore, at the onset of this study, all ethical considerations proposed by the Ethics Council were applied to avoid the violation of the principles. First, approval to conduct the research was obtained from the Arts Research Ethics Committee (AREC) in the Faculty of Humanities at the university under investigation (Ethics reference no: [REDACTED]-01053-20-S7). Once approval was obtained, permission was sought from the University's Research Data Gatekeeper Committee to conduct the proposed study at the university ([REDACTED] RDGC reference no: [REDACTED]-GK-21-005).

Researchers face ethical challenges throughout the course of any research project, from designing to reporting. These ethical issues, however, should be anticipated and acknowledged when they arise. The general principles that guide ethical practice in online research are essentially the same as those that guide ethical practice in any research involving humans, and they include autonomy, justice, and beneficence (Gupta, 2017:4). According to Moreno *et al.* (2013:711), Gupta (2017:5) and Sugiura *et al.* (2017:191), web surveys have only raised three ethical concerns; these concerns may potentially be encountered in this research study. Among these ethical concerns are informed consent, confidentiality and anonymity.

To guarantee that ethical procedures were considered in the scope of the study, an informed consent form was provided to all participants at the onset of the study to ensure their wilful participation in the study (Babbie, 2013:33, 34). Upon providing consent forms to the respondents, a disclaimer on the voluntary nature of their participation was provided to respondents to assure them that they were not obliged to participate in the study and that they were allowed to withdraw from answering the online survey should they choose to (Babbie, 2014:64). The privacy, anonymity and confidentiality of participants were not overlooked. The following procedures were used to protect confidentiality of downloaded data: the IP addresses collected by the survey tool were deleted from the downloaded data file. All responses were deleted from the online survey. The researcher made sure that the resulting data file that was used for data analysis was free of any identifiers, including IP addresses or other electronic identifiers. The data file is stored on a password-protected computer. Any back-up data files are stored in a secure location.

Furthermore, the respondents' personal names were not revealed in the reporting of the empirical results of the study (Babbie, 2014:68). This is a paramount feature of research ethics that assures that no physical, psychological or social harm is experienced by the respondents (Babbie, 2014:68). Similarly, measures pertaining to the avoidance of harm to the respondents were not overlooked by the researcher while conducting the study.

Moreover, all participants and the scientific community are not deceived about the results that were gathered, analysed and interpreted. This is to assure participants and members of the scientific community that all the findings of the study are presented faultlessly, honestly and truthfully in a professional manner that meets the requirements of the professional code of ethics (Babbie, 2013:42). Therefore, by applying ethical considerations to the study, the researcher ensures that transparency, reliability and accountability are rendered to the participants and scientific community.

1.9 LIMITATIONS OF THE STUDY

According to Price and Murnan (2004:66), the limitations of a study are the characteristics of the design or methodology that influenced the interpretation of the research findings. This may influence the generalisability, application and value of the research findings (Price & Murnan, 2004:67).

Researchers often experience limitations that pertain to some of the unaddressed matters that their study was unable to disclose. Almeida et al. (2017:382–383) list several limitations that are associated with a quantitative research design: ethical issues can arise while conducting the study; the model building of a quantitative study requires in-depth knowledge of the field; quantitative research is time-consuming and expensive, as it requires specialised hardware and software tools; and lastly, such research employs complex techniques that require specialised statistical software to interpret data.

The preceding limitations should be expected and acknowledged when they emerge. In this study, three limitations were identified. The first limitation relates to the methodology that was selected for the study. Quantitative research is a useful tool for obtaining data that will enable quantitative predictions of the phenomenon under investigation. However, the method uses a static and rigid approach, leaving no flexibility or choice for change during execution.

The second limitation relates to the use of online surveys, which are quick, inexpensive, easily accessible, save time and simplify administration. However, the limitation in this regard relates to the use of closed-response questions. Some respondents might have experienced difficulty in

understanding the questions asked. This was a limitation because the questions could not be discussed with the respondents; thus, the interpretation was left to the discretion of the respondents. This might have led to disinterest, hasty answers, contradictory answers, dishonest answers and skipped questions.

The third limitation related to access to the survey. Some respondents might not have had access to a computer, laptop or mobile device to access the survey. In addition, respondents who had access to a computer, laptop or mobile device might have experienced difficulty accessing the Internet due to network coverage problems and server issues, such as server errors, which might have led to coverage bias.

1.10 THE SIGNIFICANCE OF THE STUDY

Workplaces today require highly qualified and skilled employees who can deal with and adapt to the dynamic, fast-paced and demanding labour market (OECD, 2019:25). Graduates must possess employability skills that often fall outside the subject area of their study in higher education (Mattis, 2019). In South Africa, unemployment in general and more specifically among the youth is a serious crisis that has been exacerbated by the COVID-19 pandemic (IOL, 2020b). According to BusinessTech (2020a), South Africans continue to lose their jobs because of the lack of skills. Upskilling in preparation for the changes to come after the COVID-19 pandemic should be a critical part of response and recovery across the world (WEF, 2021b). According to Marr (2020), several skills are necessary among the workforce and will be beneficial for workers after the COVID-19 pandemic. Skills such as adaptability and flexibility, tech savviness, creativity and innovation, data literacy, critical thinking, digital and coding skills, emotional intelligence and committing to a lifetime of learning are some of the necessary skills that will be required in our current global markets (Marr, 2020).

Currently, there is a paucity of published research on the self-perceived employability among university students in South Africa. The results of this study contribute to the body of knowledge on the self-perceived employability of undergraduates in South Africa. The study shed light on the self-perceived employability of final-year undergraduate students at the university under investigation. The research may aid in the improvement of education at the university under investigation and other universities nationally to enhance undergraduate students' employability skills.

1.11 CHAPTER LAYOUT

Chapter 1: Introduction, orientation, problem statement and research methodology

This chapter provided the orientation, background to and purpose of the study. The research methodology employed in this study was also discussed.

Chapter 2: Employability and self-perceived employability: a theoretical framework

This chapter explores the existing theoretical approaches and perspectives associated with employability and self-perceived employability.

Chapter 3: A global and national overview of students' employability and self-perceived employability

This chapter examines the global and national trends in students' employability and self-perceived employability.

Chapter 4: Empirical results and analyses: descriptive statistics, and reliability and validity of the scales used

This chapter presents and discusses the empirical results of the study (Part 1), namely the socio-demographical information of the respondents, the descriptive statistics, and reliability and validity of the scales used in the study.

Chapter 5: Empirical results and analyses: inferential statistics, and discussion and interpretation of the results

This chapter presents and discusses the empirical results of the study (Part 2), namely the results of the inferential statistical analyses (independent samples t-tests, ANOVA tests, effect sizes and the Spearman rank-order correlation coefficient).

Chapter 6: Conclusions, recommendations and summary of the study

This chapter presents the concluding remarks and recommendations based on the literature review findings and the empirical results.

1.12 CONCLUSION

Chapter 1 provided an introductory overview of the study. The problem statement, research questions and objectives of the study were stated. Furthermore, the chapter outlined the research methodology that was followed in the study and discussed the research design, ethical considerations, limitations and significance of the research.

The next chapter (chapter 2) provides an overview of the theoretical approaches to and perspectives on employability and self-perceived employability to understand the variables that may influence final-year undergraduate students' self-perceived employability (secondary objective 1).

CHAPTER 2

EMPLOYABILITY AND SELF-PERCEIVED EMPLOYABILITY: A THEORETICAL FRAMEWORK

2.1 INTRODUCTION

Chapter 1 provided an introductory overview of the study. It presented the problem statement, research questions and outlined the methodological approach, procedures and methods in order to achieve the set objectives of the study. This chapter explores the existing theoretical approaches and perspectives that are associated with employability and self-perceived employability.

Delving into the discussion of employability, this chapter first conceptualises the terms employability, self-perceived employability, and graduate employability. This is followed by an overview of the theoretical perspectives on employability, which include the political, educational, human resource management and individual perspectives. The individual perspective presents most of the body of literature in this section, as it entails the main approach that underpins this study, namely the self-perceived employability approach. This chapter also explores the relevance of the concepts of field, capital and habitus, as expressed by Pierre Bourdieu, as well as their implications for employability in the case of this study, as these concepts speak to the 'position' of individuals in society. Finally, this chapter outlines the self-perceived employability models and measurement instruments developed by Rothwell and associates as it relates to the self-perceived employability approach.

2.2 A CONCEPTUALISATION OF EMPLOYABILITY, SELF-PERCEIVED EMPLOYABILITY AND GRADUATE EMPLOYABILITY

This section aims to provide a definitional framework for the conceptual understanding of the following constructs: employability, self-perceived employability and graduate employability.

2.2.1 *Employability*

Much difficulty has been experienced with defining employability over the years due to the multidimensional nature of the concept (Koloba, 2015:23), the continual change in the perceptions of employability (Lowden *et al.*, 2011:10), the context to which the concept is applied (Romgens *et al.*, 2019:2), the group to which the concept is applied (unemployed or existing workforce) (Belt

et al., 2010:2), and the changing nature of the structure and skills that are required in contemporary workplaces (Clokie & Fourie, 2016:443; Saher & Hussain Ch., 2019:120).

The concept of employability comprises the terms “employment” and “ability” and thus concerns “the ability to be employed” (Vanhercke *et al.*, 2014:592). Most authors delineate common features that are associated with the concept. Some of these authors include, among others, Hillage and Pollard (1998:1), Lowden *et al.* (2011:vi), McQuaid and Lindsay (2005:199), and Romgens *et al.* (2019:2590), who argue that employability is dependent on the “knowledge, skills and attitudes of an individual”. Moreover, they argue that employability is “linked to career management skills or the way in which individuals mobilise, present and update their resources in the context of the job market” (Hillage & Pollard, 1998:2; Lowden *et al.*, 2011:10; McQuaid & Lindsay, 2005:209; Romgens *et al.*, 2019:2590).

According to Harvey (2001:98), employability concerns the “possession of basic ‘core skills’, or an extended set of generic attributes”, or attributes that “a type of employer (discipline-linked, sector-related, company-type) specifies” or requires from individuals. Similarly, Suarta *et al.* (2017:339) refer to employability as the basic literacy and practical skills that are essential for individuals to develop throughout their schooling life, for these developed skills enable individuals to gain initial employment in the labour market.

Despite the somewhat contested nature of the concept and the variety of contexts in which the term is used, one of the most widely cited definitions that broadly encapsulates the concept of employability is derived from Hillage and Pollard (1998:2). According to Hillage and Pollard (1998:2), employability is about “the ability to gain initial employment, to maintain employment, and to obtain new employment”. The authors further elaborate that the concept is dependent on “the knowledge, skills and attitudes individuals possess, the way they use those assets and present them to employers and the context (i.e., personal circumstances and the labour market environment) within which they seek work” (Hillage & Pollard, 1998:2).

Employability comprises two dimensions, namely external and internal employability (Juhdi *et al.*, 2010:2). External employability refers to the ability and willingness of an individual to switch to a similar or different job in another firm (Juhdi *et al.*, 2010:2). External employability is dependent on the economic cycle of macro-economic demands as well as the patterns and level of job openings in the labour market (Hillage & Pollard, 1998:4; Sanchez-Manjavacas *et al.*, 2014:10). Internal employability, on the other hand, pertains to the workers’ ability to remain employed with their current employer and encompasses some of the most relevant features of employability that represent the value of a worker’s human capital in the internal labour market (Juhdi *et al.*, 2010:2;

Sanchez-Manjavacas *et al.* 2014:10). Human capital is the “stock of skills that the labour force possesses and is regarded as a resource or an asset” (Goldin, 2014:56). This encompasses the notion that there are investments in people (e.g., education, training, health) and that these investments increase an individual’s productivity (Goldin, 2014:56). Internal employability is influenced by individuals’ confidence, ambition, job satisfaction, organisational commitment, the nature of the work done, and salary levels (Paterson, 2017:248; Sanchez-Manjavacas *et al.*, 2014:10).

This study adopted the definition of Hillage and Pollard (1998:2), as it provides a comprehensive framework for understanding employability and encapsulates the different elements considered important for employability. In summary, according to Hillage and Pollard (1998:2), employability includes the following elements: employability assets (skills, knowledge and attitudes); deployment (career management skills); presentation (curriculum vitae and job-related skills); and the context of personal circumstances and the labour market. The next subsection conceptualises self-perceived employability.

2.2.2 Self-perceived employability

According to Rothwell *et al.* (2009:154), self-perceived employability refers to the “perceived ability to attain sustainable employment that is appropriate to one’s qualification level”. Self-perceived employability comprises internal and external dimensions. Internal dimensions include an individual’s perception of their own capacities and skills for finding a job – for example, self-motivation, verbal communication, problem-solving, and being proactive (McGunagle & Zizka, 2020:1; Vargas *et al.*, 2018:4). External dimensions, on the other hand, refer to an “individual’s perception of the impact of the external employment market and the importance of their qualifications and/or professions when trying to find a job” (Vargas *et al.*, 2018:4).

Both dimensions comprise factors that influence employability self-perceptions (Qenani *et al.*, 2014:202). Internal factors that significantly influence employability self-perceptions include, among others, individual knowledge and skills gained through formal education or through work experience. On the other hand, external factors that influence employability self-perceptions include the influence of a university’s reputational capital and the state of external labour market conditions (Rothwell *et al.*, 2009:205; Qenani *et al.*, 2014:205).

According to Fugate *et al.* (2004:23), internal and external dimensions are intrinsically linked to one another. This is because internal factors, such as individual experience, skills and aspirations, shape the perception of individual ability to compete in the external labour market (Rothwell *et al.*,

2009:153). On the other hand, conditions of the external labour market can influence individual aspirations, experience and skills (Rothwell *et al.*, 2009:153). For example, individuals would lack aspirations in life when labour market conditions are bad and there are no job opportunities for individuals to deploy their skills and knowledge.

This study adopted the definition of Rothwell *et al.* (2009:154), as it captures and includes the core features of self-perceived employability that the researcher aimed to examine in this study. Based on the definition, self-perceived employability involves individuals' self-perceptions of their skills, knowledge, experience and aspirations and the conditions of the external labour market to attain sustainable employment that is appropriate to individuals' qualification level.

2.2.3 Graduate employability

Hawker (2006:299) defines a graduate as a person who has successfully finished a course of study and has been awarded a university degree, which serves as an award to someone who has completed a university course and who has acquired the necessary discipline-specific knowledge, skills, attitudes and values to enter the labour market successfully (Hawker, 2006:176; Moolman, 2017:4; 9). In addition, Shivor *et al.* (2018:219) provide a simplistic and holistic view of the concept of graduate employability. These authors state that graduate employability refers to the necessary qualities that a graduate should acquire to be able to gain initial employment and maintain employment that is essential for the workplace. According to Kinash *et al.* (2015:6), the concept of graduate employability refers to graduate knowledge, skills, attributes, reflective disposition and identity (necessary qualities) that graduates need to succeed in the workforce.

Like the concepts of employability and self-perceived employability, graduate employability relies on a range of multidimensional and interrelated factors, such as the wider economic context and individuals' relationship to the labour market (Lowden *et al.*, 2011:5; Moolman, 2017:26). Internal factors include an individual's work and life, degree subject knowledge, skills and understanding, as well as attributes influencing graduate employability (Pool & Sewell, 2007:283-287). Further, internal factors are affected by external factors such as the macro-economic demand and the pattern and level of job openings in the labour market (Hillage & Pollard, 1998:3).

Although the focus of the present study was not to determine the employability of graduates but of university students instead – in particular, final-year undergraduates – the concept is defined and explained to create a common understanding of it and the context in which it is used.

From the discussion above, it is clear that the concepts of employability, self-perceived employability and graduate employability are all linked and concerned with individuals' skills,

knowledge and the ability to attain, function in and sustain a job. These concepts are particularly relevant to this study because they serve to provide an understanding of employability, particularly in the context of this study (i.e., investigating the self-perceived employability of university students). The next section presents and discusses the theoretical approaches to employability.

2.3 THEORETICAL PERSPECTIVES ON EMPLOYABILITY

Employability can be studied from four perspectives: the political perspective; the educational perspective; the human resource management perspective; and the individual perspective (see figure 2.1) (Rothwell, 2015, as cited in Vargas *et al.*, 2018:3). These perspectives are outlined and discussed in this section.

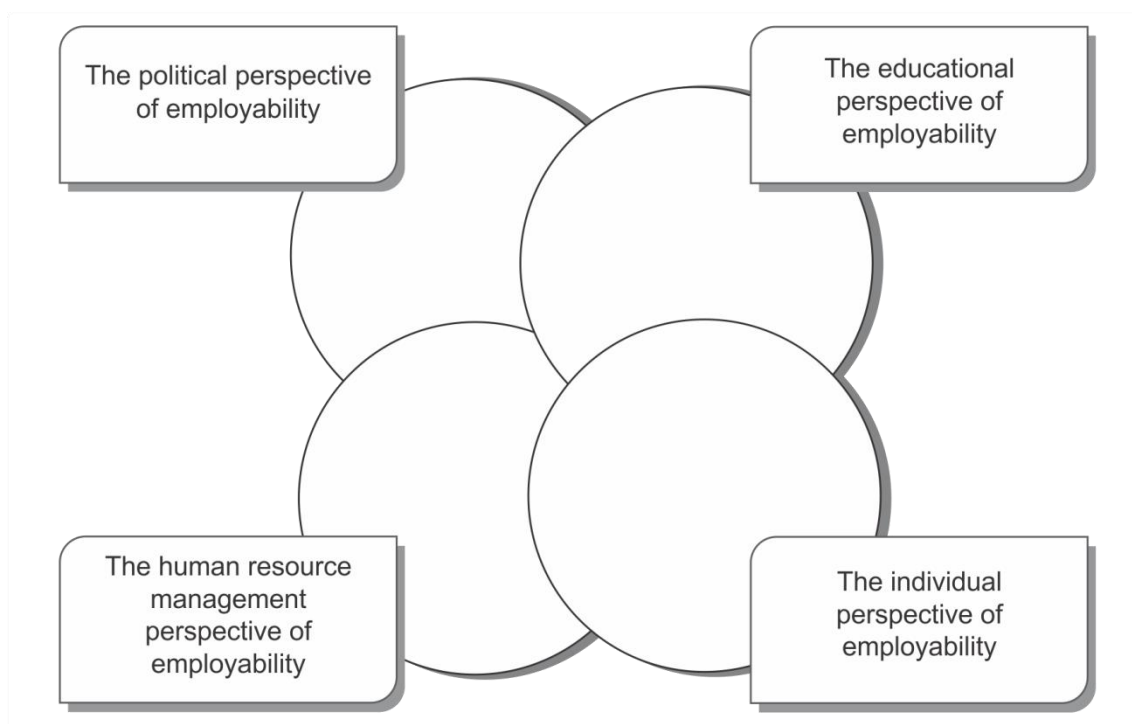


Figure 2.1: Four perspectives of employability

Source: Figure adapted by author from Rothwell (2015:338)

2.3.1 *The political perspective*

The political perspective is a framework that highlights the importance of policy initiatives in addressing matters on employability. The perspective emerged in response to concerns about the impact of rising unemployment in the Western world since the 1990s, which was characterised by declining economic growth and related to employability in public policy (Rothwell, 2015:339). As a result, and to address the encountered unemployment issues, international organisations

such as the European Union, the United Nations, the Organisation for Economic Co-operation and Development, and government departments demanded reports that should include the following: the state of the labour market; how public policy might react to changing circumstances; and how skills development could be enhanced among the working population (Rothwell, 2015:339).

Employability is not a new area in policy. According to the United Kingdom Commission for Employability and Skills (UKCES) (UKCES, 2009:1), public policy on employability has often been related to “skills development and a perceived lack of employment readiness”, especially among young people. The growing interest of employability in public policy is driven by “the changing nature of public employment policy, with increasing emphasis being given to skills-based solutions to economic competition and work-based solutions to social deprivation” (Hillage & Pollard, 1998:2). According to Hillage and Pollard (1998:1), a brief review of government initiatives on employability-related discussions suggests that employability is central to the current strategic direction of developed policies. Hillage and Pollard argue that policy orientation focuses more on a variety of factors such as the advancement and accreditation of knowledge and vocational skills; the demonstration of assets (skills, knowledge and attitudes) than their deployment; and the individual and the supply side than on employers and the demand side (i.e., labour market contextual factors). According to UKCES (2009:8), public policy aims to provide a starting point, or some new ideas, for schools, colleges, universities and employment providers who want to improve the employability of their learners.

Many good initiatives have been undertaken by policy and many are underway to improve practice and policy in developing employability skills (UKCES, 2009:8). According to Belt *et al.* (2010:19), policy development is an important feature of employability that provides a demand-led response where employers are central to policy development and implementation. This allows employability policy and programmes to promote a link between the supply and demand sides of the labour market (Belt *et al.*, 2010:19). Furthermore, it allows education providers to work with employers to ensure that the youth has a variety of education and training opportunities that will allow for employment once they leave school (UK) (Belt *et al.*, 2010:21-22).

Although employability is present within the context of the educational area, policymakers alike have increasingly sought to encourage the presence of employability in the context of a broader range of economic, social, political and cultural areas (Belt *et al.*, 2010:16). These respective areas have a significant influence on the labour market, which, in turn, affects the relevance of employability skills (Belt *et al.*, 2010:21). For example, Belt *et al.* (2010:15) indicated that social factors such as the lack of support from family and friends and having relationship problems with

work colleagues and employers can influence an individual's employability. Belt *et al.* (2010:15) further examined the unemployment culture and indicated that low qualifications often resulted in individuals being vulnerable to losing their jobs to people with higher qualifications. This leaves individuals unemployed in the long run because they lack certain skills or qualifications that make them employable enough to sustain their jobs.

The political perspective thus focuses on policy initiatives that aim to enhance individuals' employability. Such policy initiatives aim to provide general strategies for decision-makers on how to handle employability issues as they arise. The following section explores the educational perspective on employability.

2.3.2 *The educational perspective*

The educational perspective refers to the “educational context of employability, typically in higher education” (Rothwell, 2015:339). The educational perspective focuses on “graduates with bachelor's degrees and how they have fared in relation to the rapid expansion of the university sector and continuing concerns about the suitability of graduates for the world of work in an often-recessionary context” (National Committee of Inquiry Into Higher Education, 1997, as cited in Rothwell, 2015:339).

The analysis of the literature on higher education reveals that many studies on employability have defined graduate attributes that enhance employability as those expressed in the Decision learning, Opportunity awareness, Transition learning, and Self-awareness (DOTS) model; the Understanding, Skills, Efficacy Beliefs and Metacognition (USEM) model; and the Career Development Learning, Experience, Degree subject knowledge, and Generic skills and Emotional Intelligence (CareerEDGE) model of employability (Romgens *et al.*, 2019:2595; Rothwell, 2015:339). These models are regularly used to conceptualise the notion of employability in the educational context (Romgens *et al.*, 2019:2595). These models are elaborated on below.

2.3.2.1 The DOTS model

The DOTS model (see figure 2.2) was developed by Bill Law and AG Watts in 1977 to investigate high school and university career development work in the United Kingdom (and in the United States of America) (Young, 2019). The model aims to illustrate how the process of career development of individuals, specifically among students, occurs in preparing for the transition from learning to work. It is aimed at helping students to gain a realistic understanding of what is expected of them in their transition from learning to work, and it helps them acquire awareness of the coping skills they would need to make this transition successful (Law & Watts, 2003:4).

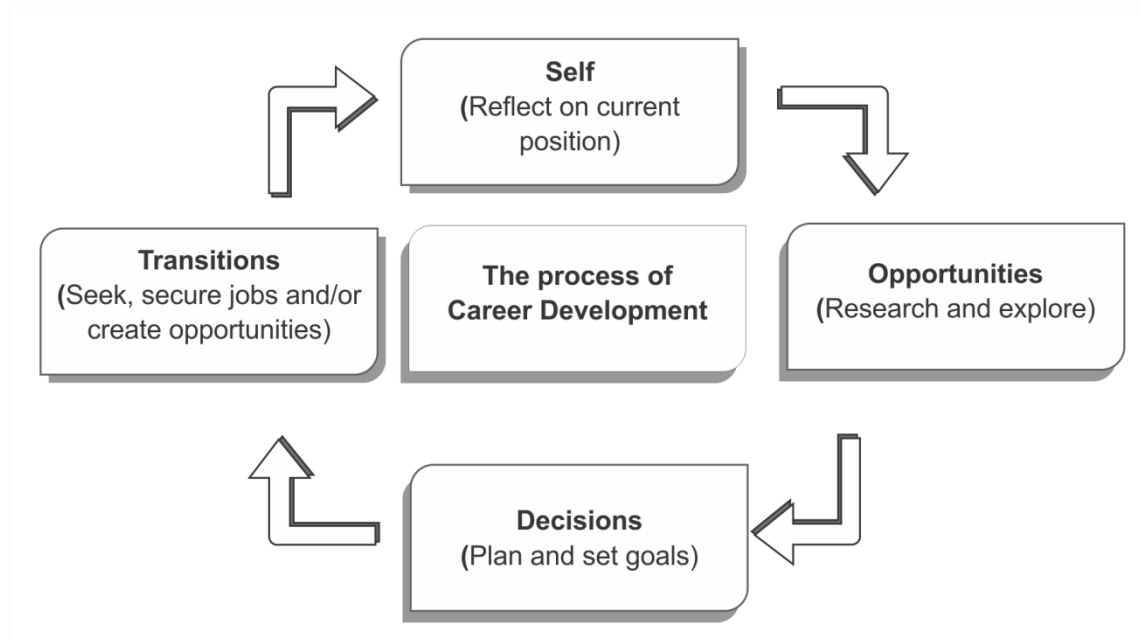


Figure 2.2: The DOTS model

Source: Law and Watts (2003:1)

According to Law (1999:38) and Pitan and Atiku (2017:3), the model focuses on career-education and career-guidance programmes and includes decision learning (i.e., being able to assess personal factors to produce a well-informed and realistic career plan); opportunity awareness (i.e., knowing about employment opportunities and their requirements); transition learning (i.e., understanding how to look for and secure opportunities; engaging in job-search and presenting oneself); and self-awareness (i.e., the ability to recognise and express personal interests, skills, abilities, values and motivations, as they affect career plans). Having these capabilities would “enable an individual to self-reflect and identify their personal strengths and vocational interests; identify suitable graduate opportunities in their chosen field; conduct effective job searches and present well in selection processes”; and, consequently, successfully develop a satisfying career (Wilton & Jackson, 2017:7).

According to Pool and Sewell (2007:279), “the value of the DOTS model lies in its simplicity, as it allows individuals to organise a great deal of the complexity of career development learning into a manageable framework”. The DOTS model is deemed a useful model that introduces students to basic concepts of career development. However, there has been much critique of the use of the DOTS model. According to Pool and Sewell (2007:279), these criticisms focused on the shortcomings of the model when it was applied beyond career education to the broader concept of employability. However, these criticisms overlook the elegant simplicity of the DOTS model in

illustrating the steps in working with someone who is preparing for the transition from learning to work.

2.3.2.2 The USEM model

The USEM model (see figure 2.3) was introduced by Yorke and Knight (2006) and has become one of the most credited and applied models of employability in several employability studies (Pool & Sewell, 2007:278-279). The model can be regarded as a useful way of thinking about how employability might be enhanced, especially amongst students. The USEM model suggests that the notion of employability is derived from competency-based training that combines skills, attributes and behaviours towards successful performance on the job and to achieve lifetime learning (Boahin, 2018:28).

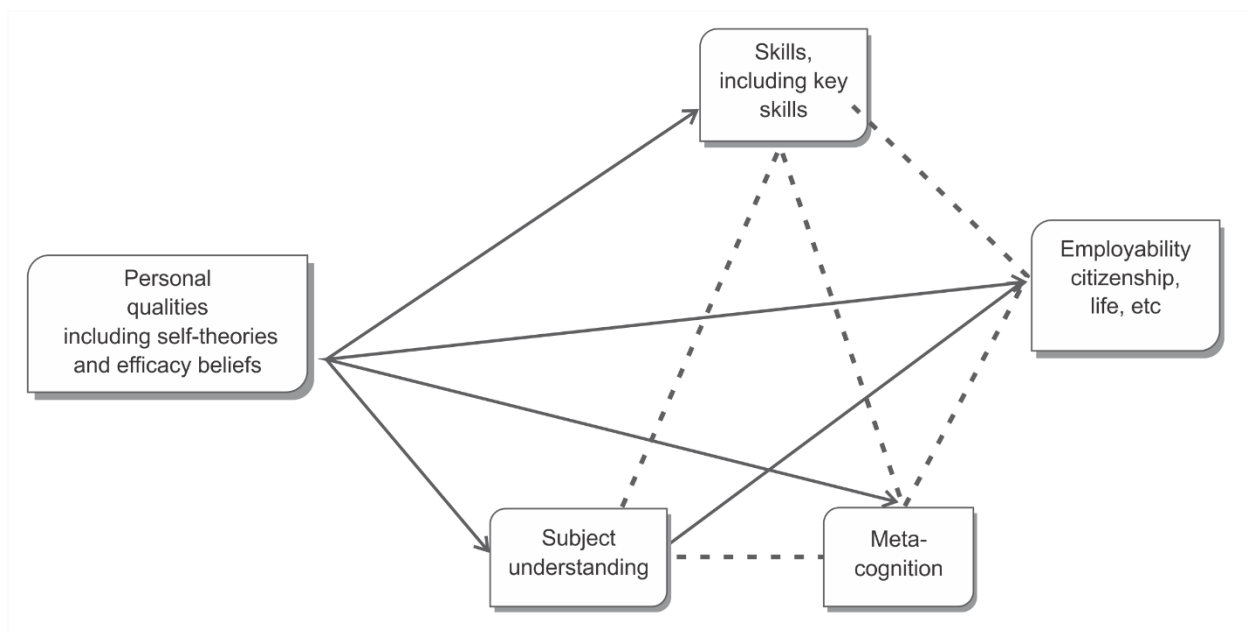


Figure 2.3: The USEM model

Source: York and Knight (2006:5)

The acronym USEM stands for four interrelated perceptions of employability: Understanding (relating to subject-specific understanding and generic skills development); Skills (pertaining to skilled practices or skilful practice and development of key skills); Efficacy beliefs (students' self-theories and personal qualities); and Metacognition (the student's self-awareness of learning and the capacity to reflect on, in and for action) (Pool & Sewell, 2007:278).

In summary, the USEM model provides “a framework for thinking about how to embed employability in the curriculum and acknowledges how the needs of students, employers and other stakeholders must be considered” (Cole & Tibby, 2013:7). It also encourages individuals to reflect on the way curricula include assessments that develop students’ efficacy and metacognition and how the assessments relate to the “development of subject knowledge and professional skills that are transferable to practice” (Cole & Tibby, 2013:7). While acknowledging the relevance and strength of the USEM model, Dacre Pool and Sewell (2007) indicated that the model has a limitation in that it is not as available to non-experts in the field (particularly students and parents) to explain exactly the meaning of employability (Cole & Tibby, 2013:7).

In the next section, the CareerEDGE model of graduate employability, which seeks to address the underlying limitations, is discussed.

2.3.2.3 The CareerEDGE employability model

The CareerEDGE model (see figure 2.4) is a framework that was developed by Dacre Pool and Sewell (2007) to overcome the limitations of the USEM model introduced by Yorke and Knight (2006). The model is a clear and practical model that allows for the multifaceted nature of employability to be explained easily and may be used as a framework when working with students to develop their employability (Tomlinson & Holmes, 2017:318).

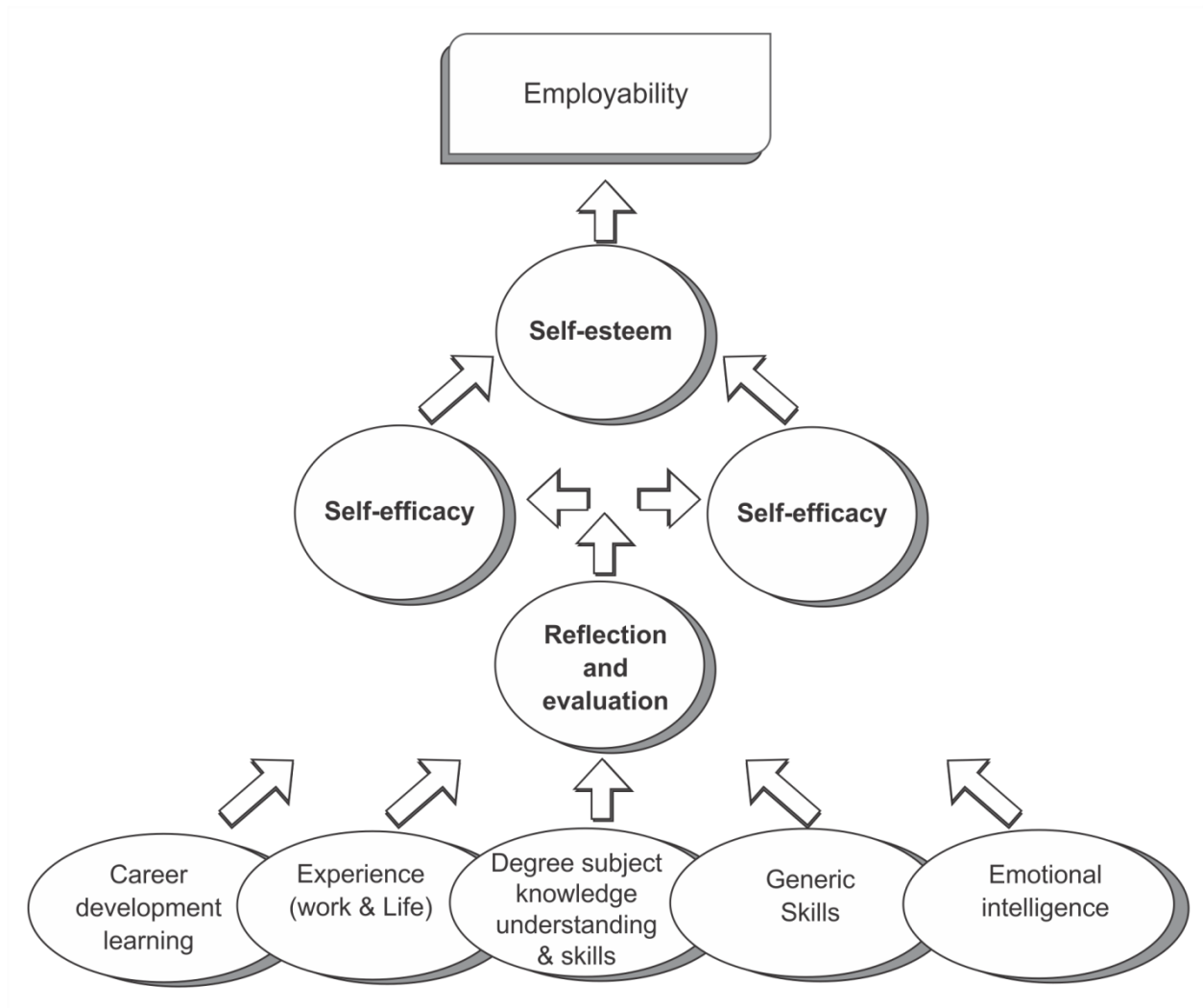


Figure 2.4: The CareerEDGE model

Source: Pool and Sewell (2007:280)

The CareerEDGE model provides a constructive summary of five compelling components that aid in promoting students employability: Career Development Learning (i.e., the knowledge, skills and experience that help and guide students with their careers); Experience (i.e., work and life experiences that enhance students' levels of employability, knowledge, attributes and skills that are attractive to prospective employers); Degree subject knowledge, understanding and skills (i.e., generic skills or key skills of employability); and Emotional intelligence (i.e., the ability to recognise our own feelings and those of others, to motivate ourselves and to adequately manage our own emotions and those of others in our relationships) (Goleman, 1998:4).

All five components are paramount and missing one component can considerably reduce students' employability. Each component is also important in its own right and these components

are integral to each other. According to Pool and Sewell (2007:281), students should be provided with opportunities to access and develop all five components on the lower tier. Pool and Sewell (2007:281) further suggest that reflecting on and evaluating these experiences would result in higher levels of self-efficacy, self-confidence and self-esteem, which are fundamental to employability.

In summary, the three models are important because they denote elements that are associated with employability development. Much value has been placed on these models because of their simplicity in enabling individuals to classify a great deal of the complexities that are encountered in career development learning into manageable frameworks (Pool & Sewell, 2007:279). However, some shortcomings were identified in the models. For example, the following still requires clarification: the basic skills that employers want, and what academic training institutions ought to deliver to graduates before they enter a particular job. Rosenberg *et al.* (2012:16) aimed to address these shortcomings by offering a triangular perspective on employability, which include the viewpoints of graduates, the faculty, and human resources managers. This perspective is discussed in the section below.

2.3.2.4 Basic employability skills needed for job performance: a triangular design approach

The triangular model (see figure 2.5) developed by Rosenberg *et al.* (2012) is an approach that aims to “examine the basic employability skills needed for job performance, the reception of these skills in college, and the need for additional training in these skills after graduation” (Rosenberg *et al.*, 2012:7). According to the authors, the model comprises three distinct groups: recent graduates; the faculty who taught them; and the human resource managers who recruit them (Rosenberg *et al.*, 2012:7).

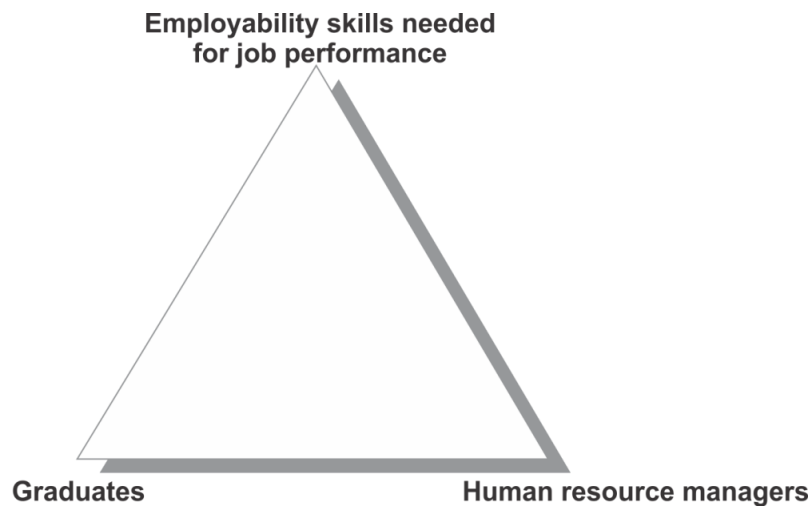


Figure 2.5: Triangular model

Source: Figure adapted by author from Rosenberg *et al.* (2012:12)

Rosenberg *et al.* (2012:7) conducted a study to investigate “the basic employability skills needed for job performance, the reception of these skills in college, and the need for additional training in these skills after graduation”. The study took place at a business school in southern California among three distinct groups: 343 recent graduates; 92 faculties who taught them (respective faculties are not provided); and 97 human resource managers who recruit the graduates (Rosenberg *et al.*, 2012:13). Thus, in total, 532 respondents participated in the survey (Rosenberg *et al.*, 2012:13).

According to Rosenberg *et al.* (2012:7), the triangular approach taken in the study was developed to validate the importance of interrelation among graduates, faculty and industry. Findings of their study indicated significant differences in opinions among the three groups regarding “the basic skills needed for job performance, the skills received by college graduates, and the additional training needed”, thus making it “imperative to strengthen the communication across these groups to ensure adequate preparation of graduates” (Rosenberg *et al.*, 2012:7).

According to Rosenberg *et al.* (2012:10), based on literature, issues pertaining to the existing gap among employers, educators and students with regard to the basic job-specific specialist skills that are required from graduates by employers have been a continual trend that is widening. For their study, Rosenberg *et al.* (2012:10), identified eight dimensions that constitute basic employability skills:

- i. critical thinking (individual ability to be creative and solve problems);
- ii. information technology (the ability to select procedures, equipment and tools to acquire and evaluate data);
- iii. interpersonal skills (the ability to work in cohesive structures such as teams);
- iv. leadership (the ability to motivate and guide others to achieve organisational goals);
- v. literacy and numeracy skills (the ability to read, write and solve problems through the use of a variety of mathematical techniques);
- vi. management skills (the ability to plan, organise, lead and coordinate tasks to meet organisational goals);
- vii. systems thinking (the ability to understand and operate within social, organisational and technological systems);
- viii. and work ethic (individuals' disposition towards work that includes punctuality and professionalism, among others) (Rosenberg *et al.*, 2012:11).

These dimensions were used to measure the basic skills required for job performance, the skills acquired by college graduates, and the additional training required for graduates among the three groups of respondents (Rosenberg *et al.*, 2012:14). The findings showed that as regards the skills required for job performance, the faculty (educators) indicated that the following skills were important: critical thinking skills; leadership skills; work ethic; interpersonal skills; numeracy and literacy; information technology; and management skills (Rosenberg *et al.*, 2012:15). Further, the students regarded the following skills as important for job performance: critical thinking skills; leadership skills; systems thinking skills; information technology; and management skills (Rosenberg *et al.*, 2012:14). The human resource managers regarded the following skills as important for job performance: critical thinking skills; interpersonal skills; literacy and numerical skills; and management skills (Rosenberg *et al.*, 2012:14).

Regarding the skills acquired by college graduates, the findings revealed that graduates believed that they acquired more leadership, work ethic, literacy and numeracy skills in college (Rosenberg *et al.*, 2012:13). Concerning additional training needed for graduates, the findings showed that the faculty regarded additional training in critical thinking skills as the most important, while human resource managers indicated that additional training in management skills was the most important

(Rosenberg *et al.*, 2012:15). However, for graduates, additional training in interpersonal skills, leadership skills, literacy and numeracy skills, management skills, and work ethic was not necessary (Rosenberg *et al.*, 2012:14). According to Rosenberg *et al.* (2012:15), the reason for this tendency might be that too little emphasis is placed on the importance of these skills in undergraduate education (Rosenberg *et al.*, 2012:15). Graduates regarded additional training in systems thinking skills as the most important among the skills listed (Rosenberg *et al.*, 2012:15).

Based on their research findings, Rosenberg *et al.* (2012:7) argued that there was a need for graduates to acquire soft skills that they could deploy in the work industry; however, due to a lack of communication regarding the necessary skills required by industry, graduates find it difficult to obtain employment (Rosenberg *et al.*, 2012:15). In addressing their findings, the authors conclusively suggested that faculties that taught graduates needed to teach graduates the “soft skills employers sought and also that employers needed to communicate what these skills were in a timely manner to faculties” (Rosenberg *et al.*, 2012:16; Rothwell, 2015:340).

In conclusion, the educational perspective focuses on enhancing the employability skills, knowledge and attributes of students to adequately prepare them for the workplace. The next section provides a discussion of the human resource management perspective on employability.

2.3.3 *The human resource management perspective*

The human resource management (HRM) perspective focuses on proactive strategies taken by employers to hire multi-skilled employees (Rothwell, 2015:338). According to Rothwell (2015:342), in developing the perspective, employability had asserted a presence in the domain of HRM because of the contemporary changing conditions of the labour market. The changing labour market conditions in the 1990s resulted in a significant decline in job security and a change in the nature of the psychological contract (Rousseau, 1995, as cited in Rothwell, 2015:342). Unlike formal employee contracts, a psychological contract refers to “an unwritten set of expectations” between the employee and employer, which includes “common ground and perceptions between the two parties” (Stevenson, 2018). In this respect, the responsibility and risk of individual careers shifted from organisations to individuals (Ekinsmyth, 1999, as cited in Rothwell, 2015:342).

Contemporary employment relationships are changing because of fundamental shifts in the nature of work; consequently, this shifts the way employment relationships are managed (Schalk & Rousseau, 2009:133). According to Rothwell (2015:342), in contemporary workplaces, responsible employers support employee skills development to enable employees to fit into

changing job roles. Hallier (2009:847) further suggests that workers continually develop their skills to maintain their attractiveness in the labour market. This approach was criticised because it suggested that only a minority of employees would benefit from such support and initiatives (Pascale, 1995, as cited in Rothwell, 2015:34). Furthermore, when employees' skills are developed, other employers might benefit from them (Hallier, 2009:851).

Despite these concerns, there are still reasonably contemporary examples of employer-led employability development strategies (Rothwell, 2015:343). Rothwell (2015) examined the works of Nauta *et al.* (2009), who suggested that developing an employability culture in Dutch health care workers could help their employing organisations adapt to change and reduce turnover intention in the workforce. From examining the work of Nauta *et al.* (2009), in response to current challenges in the labour market, Rothwell concluded that a greater career counselling orientation in HRM could be a significant change for the profession and a practical contribution to sustain employment (Rothwell, 2015:343).

In summary, the HRM perspective focuses on proactive employment strategies taken by employers to enhance employees' skills to enable them to fit into changing job roles, to assist employees to find alternative employment in the labour market, and to enable employers to hire multiskilled employees in contemporary changing conditions of the labour market. The next section elaborates on the individual perspective on employability.

2.3.4 *The individual perspective*

The individual perspective includes a body of research associated with individual perceptions of employability and how individuals perceive their current and prospective relation to employment (Rothwell, 2015:338). According to Rothwell (2015:343), most of this work developed from the fast growth of the body of literature on the changing nature of work and careers in the 1990s. Here, employability focuses on "employees' ability to cope with new job assignments and re-employment in different fields, with professional expertise and professional knowledge as variables in the research" (Rothwell, 2015:343). Three main approaches within this perspective are identified: competence-based employability, trait-based individual employability, and self-perceived employability. These approaches are discussed in the sections that follow.

2.3.4.1 Competence-based employability

Van der Heijde and Van der Heijden (2006:453) define employability as the continuous fulfilment, acquiring or creating of work through the optimal use of competencies. The concept of competence has been associated with employability by several scholars and has been

conceptualised differently across various studies in the context of higher education (Abelha *et al.*, 2020:2). According to Rothwell and Lindholm (1999:102) and Sullivan and McIntosh (1996:95), the concept of competence refers to individual skills that are performed to a specific standard under specific conditions, such as organisational performance, organisational long-term strategising and employee needs for professional growth. De Vos *et al.* (2011:445) and Römgens *et al.* (2019:2) claim that competence involves individual knowledge, skills and attitudes that contribute to effective performance in the labour market. According to Suarta *et al.* (2017:337), for employers, it is important that individuals possess competency skills and attributes that would be beneficial for their organisations, such as willingness to learn; having a positive attitude; being motivated; having good communication skills; and the ability to work independently.

Van der Heijde and Van der Heijden (2006:453) state that the competence-based approach to employability comprises the following key elements:

- Employability is important for both career and firm outcomes. It is necessary to enable workers to function, cope with and accommodate fast-changing job requirements in volatile and competitive labour markets (Van der Heijde & Van der Heijden, 2006:449).
- Employability is important for both present and long-term performance (implying the process of adaptation and learning) on the job. In this respect, employability is considered as both a product (a set of skills that “enables”) and a process that “empowers” an individual to acquire and improve marketable skills that can lead to gainful employment (Pologeorgis, 2021).
- Employability may include personal aspects such as personality, attitudes, motivation and ability. These aspects are important in the competence-based approach because they direct people towards specific goals (learning orientation vs. performance orientation), resulting in adaptive or maladaptive behaviour patterns (Van der Heijde & Van der Heijden, 2006:453).
- Employability represents the combination of specific and more generic competence. This entails that employability is dependent on a set of demonstrable characteristics and skills that complement occupational expertise and performance (Van der Heijde & Van der Heijden, 2006:449).

Di Fabio (2014:98) claims that the unstable labour market in the 21st century, which is characterised by rapid economic changes, has led to a demand for entrepreneurs in workplaces. According to Hayes (2021), entrepreneurs are individuals who create new businesses, bearing most of the risks and enjoying most of the rewards. They are regarded as innovators who play a

key role in any economy, using the skills and initiative necessary to anticipate needs and bring good new ideas to the market (Hayes, 2021). Hayes (2021) further indicates that entrepreneurship is the process of establishing or setting up a business. The concept is closely associated with competency because it includes the development of skills to grow a business together with the personal competencies to make it a success (Cooney, 2012:5).

De Vos *et al.* (2011) undertook exploratory research on competency development and career success; they examined employees in large financial services organisations. Their research provided insight into how competency development could contribute to individual employability and career success. The results of the study showed that competency development contributes to career success (De Vos *et al.*, 2011:438). Furthermore, competency development initiatives as well as perceived support for competency development were positively associated with workers' perceptions of employability. In addition, the results revealed that self-perceived employability appeared to be positively related to career satisfaction and perceived marketability (De Vos *et al.*, 2011:438). The authors found that competency development is an essential element that contributes to individual employability and self-perceived employability. Moreover, competency development opens career opportunities for individuals because they possess certain skills and attributes that would allow them to be confident and satisfied in their work (De Vos *et al.*, 2011:444-445).

In summary, the competence-based approach centres on individual ability or capability and focuses on the individual skills and attributes that contribute to one's professional growth and competent work performance. Following this discussion on the competence-based approach is a discussion on the trait-based approach of individual employability.

2.3.4.2 The trait-based individual employability approach

The trait-based (also known as the dispositional) employability approach is a career meta-competency framework that focuses on the proactive attitudes that are adopted by individuals when seeking to create and realise job opportunities (Fugate & Kinicki, 2008:505). It centres on the relationship between (self-perceived) employability and individual traits, which are vital resources in sustaining employability (Aziz & Pangil, 2017:134). According to Diener *et al.* (2019:1), individual/personality traits are underlying characteristics that reflect people's patterns of thoughts, feelings and behaviours. They imply the consistency and stability in individual behaviours related to individual traits across various situations (Diener *et al.*, 2019:1). These traits include, among others, extraversion, openness, agreeableness, conscientiousness and neuroticism (Diener *et al.*, 2019:1). Personality traits play an important role in life, especially in

education and careers because of how they influence an individual's personality development, cognitions, motivations, and behaviours in various situations (Yunus *et al.*, 2018:1032-1033).

Literature indicates that the following five dimensions are deemed critical and representative of the active and adaptable nature of dispositional employability: openness to change at work; work and career resilience; work and career proactivity; career motivation; and work identity (Fugate & Kinicki, 2008:509). The five dimensions of personality and core self-evaluation are reflected in figure 2.6.

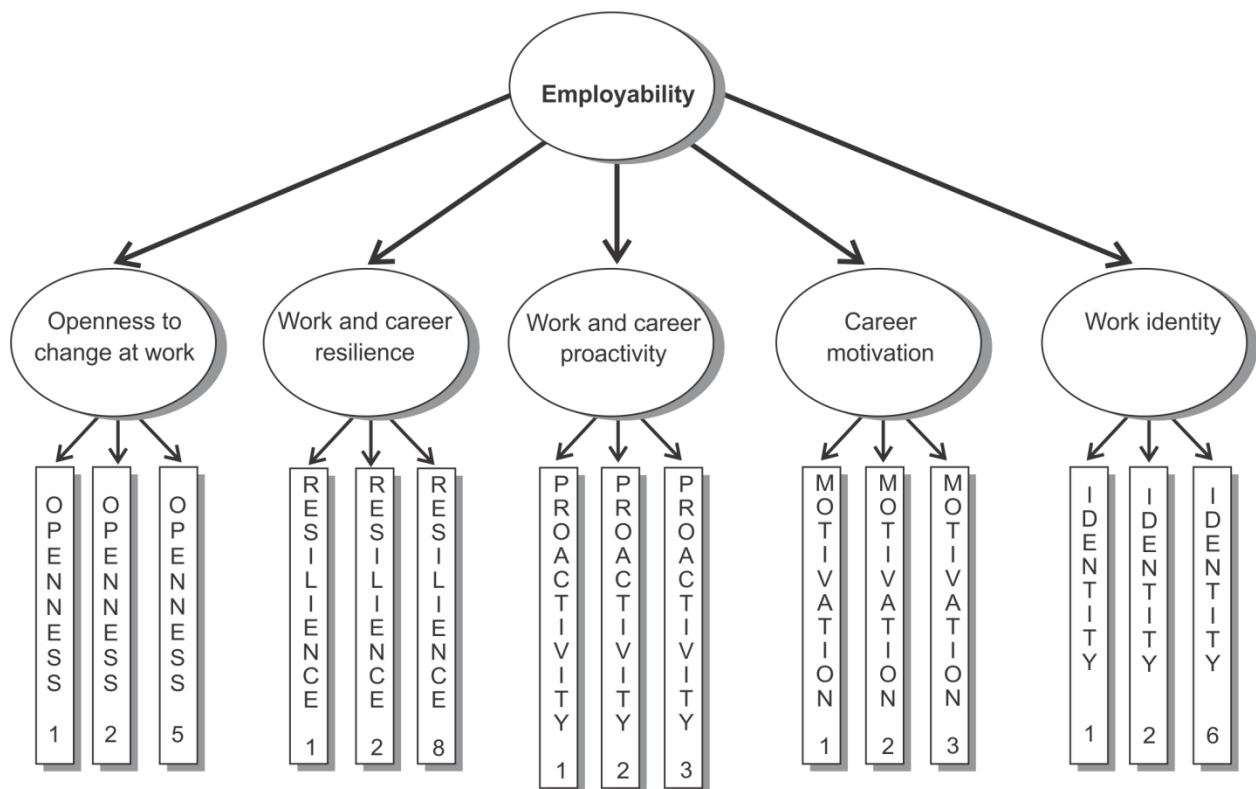


Figure 2.6: Five dimensions of dispositional employability

Source: Fugate and Kinicki (2008:507)

The first dimension, *openness to change at work*, refers to people who are open to new experiences and changes in work and are adaptable to dynamic work requirements, making them ultimately more employable (Fugate & Kinicki, 2008:507). The second dimension, *work and career resilience*, refers to the attributes of resilient individuals. Resilient individuals might have a combination of the following attributes: they are generally optimistic about their career opportunities; and/or they feel in control of the destiny of their careers; and/or they feel that they are able to make valuable contributions at work (Fugate & Kinicki, 2008:527). These attributes

enable individuals to perceive numerous opportunities in the workplace and view career changes as challenges and opportunities to learn (Carver & Scheier, 1994, as cited in Fugate & Kinicki, 2008:507). The third dimension, *work and career proactivity*, facilitates identification and realisation of occupational opportunities. Employable individuals often “seek information of varying specificity that is relevant to their personal job and career interests” both within and outside their current employer (Fugate & Kinicki, 2008:507). The fourth dimension, *work/career motivation*, pertains to self-regulatory strategies used by individuals during goal-striving (Kanfer & Heggstad, 1997:39). Self-regulatory strategies refer to integral patterns of response to difficulties or anticipated difficulties in goal-directed action (Kanfer & Heggstad, 1997:39). Individuals with career motivation tend to make specific career plans; they take control of their own career management and set work or career-related goals (Fugate & Kinicki, 2008:527). According to Kanfer and Heggstad (1997:39), in accomplishing goals, individuals must possess motivational skills, which are strategies that elicit the desired behaviour for goal attainment. However, dissimilarity in motivational traits/skills influences individual differences in motivational skills by differentially affording individual opportunities for skills development (Kanfer & Heggstad, 1997:43). For example, people with higher motivational traits are more likely to approach challenging situations compared to individuals with lower motivational skills who are more likely to avoid challenging situations (Kanfer & Heggstad, 1997:43). As such, Fugate and Kinicki (2008:508) propose that “career motivation is a critical determinant of continuous learning and dispositional employability”. The fifth dimension, *work identity*, refers to one's self-definition in the career context. “Work identity reflects the degree to which individuals define themselves in terms of a particular organisation, job, profession, or industry” (Fugate & Kinicki, 2008:527). According to Fugate and Kinicki (2008:505), “career identities direct, regulate and sustain behaviour. The absence of well-prescribed career tracks in today's environment requires individuals to manage their often boundaryless careers”. Work identity replaces institutionalised career structures with individualised psychological structures such as “motivation, direction and purpose for career-related endeavours” (Fugate & Kinicki, 2008:508).

In summary, the trait-based (dispositional) employability approach focuses on identifying the individual traits that enable a person to sustain employment and cope in the labour market. Next, the self-perceived employability approach – which is the main approach that was employed in this study to understand and analyse the self-perceived employability of final-year undergraduate students at a South African university – is elaborated on.

2.3.4.3 The self-perceived employability approach

Employability concerns the extent to which people possess the skills and attributes to find and stay in a desired job or occupation (Rothwell & Arnold, 2007:23). According to Rothwell and Arnold (2007:25-26), self-perceived employability is an assessment of one's capacity to navigate the world of work in the future. The approach is thus a subjective evaluation that evokes differences in people's perceptions of employability based on "their knowledge of the labour market, access to networks, or their motivation to participate in employability enhancing activities" (Vanhercke *et al.*, 2014:595).

The self-perceived employability approach is a comprehensive approach that is keenly focused on personal and structural factors of employability (Vargas *et al.*, 2018:4). According to Vanhercke *et al.* (2014:595), personal factors refers to individual factors, such as individual skills, abilities and behaviour, whereas structural factors involve external dimensions, such as the economic climate (e.g., total number of available jobs) and human capital (e.g., access networks) (Vanhercke *et al.*, 2014:601).

As highlighted above, the self-perceived employability approach concerns "one's capacity to navigate the world of work in the future" (Rothwell & Arnold, 2007:26). This attests to the idea that perceived employability is important in the phases of "exploration of the labour market, consolidation and maintenance of an individual's current employment and in making transitions in the workplace" (Vanhercke *et al.*, 2014:595). The approach also concerns individual perceptions on their employment possibilities, be it with the current employer (i.e., in the internal labour market) or with another employer (i.e., in the external labour market) (Vanhercke *et al.*, 2014:595). According to Vanhercke *et al.* (2014:595), "this distinction relates to perceived internal employability and perceived external employability, respectively".

According to Vargas *et al.* (2018:4), the self-perceived employability approach focuses on two related components: internal dimensions (individual abilities and willingness) and external dimensions (labour market conditions) of employability. Internal employability relates to individual perceptions of one's skills and capacities for finding a job; external employability relates to individual perceptions of the external employment market and the importance of one's profession or qualification when trying to obtain employment (Vargas *et al.*, 2018:4).

Therefore, the self-perceived employability approach is a self-report measure that expresses self-awareness, self-belief and opportunity awareness, which are essential components of employability (Turner, 2014), and can be defined as individuals' perception of their possibilities of

obtaining and maintaining employment (Vanhercke *et al.*, 2014:594). The next section explores Bourdieu's concepts of habitus and capital and their implications for employability.

2.4 BOURDIEU'S CONCEPTS OF FIELD, CAPITAL AND HABITUS AND THEIR IMPLICATIONS FOR EMPLOYABILITY

Employability research has long been, and still is, criticised for being overly agentic (Delva *et al.*, 2021:1). This is because scholars have viewed employability as a personal asset tied to the individual (Delva *et al.*, 2021:1). Definitions provided by scholars, such as Delva *et al.* (2021:2), Hillage and Pollard (1998:2) and Rothwell and Arnold (2007:24), highlight three key elements of the concept of employability. First, at the core of the definition is the individual actor who is regarded as the entity that is employable (Delva *et al.*, 2021:2; Hillage & Pollard, 1998:2; Rothwell & Arnold, 2007:24). Second, this individual actor is embedded in a context (structure) – that is, the internal and/or external labour market (Delva *et al.*, 2021:2; Hillage & Pollard, 1998:2; Rothwell & Arnold, 2007:24). A third crucial term in the definition is potential, which comprises both agency and structure (Delva *et al.*, 2021:2; Hillage & Pollard, 1998:2; Rothwell & Arnold, 2007:24). The purpose of this section is to introduce the agency–structure dichotomy in the context of employability and to connect it to Bourdieu's theory of practice and related concepts of field, capital and habitus.

2.4.1 *The agency–structure dichotomy*

The classical sociological emphasis on the interplay between agency and structure has been a topic of interest in recent employability studies. Agency is regarded as the “individual's capacity to actively and independently make choices, decision and plan”, and structure is viewed as “a mechanism, system or institution which regularises or routinises a pattern of events” (Stewart & Zaiman, 2020:ix). Agency and structure, according to Giddens (1984: 9, 17), refer to an agent's capability of doing things as well as the structuring properties or rules and resources that allow the “binding” of time–space in social systems. According to Watson (2017:277), successful sociology considers “the interplay between individual characteristics and initiatives, on the one hand, and, structural factors and contingencies, on the other”. Watson (2017:277) argues that much emphasis has been placed on free choice that people have regarding the work they enter. The author emphasises that “for many individuals, entry to work is a matter of fitting oneself into whatever jobs are available in the labour market given the qualifications one's class and educational background has enabled them to attain” (Watson, 2017:277).

2.4.1.1 Agency in employability research

Agency is central to contemporary employability literature and is frequently understood in three related assumptions: first, employability is a personal asset; second, the individual is the primary agent in the employment relationship; and finally, personal agency in employability-related matters produces positive outcomes (Forrier *et al.*, 2018:512). These assumptions are authoritative, according to Forrier *et al.* (2018:518), as they seem to be grounded in theoretical insights from human capital theory (HCT), conservation of resources theory (COR), and social exchange theory (SET). These respective theories are used in employability studies mostly to support agentic ideas.

According to Forrier *et al.* (2018:517), human capital theory focuses on the differences in individuals' human capital and explains inequality in labour market outcomes. It describes an individual's educational attainment, knowledge, experience and skills that allow them to typically pursue and occupy good job positions in the labour market (Munichiello, 2021). The COR theory, on the other hand, is a stress theory that describes the motivation that drives humans to maintain and seek new resources (Hobfoll *et al.*, 2018:104). The theory explains human behaviour by emphasising people's evolutionary need to acquire, retain, foster, and conserve resources critical to their survival, such as interpersonal, material and work-related resources, in the face of imminent loss and failure to obtain these essential resources (Hobfoll *et al.*, 2018:104). On the other hand, social exchange theory proposes that social behaviour is the result of an exchange process centred on maximising benefits and minimising costs (Cherry, 2022a). According to the theory, when the potential risks outweigh the potential rewards, people terminate or abandon social relationships (Cherry, 2022a).

According to Forrier *et al.* (2018:512-513), agentic assumptions may be valid only for individuals who are highly employable, act as free agents and have control over their employability development. Delva *et al.* (2018:2) differentiate assumptions based on whether they view potential as input-based (which looks at personal strengths such as competence, skills and attitudes that increase an individual's employment potential) or outcome-based (which looks at indicators of employment potential, mostly in the form of the individual's self-perception of available employment opportunities). Therefore, employability, according to Delva *et al.* (2021:2) and Vanhercke *et al.* (2014:593), is a personal asset that is centred on the individual level of analysis but can be influenced by external structuring factors such as the labour market.

2.4.1.2 Structure in employability research

According to Tholen (2015:772), employability is structured by opportunities and inequalities within a structural context. Social structures, like organisations and social institutions, are causally effective structural systems that have direct power over individuals' actions (Tholen, 2015:776). Examples of structural elements include overall economic conditions (Reeskens & Oorschot, 2012:387), labour market demands and labour market policies (Reeskens & Oorschot, 2012:380). Tholen (2015:772, 774) argues that employability is not purely an individual phenomenon but a socially constructed process of finding the match between one's "labour-market persona" (skills, abilities, interests, experiences and choices) and the right opportunity in the labour market.

In the case of employability, neither structures nor agents act independently of their structural context (Tholen, 2015:775-776). Rather, employability offers a holistic perspective that integrates agency and structure (Vanhercke, 2014:599). Anthony Giddens coined the term *structuration* in 1984 to describe a synthesis of structure and agency effects known as *the duality of structure* (Gibbs, 2017; Giddens, 1979:66). Notably, Giddens' structuration theory takes the position that "social structures have no inherent stability outside of human action because they are socially constructed". According to Morrison (2005:314) and Tholen (2013:766), Giddens' structuration theory is explainable through Bourdieu's holistic theory of practice. Both theoretical perspectives emphasise the importance of understanding the duality of structure in social spaces. The next section elaborates on Pierre Bourdieu's theory of practice to explain the integration between agency and structure to understand and account for social life.

2.4.2 ***Bourdieu's theory of practice: field, capital and habitus***

Pierre Bourdieu is one of the most prominent social theorists in social science who is best known for his practice theory as well as the associated concepts of field, capital and habitus. At the core of Bourdieusian theory is "the idea that integrating agency and structure is necessary to understand and account for social life" (Bourdieu, 1977, as cited in Delva *et al.*, 2021:3). According to Delva *et al.* (2021:3) and Tatli *et al.* (2014:616), Bourdieusian theorisation follows a relational perspective on reality, which can be best defined as an approach that frames and studies social phenomena as dynamically evolving, gaining meaning and shape in a web of complex relationships in their situated context (Kyriakidou & Özbilgin, 2006:247; Tatli *et al.*, 2014:615). Pierre Bourdieu's concepts of **field**, **capital** and **habitus** are at the core of Bourdieu's relational perspective and were thus incorporated into this study.

Bourdieu's concept of field refers to a collection of goals and historical relationships between individuals, groups and institutions (social structures) (Riley, 2017:111). In his theorisation, Bourdieu thinks of society as a complex arrangement of many fields, such as the economic field, the artistic field, the religious field, the legal field, and the political field (Van Maanen, 2009:655). Field can be regarded as social spaces of action and competition, and they consist of a network of positions of and for agents within the field (Musofer & Lingard, 2020:387). Positions, according to Delva *et al.* (2021:3) and Husu (2013:266), not only refer to, but are determined by, an agent's distribution and possession of capital. It describes the way actors navigate the field by utilising the resources (capital) at their disposal (Delva *et al.*, 2021:3).

Capital refers to resources (Riley, 2017:110). Bourdieu identified four main forms of capital that are unequally distributed among actors: economic, cultural, social and symbolic capital (Bourdieu, 1986:16). According to Delva *et al.* (2021:3), *economic capital* refers to income and other financial resources and assets, such as wages or property (e.g., houses, cars, computers, internet access, among others). *Cultural capital*, which, in certain conditions, is convertible into economic capital, entails the knowledge and skills of the actor and comes in three forms: embodied, objectified and institutionalised (Bourdieu, 1986:17; Delva *et al.* 2021:3; Suminar, 2013:203). According to Delva *et al.* (2021:3) and Suminar (2013:203), embodied/incorporated cultural capital refers to mental and physical dispositions such as competencies and skills. Institutionalised cultural capital appears in the form of academic titles and degrees (Bourdieu, 1986:17; Delva *et al.*, 2021:3; Suminar, 2013:203). Objectified cultural capital entails cultural products such as pictures, dictionaries, books or art (Bourdieu, 1986:17; Delva *et al.*, 2021:3; Suminar, 2013:203). *Social capital*, which includes social networks and relationships (e.g., a family or a nation, an association or a political party), refers to the network to which an actor has access (Delva *et al.*, 2021:3). *Symbolic capital* is field-specific: it reflects how capitals are perceived within the social structure (Delva *et al.*, 2021:3; Suminar, 2013:203). Symbolic capital is a synthesis of the other three capitals (economic, cultural, and social) that are socially recognised, legitimate and more valuable than the other three in a particular field of endeavour (Bourdieu, 1986:18; Delva *et al.*, 2021:3). Symbolic capital is never complete; it is constantly generated, reproduced and occasionally transformed by actors, and it is contingent on actual social interaction or relationship practices (Bourdieu, 1986:27; Suminar, 2013:204). Beyond field and capital, Delva *et al.* (2021:3) and Suminar (2013:204) suggest that habitus affects the way actors navigate their fields.

"Habitus" is a collection of dispositions, trajectories, values and social rules that guide an individual actor's thoughts, perceptions and actions (Delva *et al.*, 2016:3). The concept ("habitus") is a social, historical and collective construct that includes a person's ingrained abilities, habits

and dispositions (Sapiro, 2015:484). Since the sixth century, when the concept first appeared in scholastic philosophy in Boece's translation of Aristotle's "hexis", which denoted the positive dimension of "the habit", the concept habitus has been extensively discussed by a diverse range of researchers in philosophy, phenomenology and sociology (Sapiro, 2015:484). This concept first appeared in European thought through the work of Hegel, Weber, Mauss and Elias, who all examined whether religious groups, social groups and national groups had their own distinct habitus (Sapiro, 2015:485). In the 1960s, Bourdieu reworked the concept of habitus with the express purpose of developing a dispositional theory of action capable of reintroducing time and agents' inventive capacity into structuralist anthropology (Wacquant, 2016:64). Bourdieu, according to Sapiro (2015:485), used the concept of habitus to analyse the sociological problem of agency and structure, particularly in the context of class. Delva *et al.* (2021:3) claim that habitus is shaped by a field's internalisation through field experiences. According to Wacquant (2014:3), habitus is classified into two types: primary and secondary. The primary (generic) habitus is a collection of dispositions that individuals acquire during their early childhood, gradually and imperceptibly, through their primary socialisation (family group). The secondary (specific) habitus is a collection of dispositions that an individual acquires as a result of their social environment and the fields that they enter (school, university, and life experience) (Asimaki & Koustourakis, 2014:126).

According to Bourdieu (1996:235) and Suminar (2013:204), habitus provides individual actors with a structured space of possibilities consisting of an ordered system and an identifiable network of relationships that impact on the habitus of individuals. The notion of habitus explains that the way an individual actor perceives, navigates and competes in the field "is not merely the result of purely subjective intention nor of external structures – it is shaped by the individual actor's history, experiences and trajectory in that field" (Bourdieu & Wacquant, 1992, as cited in Delva *et al.*, 2021:4).

Therefore, Bourdieu's theory of practice encapsulates and provides an understanding of what occurs when diverse individuals interact in a social setting. His theories describe how social beings (agents) shape and transform the world in which they live (field) through their varied motivations and intentions (which shape their perceptions in the field). Field, according to Bourdieu, is composed of a network of positions that assist agents in competing in and navigating the field by utilising resources referred to as capital, which can take a variety of forms (cultural, economic, social, and symbolic). In these fields of action, social structure interacts dynamically with human agency, thereby forming and shaping one's habitus.

2.4.3 *Understanding employability through Bourdieu's practice theory*

Employability is formed by the “relationship between the individual actor and their field” (Delva *et al.*, 2021:4). Delva *et al.* (2021:4) argue that employability is contextualised in four ways: (1) through symbolic capital; (2) through the do's and don'ts of the field – this is what Bourdieu would refer to as the field's doxa (Delva *et al.*, 2021:4); and (3) through the way an actor conceives employment opportunities as a function of the “space of possibles” embedded in their habitus. In addition, (4) the actor is not only embedded in and shaped by a field; the field and its rules are also shaped by the individual and collective actors who occupy it (Delva *et al.*, 2021:4). This is explained further below.

First, capital varies according to its form (Delva *et al.*, 2021:4). This is due to the disparities in the value placed on various labour market segments that influence an individual's employability (Bowman *et al.*, 2017:465). Delva *et al.* (2021:4) mentioned that movement capital may differ in the following ways: it may be non-generic; it may be difficult to transfer to other fields; it diminishes with context; and one form may be important in one field but detrimental in another. As Delva *et al.* (2021:4) assert, employability goes beyond acquiring capital and involves having capital that is considered symbolic within a field.

Second, field has field-specific doxa that dictate what is and is not acceptable in search of employment opportunities, and these can significantly support, or even contradict, one another across fields (Delva *et al.*, 2021:4). According to Delva *et al.* (2021:4), employability does not simply entail doing what is required within a particular field, but also involves acting in accordance with the doxa within that field. Employability, in this regard, necessitates the development of a habitus compatible with the field's doxa (Delva *et al.*, 2021:4). Actors require a sense of “how” to realise possibilities in a field, as they retain considerable leeway in what they do (Delva *et al.*, 2021:4).

Third, the “space of possibles”, according to Bourdieu (1996:234) and Delva *et al.* (2021:4), refers to a set of all possible positions that are available for occupation at any given time or place. Delva *et al.* (2021:4) argue that the “space of possibles” in relation to employability entails employment opportunities conceived by individual actors that are influenced by their experiences in and with a context.

Lastly, employability is always contextual, and it gets its significance through the relationships of actors in a given field. According to Delva *et al.* (2021:5), “the field in which the actor pursues employment opportunities is produced and changed by the actors that make up that field”. Delva

et al. (2021:5) argue that the context in which actors are embedded “shapes what is needed and legitimate in terms of employability and what kind of opportunities individual actors can expect”. “At the same time, individual and collective actors shape the context and its rules” (Delva *et al.*, 2021:5). Delva *et al.* (2021:5) argue that this emphasises “the importance of integrating agency and structure in understanding employability”, given that social actors’ improvised and contingent practices reflexively produce and reproduce their social life.

In conclusion, Bourdieu’s theory elucidates how an actor’s capacity to acquire additional capital and positions via field practice affects their employability. The labour market should be regarded as the main field of action and competition that the respondents (final-year undergraduate students) are looking to enter and compete within to improve their field positions via their actions and increased capital mobilisation and acquisition. The labour market as a field is defined by a space that exemplifies competition and power dynamics because of available resources (capital) which maintain and signal to other actors in the field an actor’s social position – a process Bourdieu refers to as position-taking (Bourdieu & Wacquant, 1992:99).

Therefore, in this study, it is pointed out that the labour market (structure) is the primary field of action and competition in which actors (final-year undergraduate students) participate and compete. Habitus is crucial because it directs and influences position-taking and provides actors with their initial capital volumes (Sontange, 2018:91). The embedded habitus (various backgrounds) of students determine their agentic capabilities/actions in the labour market field where other graduate students compete. As a result, when students navigate the field, their embedded habitus (which includes their initial capital and field position) determines which practices they can engage in within the field as well as the extent to which they can compete with other members. Furthermore, as students navigate and compete in the field, their habitus determines their initial and achievable field positions. Therefore, rather than strict rules dictating practices, habitus acts as a flexible guideline that can be changed under unforeseen circumstances or over time.

Next, the models and measures developed for self-perceived employability by Rothwell and colleagues are described.

2.5 SELF-PERCEIVED EMPLOYABILITY MODELS

This section discusses the self-perceived employability models and instruments developed by Rothwell and associates. First, the model and instrument developed for occupational groups are elaborated on, followed by the model and instrument developed for university students.

2.5.1 *The self-perceived employability model and measurement instrument for occupational samples*

Rothwell and Arnold (2007) developed an instrument (questionnaire) to measure individuals' self-perceived employability among occupational samples. The authors developed the instrument due to the lack of a satisfactory ready-to-use scale and a desire to measure the self-perceived employability of individuals (Rothwell & Arnold, 2007:27). The authors adopted an all-embracing view of employability that included labour market variables and individual capability. The measurement instrument was based on a quadrant-type theoretical model that included the following dimensions: personal attributes; occupational attributes; and internal as well as external labour markets (see figure 2.7). Thus, the theoretical model collectively reflected the employability within and outside a person's current organisation based on personal and occupational attributes (Rothwell & Arnold, 2007:23). Emphasis was placed on what people believe their employment options are, thus comprising an individual focus (Rothwell & Arnold, 2007:24).

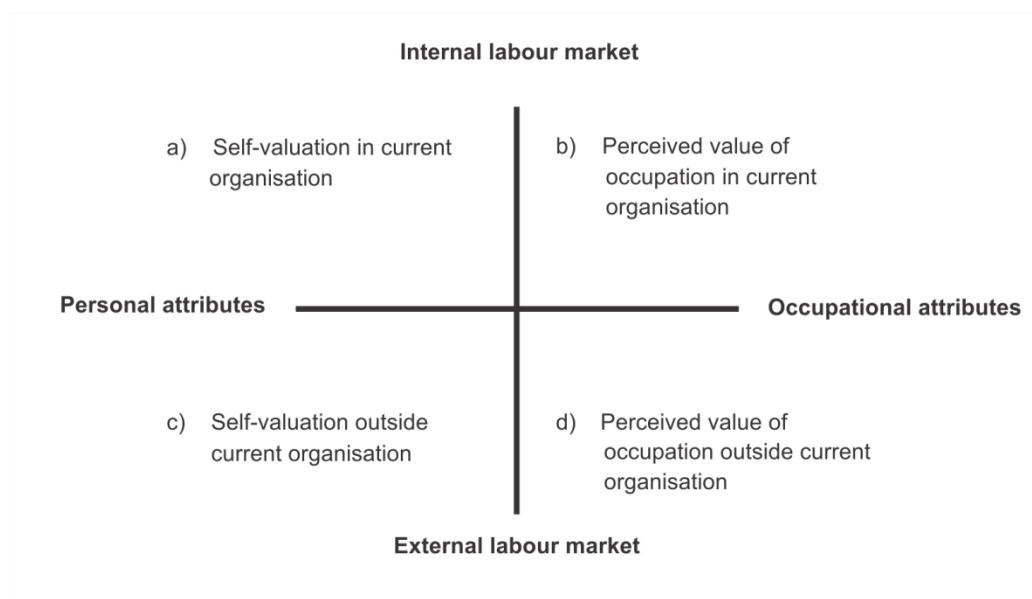


Figure 2.7: Theoretical model of self-perceived employability for occupational samples

Source: Rothwell and Arnold (2007:27)

According to Rothwell and Arnold (2007:27), the four quadrants are interrelated. Quadrant “a” represents individuals' self-perceptions of their own value to their employing organisation. This means the value they believe the organisation places on them as individuals. Quadrant “b” reflects how the organisation values individuals' occupation or occupational group in the internal labour market. Quadrant “c” relates to individuals' self-perception of their worth (based more on their

personal skills than features of their occupation) in the external labour market, and quadrant “d” relates to self-perceptions of the external labour market’s valuation of people with the individual’s occupational experience.

The self-perceived employability instrument consisted of 16 items measuring individual self-perceived employability, based on the model discussed above (Rothwell & Arnold, 2007:23).

Table 2.1: Self-perceived employability scale items

(1)	I have good prospects in this organisation because my employer values my personal contribution.
(2)	Even if there was downsizing in this organisation, I am confident that I would be retained.
(3)	My personal networks in this organisation help me in my career.
(4)	I am aware of the opportunities arising in this organisation even if they are different to what I do now.
(5)	The skills I have gained in my present job are transferable to other occupations outside this organisation.
(6)	I could easily retrain to make myself more employable elsewhere.
(7)	I can use my professional networks and business contacts to develop my career.
(8)	I have a good knowledge of opportunities for me outside of this organisation even if they are quite different to what I do now.
(9)	Among the people who do the same job as me, I am well respected in this organisation.
(10)	People who do the same job as me who work in this organisation are valued highly.
(11)	If I needed to, I could easily get another job like mine in a similar organisation.
(12)	People who do a job like mine in organisations similar to the one I presently work in are really in demand by other organisations.
(13)	I could easily get a similar job to mine in almost any organisation.
(14)	Anyone with my level of skills and knowledge, and similar job and organisational experience, will be highly sought after by employers.
(15)	I could get any job, anywhere, so long as my skills and experience were reasonably relevant.
(16)	People with my kind of job-related experience are very highly valued in their organisation and outside whatever sort of organisation they have previously worked in.
Internal employability is reflected by items: Q1-4; Q9 and Q10 (6 Items)	
External employability is reflected by items: Q5-8 and Q11-16 (10 Items)	

Source: Rothwell and Arnold (2007:41)

According to Rothwell and Arnold (2007:28), the items in the questionnaire were presented to respondents in the order shown in table 2.1 to reflect the quadrants presented in figure 2.7. Items 1–4 of the questionnaire reflected quadrant “a”, items 5–8 reflected quadrant “c”, items 9 and 10 reflected quadrant “b”, whilst items 11–16 reflected quadrant “d” (Rothwell & Arnold, 2007:28). According to Rothwell and Arnold (2007:28), six out of the 16 items reflected internal dimensions of self-perceived employability, whilst 10 out of the 16 items reflected external dimensions of self-perceived employability (see table 2.1).

In addition to the scale, the authors employed two established instruments developed by Greenhaus *et al.* (1990), Nabi (1999) and Tsui *et al.* (1997) which measured subjective career success (8 items; see table 2.2) as well as professional commitment (8 items; see table 2.3). In

employing these measures in their study, Rothwell and Arnold wanted to examine the extent to which self-perceived employability was distinguishable from self-perceived career success and self-perceived professional commitment (Rothwell & Arnold, 2007:26). The items of the respective measurement instruments are presented in tables 2.2 and 2.3 below.

Table 2.2: Subjective career success scale items

(1)	I am in a position to do mostly work which I really like.
(2)	My job title is indicative of my progress and my responsibility in the organisation.
(3)	I am pleased with the promotions I have received so far.
(4)	I am satisfied with the success I have achieved in my career.
(5)	I am satisfied with the progress I have made towards meeting my overall career goals.
(6)	I am satisfied with the progress I have made toward meeting my goals for income.
(7)	I am satisfied with the progress I have made toward meeting my goals for advancement.
(8)	I am satisfied with the progress I have made toward meeting my goals for the development of new skills.

Source: Rothwell and Arnold (2007:41)

Table 2.3: Professional commitment scale items

(1)	I am willing to put in a great deal of effort beyond that normally expected in order to help make my profession successful.
(2)	I would accept almost any type of job assignment in order to keep working in areas that are associated with this profession.
(3)	I find that my values and my profession's values are very similar.
(4)	I am proud to tell others that I am part of this profession.
(5)	Being a member of this profession really inspires the best in me in the way of job performance.
(6)	I am extremely glad I chose this profession over others I was considering at the time I joined.
(7)	Often, I find it difficult to agree with this profession's policies on important matters relating to its members.
(8)	I really care about the fate of this profession.
For me this is the best of all professions to be a member of.	

Source: Rothwell and Arnold (2007:41)

To test the reliability and validity of the self-perceived employability measuring instrument, Rothwell and Arnold conducted research among 200 human resource professionals from the Chartered Institute of Personnel and Development (CIPD) in Derbyshire and Nottinghamshire branch area in the UK (Rothwell & Arnold, 2007:35). According to Rothwell and Arnold (2007:30), the results indicated that the internal reliability of all scales used in the study was good. The value of Cronbach's alpha for self-perceived employability was 0.7 (internal employability: $\alpha = 0.72$; external employability: $\alpha = 0.79$), 0.88 for subjective career success, and 0.80 for professional commitment (Rothwell & Arnold, 2007:30). The results of the study further showed that "self-perceived employability is separable from, though correlated with, subjective career success and professional commitment" (Rothwell & Arnold, 2007:35). Rothwell and Arnold (2007:35)

concluded that the self-perceived employability scale can legitimately be used either as one whole scale measuring self-perceived employability or as two separate ones measuring either internal or external self-perceived employability, depending on the purpose of the research.

Rothwell developed a second self-perceived employability model and instrument to specifically measure employability within the context of higher education. The scale focused on individuals seeking a particular type of work and their belief in their chances of success and the factors that influenced their perceptions (Rothwell *et al.*, 2008:1). The following section provides a discussion of the model and scale that were developed by Rothwell *et al.* (2008) to measure self-perceived employability among university students.

2.5.2 *The self-perceived employability model and measurement instrument for university students*

In 2008, Rothwell *et al.* (2008:1) reported the development of the self-perceived employability measurement instrument for graduate students. According to them, “undergraduate job-seekers might be expected to aspire to some level of continuous employment to establish a career following the acquisition of a degree” (Rothwell *et al.*, 2008:1). Consequently, Rothwell *et al.* (2008:2) developed a model that examined university students’ self-perceived employability. Upon developing the model, Rothwell *et al.* provided a definition of self-perceived employability that specifically focuses on bachelor-degree students. According to the authors, self-perceived employability is defined as “the perceived ability to attain sustainable employment appropriate to one’s qualification level” (Rothwell *et al.*, 2008:2).

Rothwell and Arnold (2007) developed a 16-item questionnaire including internal (self-beliefs) and external dimensions (the prevailing state of the external labour market) of employability. Rothwell *et al.* (2008) added two more dimensions, namely the influence that the university’s reputation (brand image) and student’s particular field of study might had on students’ employability perceptions. Thus, the model was based on four components that were represented in a matrix, namely self-belief, my university, my field of study, and the state of the external labour market (Rothwell *et al.*, 2008:3). These components do not exist in isolation; the corners of the matrix are intended to represent their interactions (Rothwell *et al.*, 2008:3). Each component is measured/evaluated by two items (questions), resulting in their interaction in an eight-component theoretical model (see figure 2.8).

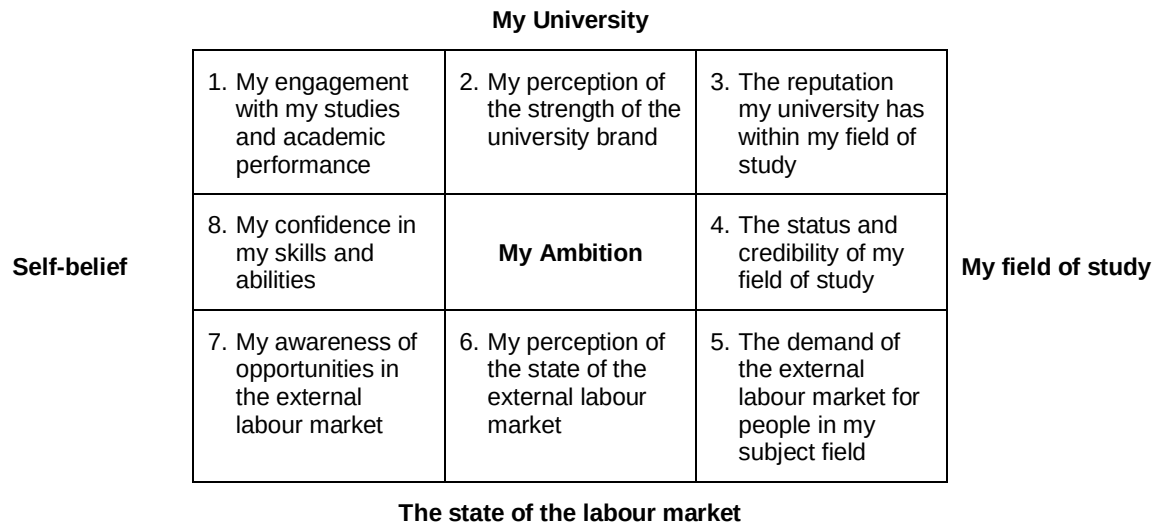


Figure 2.8: Theoretical model of self-perceived employability for university students

Source: Rothwell *et al.* (2008:3)

The subsections below elaborate on the four components of the self-perceived employability model for university students: self-belief, university reputation, status and credibility of chosen field of study, and the state of the external labour market.

- **Self-belief**

Employability is a psycho-social construct that comprises a “synergistic combination” of career identity, personal adaptability, and social and human capital (Fugate *et al.*, 2004:15). According to Fugate *et al.* (2004:15), employability embodies individual characteristics that foster adaptive cognition, behaviour and affect and enhance the individual–work interface. Regarding employability, self-belief is considered as a trait-based attribute (Quiring *et al.*, 2017:533; Turner, 2012:594). According to Rothwell *et al.* (2008:2), self-belief is an attribute of employability that encapsulates the combination of individual skills and behaviour that allow an individual to achieve their goals. The dimension “self-belief” focuses on internal employability factors that reflect individual perceptions on the (internal) attributes, skills, abilities, engagement with study and ambition that prepare students for the labour market (Rothwell *et al.*, 2008:6). According to Rothwell *et al.* (2009:154), self-belief is a measure that also focuses on the interaction of the influence of the university attended and the skills and behaviours that an individual has acquired that prepare them for the labour market.

- **University reputation**

Self-perceived employability is a construct that is affected by external factors measured through individual self-perceptions of the state of the external labour market and university's reputational capital (Qenani *et al.*, 2014:7). According to Rothwell *et al.* (2008:2), in measuring individual self-perceived employability, the reputation (brand image) of the university that someone had attended is a factor that influences a student's perception. Rothwell *et al.* (2008:2) and Rothwell *et al.* (2009:155) claim that a university's reputation serves as an asset on a resume because it lends credibility to individuals' job-seeking potential in a crowded labour market. University reputation provides individuals with increased trust and credibility in the labour market and a competitive advantage (Bano & Vasantha, 2019:2062). Therefore, to have a stronger image for the labour market, graduates should have extra credentials. University reputation is a vital aspect explaining these extra credentials (Bano & Vasantha, 2019:2061).

According to Bano and Vasantha (2019:2061) and Qenani *et al.* (2014:210), employment opportunities of a graduate are influenced by the perceptions of the quality of the reputable institution that a graduate has attended. This perpetuates the idea that graduates from reputable universities have higher social and cultural capital than those from less reputable universities (Qenani *et al.*, 2014:210). Thus, this results in highly rated universities with high reputational capital being typically known for producing students who are more employable and preferred by employers (Qenani *et al.*, 2014:8). In summary, Qenani *et al.* (2014) indicated that if students perceive that their university is highly rated, they would be more prone to believing in themselves and thus they would exhibit more confidence in their own knowledge, attributes, skills and abilities and preparedness for the labour market (Qenani *et al.*, 2014:8).

- **Status and credibility of a chosen field of study**

The status and credibility of a chosen field of study are directly influenced by the brand image of the university that one attends (Rothwell *et al.*, 2008:2; Rothwell *et al.*, 2009:156). According to Bano and Vasantha (2019:2061, 2063), university reputation provides a certain level of credibility to an institution. The credibility and trust that the university institution has increase the chances of employment for graduates and has competitive advantages in the labour market. This ultimately yields a benefit for graduates and the labour market because a credible institution is believed to produce students who have discipline-specific knowledge and competency skills that graduates can transfer from their field of study to the labour market (Moolman, 2017:39). The chosen field of study helps individuals have the necessary occupational skills, attitudes and values that would make them more likely to gain employment and succeed in their chosen occupations (Moolman,

2017:39). Thus, it can be deduced that the status and credibility of a chosen field of study signifies the quality or academic standards of a chosen field; students know that they will obtain a certain level of knowledge and training that will increase their chances of employment.

- **The state of the external labour market**

In a setting that no longer readily provides long-term employment, a main goal for individuals (and for some careers interventions) is to maintain and enhance employability skills and attributes that would be attractive to the labour market (Rothwell & Arnold, 2007:24). The constant “growing dynamism of the world today” has resulted in individuals being required to be “increasingly fluid and adaptable” to the rapid technological, social and economic changes that are present in our day and age (Fugate *et al.*, 2004:15). The state of the external labour market facilitates the identification and realisation of career opportunities (Fugate *et al.*, 2004:18). For example, students find out about career opportunities in their chosen field of study in the external labour market.

The labour market today is inundated with graduates with similar qualifications competing for graduate jobs in organisations and companies that are shrinking their workforce due to less skilled employees and unpredictable and inconsistent economic conditions (Shivoro *et al.*, 2018:216). The lack of basic skills in individuals is a factor that influences the labour market and it has a potential impact on students’ career success in their chosen field of study in a university. Furthermore, the reputation of a university that one attended and the status and credibility of a chosen field of study also influence one’s employment opportunities in the labour market (Rothwell *et al.*, 2009:154).

Based on the above theoretical model, Rothwell *et al.* (2008:3) developed a 16-item measurement instrument to determine the self-perceived employability of bachelor’s degree students. In addition, the authors included two instruments that measured perceptions of students’ ambition and university commitment. Reasons pertaining to the inclusivity of the two measures are because the students in the present study were not yet in employment. A measure of ambition was integrated as “a proxy for perceptions of future success to test discriminant validity” (Rothwell *et al.*, 2008:2). While the measure of university commitment was contextualised in employment terms to reflect students’ perceptions of their university’s reputation (brand strength). Table 2.4 reflects the items that were included in the self-perceived employability scale.

Table 2.4: Self-perceived employability scale items

Employability scale items (scale item numbers correspond to cell numbers in figure 2.9)	
1a.	I achieve high grades in relation to my studies
1b.	I regard my academic work as top priority
2a.	Employers are eager to employ graduates from my university
2b.	The status of this university is a significant asset to me in job seeking
3a.	Employers specifically target this university in order to recruit individuals from my subject area(s)
3b.	My university has an outstanding reputation in my field(s) of study
4a.	A lot more people apply for my degree than there are places available
4b.	My chosen subject(s) rank(s) highly in terms of social status
5a.	People in the career I am aiming for are in high demand in the external labour market
5b.	My degree is seen as leading to a specific career that is generally perceived as highly desirable
6a.	There is generally a strong demand for graduates at the present time
6b.	There are plenty of job vacancies in the geographical area where I am looking
7a.	I can easily find out about opportunities in my chosen field
7b.	The skills and abilities that I possess are what employers are looking for
8a.	I am generally confident of success in job Interviews and selection events
8b.	I feel I could get any job so long as my skills and experience are reasonably relevant

Source: Rothwell *et al.* (2008:10)

Table 2.5 presents the items that were included in the ambition scale and table 2.6 the items that were included in the university reputation scale.

Table: 2.5: Ambition scale items

Ambition scale items	
A1.	I want to be in a position to do mostly work which I really like
A2.	I am satisfied with the progress I have made meeting my goals for the development of new skills
A3.	I have clear goals for what I want to achieve in life
A4.	I regard myself as highly ambitious
A5.	I feel it is urgent that I get on with my career development
A6.	What I do in the future is not really important (reverse-scored)

Source: Rothwell *et al.* (2008:11)

Table: 2.6: University commitment scale items

University commitment scale items	
UC1.	I talk up this university to my friends as a great university to be at
UC2.	I would have accepted almost any type of course offer in order to come to this university
UC3.	I find that my values and this university's values are very similar
UC4.	I am proud to tell others that I am at this university
UC5.	Being at this university really inspires the best in me in the way of study performance
UC6.	I am extremely glad I chose this university over others I was considering at the time I joined
UC7.	I really care about this university and its future
UC8.	For me this is the best of all universities to be a member of

Source: Rothwell *et al.* (2008:11)

The reliability and validity of the self-perceived employability scale was tested among 351 undergraduate business students (bachelor's degree students) enrolled at three universities in the UK. According to the authors, no other faculties were examined in the study and, thus, they recommended that further examinations be conducted among students in other subject areas (Rothwell *et al.*, 2008:10). The 16-item self-perceived employability scale was found to have a satisfactory internal reliability coefficient for an untested measure ($\alpha = 0.75$) (Rothwell *et al.*, 2008:7). The Cronbach's alpha coefficient for the 22-items (self-perceived employability scale plus ambition scale) was 0.76, and the Cronbach's alpha coefficient of university commitment was 0.87 (Rothwell *et al.*, 2008:7). Thus, the Cronbach's alpha coefficient of all the scales measured above the required 0.7 and showed high reliability and internal consistency (DeVellis, 2012, as cited in Pallant, 2016:101).

Rothwell *et al.* (2008:10) indicated that their scale and research represented "an important first step in investigating how undergraduates themselves felt about their future employment prospects". Theoretically, their research began "to fill the gap in relation to understanding the relationships between "internal" factors, such as the individual's skillset and its application to their studies, and "external" factors, such as the general state of the labour market, the strength of the university brand, and the demand for particular subject areas".

In 2009, in a second study in the higher education context, Rothwell *et al.* examined the self-perceived employability of 226 postgraduate students at a University Business School in the Midlands region of the UK (Rothwell *et al.*, 2009:152). The internal reliability of the scales was all good and yielded values above the required 0.7. The self-perceived employability scale yielded a Cronbach's alpha value of 0.84, the self-perceived employability and ambition scale combined yielded a value of 0.85, and the university commitment scale yielded a value of 0.9. The values

were slightly higher than they had been for the undergraduate study where the values were 0.75, 0.76 and 0.87, respectively (Rothwell *et al.*, 2009:157).

This study employed the self-perceived employability measurement instrument of Rothwell *et al.* (2008) to examine the self-perceptions of employability among final-year undergraduate students at a South African university. The measure was suitable for the study because it is context-specific (university) and focuses on the target population that this study focused on. The results of the study contribute to the existing literature on the application of the measurement instrument but within the South African context.

2.6 CONCLUSION

In conclusion, this chapter provided an analysis of the theoretical approaches and perspectives on employability and answered research question 1 (see chapter 1): “What are the existing theoretical approaches and perspectives on employability and self-perceived employability?” This was done by first providing a conceptualisation of the main concepts used in the study, namely employability, self-perceived employability and graduate employability. The three concepts are related and are concerned with individuals’ skills, knowledge and ability to attain, function in and sustain a job.

Second, the four main theoretical perspectives on employability were discussed, namely the political perspective, the educational perspective, the human resource management perspective, and the individual perspective. The political perspective highlighted the importance of policy initiatives in providing general strategies that are aimed at addressing employability related issues. The educational perspective provided insight into theoretical models that aim to enhance students’ employability assets before they enter the labour market. This was followed by a discussion of the human resource management perspective, which focuses on proactive strategies that assist employees to obtain and sustain a job in contemporary changing labour market conditions. Lastly, the chapter focused on the individual perspective, which presented most of the body of literature in this section, as it entails the main approach that underpins this study, namely the self-perceived employability approach.

Following the discussion of the aforementioned perspectives on employability, a discussion of the sociological concepts of agency and structure was included. These concepts are central to the body of work in the field of sociology. The concepts were used to illuminate the relationship between agency and structure in social spaces. Bourdieu’s theory of practice as well as the concepts of field, capital, and habitus served as a theoretical anchor for examining the interaction

of agency and structure and were then extended to examine employability. This section discussed the interaction and significance of agency and structure in social spaces, particularly in the context of employability related matters.

The latter sections of the chapter elaborated on the self-perceived employability approach and discussed the various models and measurement instruments developed by Rothwell *et al.* (2008) to measure individuals' self-perceived employability. The self-perceived employability scale developed by Rothwell and colleagues has proven to be a reliable measuring tool that can be used to examine university students' self-perceived employability. The instrument was tested in several European countries such as the UK, Spain, and Turkey, among others. Therefore, this instrument was used in this study to determine the self-perceived employability of final-year undergraduate students at a South African university. It also drew on Bourdieu's concepts of field, capital and habitus to better understand self-perceived employability in relation to individuals' habitus. The study considered individuals' social structures, their capital in society and how this affects their social position, which, in turn, may affect their perception of their employability in the field (labour market) in which they compete with other individuals.

Figure 2.9 summarises the theoretical perspectives that were used in the study – namely Rothwell *et al.*'s (2008) self-perceived employability model, and Bourdieu's (1990) habitus, field and capital theory – to understand self-perceived employability.

(Self-perceived) Employability	
Theoretical frameworks (Chapter 2)	
Internal dimensions	External dimensions
<u>Rothwell and colleagues (2008):</u> • Self-belief • Ambition • University commitment <u>Bourdieu (1986):</u> • Symbolic capital	<u>Rothwell and colleagues (2008):</u> • External labour market • University reputation • Field of study <u>Bourdieu (1986):</u> • Habitus • Social position • Economic, cultural and social capital

Figure 2.9: Determinants of employability and self-perceived employability according to the theoretical frameworks used in the study (author's own compilation, 2022)

From Rothwell *et al.*'s (2008) model, it can be deduced that there are three external (structural) determinants of self-perceived employability – the external labour market, university reputation, and the field of study – and three internal (agentic) determinants of self-perceived employability – self-belief, ambition, and university commitment. Based on Bourdieu's theory, habitus, social position, economic, cultural and social capital can be seen as external determinants of employability and self-perceived employability. Symbolic capital, on the other hand, which essentially refers to an actor's status, honour and recognition in society, can be seen as internal factors influencing individuals' employability and self-perceived employability.

The next chapter provides a discussion of global and national trends and perspectives relating to students' employability and self-perceived employability.

CHAPTER 3

A GLOBAL AND NATIONAL OVERVIEW OF STUDENTS' EMPLOYABILITY AND SELF-PERCEIVED EMPLOYABILITY

3.1 INTRODUCTION

Chapter 2 provided a theoretical framework of employability and self-perceived employability. The chapter conceptualised the key terms used in the current study and elaborated on the theoretical approaches to and perspectives on employability.

Chapter 3 provides a global and national overview of student employability and self-perceived employability. First, global trends in and perspectives on student employability and self-perceived employability are provided. This is followed by a discussion of national trends and perspectives on student employability and self-perceived employability. The next section elaborates on the association between selected socio-demographic variables and student employability and self-perceived employability. Next, the chapter provides an outline of the skills required in the 21st century. Lastly, it concludes with a discussion of the role of higher education in developing students' employability skills.

3.2 GLOBAL TRENDS IN AND PERSPECTIVES ON STUDENT EMPLOYABILITY AND SELF-PERCEIVED EMPLOYABILITY

Employability development in higher education curricula has garnered increasing attention in recent years. This is because employers report that graduates lack the fundamental skills and characteristics necessary for success in the workplace (Tymon, 2013:841). This concern revealed a growing interest in graduate employability, as graduates are considered important in promoting competitiveness in the global economy (Koloba, 2015:44).

For the last decade, Times Higher Education (2021a) has been performing a global ranking study to determine the top universities worldwide with the highest rankings on the Global University Employability ranking index. The global employability ranking identifies the universities that excel at preparing students for the workplace; the views of recruiters at top companies are considered. Over 1 500 universities from 93 countries and regions were included in the 2021 study. According to the findings of the study, 250 universities spanning 43 countries from the US to Japan are regarded as the best at preparing students for the workplace (Times Higher Education, 2021a). Additionally, the results showed that the majority of institutions with high employability rankings

were located in Europe, France, Germany, the UK, and the Netherlands (Times Higher Education, 2021a). Universities in the US, Mainland China, Australia, Canada, South Korea, and Japan also performed well in respect of employability (Times Higher Education, 2021a). Table 3.1 presents the World University Rankings 2020–2021. Over the last decade, the countries on this list have taken employability more seriously and have become the most attractive destinations for students worldwide when pursuing their studies (Times Higher Education, 2021a). In addition, table 3.1 shows where South Africa is positioned in the World University Rankings 2020–2021 to better situate the study in the context in which it was examined.

Table 3.1: World University Rankings 2020–2021

COUNTRY/REGION	2021 RANK	2020 RANK
United States of America	1	1
United Kingdom	2	4
Germany	3	3
Australia	4	6
Mainland China	5	5
Netherlands	6	11
Canada	7	7
Switzerland	8	8
South Korea	9	9
France	10	2
Hong Kong	11	14
Sweden	12	11
South Africa	199	222

Source: Times Higher Education (2021)

From table 3.1, it is clear that the high-ranking universities are mostly found in Western and Asian countries, which are generally considered developed, especially Western countries. According to Times Higher Education (2021a), South Africa in the World University Rankings 2020–2021 ranked 199th, a gradual increase from the 2020 ranking where the country ranked 222th (section 3.3 explores students' perceptions of the key factors influencing their employability in the South African context). The next section explores employability in the UK, Australia, Turkey, Poland, and the sub-Saharan African region. These respective regions/countries have conducted

extensive research on student employability, and therefore they are integrated into this discussion.

3.2.1 Australia

According to Take-profit (2022), the unemployment rate in Australia remained unchanged and was 4.2% in January 2022. During this period, the lowest youth unemployment rate was recorded – it decreased from 9.4% in December 2021 to 9.0% in January 2022.

Universities in Australia are well regarded by companies around the globe (Times Higher Education, 2021b). The country has 43 universities of which 36 are included in the Quacquarelli Symonds (QS) list of the world's top universities for 2021 (Australian Trade and Investment Commission, 2021). As per Quacquarelli Symonds (2021a), the top five universities in the country are The Australian National University (ANU), University of Sydney, University of Melbourne, University of New South Wales (UNSW), and University of Queensland (UQ). Australian universities are ranked among the best in the world, according to the World University Employability Rankings 2021 (Times Higher Education, 2021b). Based on the 2021 World University Employability Rankings, Australia ranks fourth in producing employable graduates (Times Higher Education, 2021b) (see table 3.1).

Scholars such as Gilbert and Wingrove (2019), Sarkar *et al.* (2017) and Tuffley and Antonio (2017) investigated the employability of Australian students.

Sarkar *et al.* (2017) investigated undergraduate business students' perceptions of employability at Australia's Monash University. With a sample size of 75 students, a mixed-methods approach was used. Rothwell's 2008 self-perceived employability scale for university students was used for the quantitative phase of the study. To collect qualitative data, the authors included open-ended items that sought graduates and employers' perceptions on the measures that universities could implement to promote students' employability skills. The quantitative results showed that work experience, field of study, self-confidence, and belief in one's abilities were perceived to be important to students' employability, promoting their readiness for the workplace. According to the qualitative findings of the study, students found practical workshop activities such as teamwork, networking, commercial awareness, leadership and decision-making, among others, necessary and beneficial for developing key employability skills. It was also suggested that workshops be incorporated into undergraduate programmes to improve students' employability (Sarkar *et al.*, 2017:31).

Tuffley and Antonio (2017) conducted a study using a quantitative approach to validate Rothwell's (2008) self-perceived employability scale for university students in an Australian context. The study was conducted among 136 Information Technology (IT) students at a multicampus metropolitan university in Australia (Tuffley & Antonio, 2017:105). The study's results revealed that IT students' self-perceptions of employability were high (Tuffley & Antonio, 2017:105). According to Tuffley and Antonio (2017:105), this is because IT students believed they were more employable than other professions because IT was perceived as a highly sought-after degree that would almost certainly result in students gaining employment, particularly students from prestigious universities. Moreover, Tuffley and Antonio (2017:110) noted that the results revealed that respondents' self-perceptions of employability were heavily influenced by their field of study and university reputation. The results were influenced by the fact that employment prospects in the IT industry appeared to be better than in other less dynamic professions, which lead IT students to believe that they were more employable (Tuffley & Antonio, 2017:111).

Gilbert and Wingrove (2019) conducted a study that examined students' perceptions of their employability after participating in a simulated or real-life project. According to Gilbert and Wingrove (2019:654), the project was a capstone course offered at an Australian university that aimed to improve graduate employability and foster transferable skills such as professional communication, interpersonal skills and leadership. In this study, the authors followed a quantitative research approach to determine 58 students' perceptions of their employability using Caballero *et al.*'s (2011) four-factor work readiness model and Smith *et al.*'s (2014) six dimensions of employability.

Caballero *et al.*'s four-factor work readiness model assesses four dimensions of graduate work readiness: work competence (the ability to perform a job task successfully using one's abilities, knowledge, qualities and behaviour); social intelligence (the ability to manage interpersonal relationships efficiently); organisational acumen (the ability to effectively navigate the inner and outer workings of an organisation); and personal characteristics (an individual's distinctive features) (Caballero *et al.*, 2011:41). The six dimensions of employability outlined by Smith *et al.* (2014:7) assess the skills and attitudes that employers look for in students, such as professional practice and standards (competence in professional practice); linkage between theory and practice (integrating academic knowledge with practical application); informed decision-making (evaluating risks and collecting relevant information); lifelong learning (continuing to learn even after formal education is completed); collaboration (working together); and commencement readiness (confidence to start a job in a specific field) (Smith *et al.*, 2014:7).

Gilbert and Wingrove (2019:658) reported that students felt satisfied after completing the course and participated in the study's survey because they completed a project that enhanced their resumes with real-world work experience. Students gained confidence in communicating, leading and developing relationships with stakeholders, and they had the opportunity to hone these skills prior to graduating and beginning full-time employment (Gilbert & Wingrove, 2019:658). The results showed that practical experience prior work experience and self-confidence influenced students' perceptions of employability following completion of the capstone course and contributed to graduates' readiness for professional practice (Gilbert & Wingrove, 2019:657-658).

Based on the above discussion, it can be concluded that Australian universities are highly respected for both educational quality and international reputation. In the conducted studies, researchers found common dimensions that influence students' self-perceptions of employability. These include work experience, self-confidence, field of study and university reputation. The next subsection discusses employability in the UK.

3.2.2 *The United Kingdom*

In the UK, the overall unemployment rate was measured at 3.9% and youth unemployment at 11.1% in 2021 (Clark, 2022; UK Parliament, 2021). European countries, most notably the UK, have gained widespread recognition in recent years for their high employability rankings and research (Abelha *et al.*, 2020:12). In the QS World University Rankings 2021, the UK is represented by 90 universities. Four of these institutions are ranked in the top 10 in the world, while an additional four are ranked in the top 50 (Quacquarelli Symonds, 2021d). The four institutions in the UK ranked among the top 10 universities in the world for 2021 were Oxford University, Cambridge University, Imperial College London, and University College London (Quacquarelli Symonds, 2021d).

Perceptions of employability in the UK can be understood by referring to research conducted by Donald *et al.* (2018), Donald *et al.* (2019) and Glover *et al.* (2002).

Glover *et al.* (2002:297) examined the employability of 400 undergraduate students studying English, Philosophy, History, and Engineering at the University of Nottingham in the UK in 2002. A mixed-methods approach was employed in the study. Students' perspectives were elicited through self-constructed questionnaires (which were not provided by the scholars) consisting of 14 closed-ended questions and several open-ended questions soliciting broader perspectives and comments on employability (Glover *et al.*, 2002:297). First, according to Glover *et al.* (2002:300-302), study findings revealed a link between students' perceptions of employability and

their academic degree, university reputation, generic skills, the external labour market, and work experience. Through an examination of these findings, Glover *et al.* indicated that students' employability was strongly influenced by their university's reputation (Glover *et al.*, 2002:300). According to Glover *et al.* (2002:300), reputable universities provide exceptional educational opportunities that assist students in developing their personal skills and overall ability to navigate the labour market. Second, a university degree is viewed as a means to an end, allowing students to gain access to the labour market and certifying their competence in a particular field of study (Glover *et al.*, 2002:298). Finally, work experience is an integral part of an undergraduate degree at most prestigious universities (Glover *et al.*, 2002:302). According to Glover *et al.* (2002:302), work experience provides students with the opportunity to enhance their skills and knowledge in the labour market.

In 2018, Donald *et al.* conducted a qualitative study using semi-structured interviews to explore the employability perceptions of 38 final-year undergraduate students at a UK university (Donald *et al.*, 2018:7, 513). The sample included students in specialised majors (business, engineering, law, mathematics, and modern languages) and generalist majors (archaeology, art, life sciences, criminology, education, English, geography, history, music, marine and earth sciences, philosophy, politics, psychology, and social sciences) (Donald *et al.*, 2018:7, 513). According to Donald *et al.* (2018:513), specialised majors are subjects with higher employability outcomes and earning potential compared to generalist majors with lower employability outcomes and earning potential. By means of the Career Ecosystem Theory (CET) developed by Baruch (2015) as the underlying framework, the authors sought to gain a better understanding of the future employment prospects of graduates (Donald *et al.*, 2018:515). Using the concept of employability as a means of understanding students' perceptions of higher education, the CET explores the perceived costs and benefits of higher education in respect of how it better prepares students for the global labour market (Donald *et al.*, 2018:515). As a result of this underlying framework (CET), the authors developed a two-dimensional model that considers both personal and market factors related to employability. According to Donald *et al.* (2018:513), the employer and university career advice model is used by employers and universities to support students in their career development (Donald *et al.*, 2018:513) (see figure 3.1). The employer and university career counselling model provides insight into career counselling by focusing on students' perceptions of potential collaborative opportunities between employers and colleges. This model illustrates the complexity and interdependence of employability among a variety of labour market actors (Donald *et al.*, 2018:520).

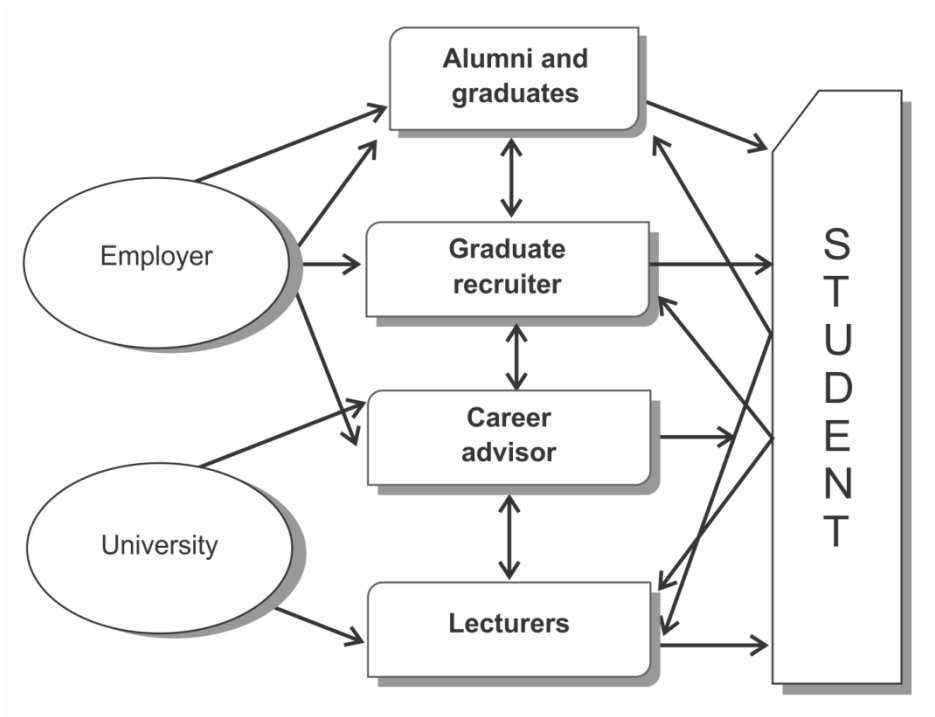


Figure 3.1: Employer and university careers advice model

Source: Donald *et al.* (2018)

The study had three specific aims: (1) to understand how undergraduates perceived their future careers and how the university had prepared them to enter the global labour market; (2) to understand student perceptions regarding benefits versus associated costs of pursuing higher education (HE) on employability and earnings; (3) and to determine anticipated barriers and students' plans to overcome these barriers in their pursuit of career sustainability within a career ecosystem (i.e., a system made up of individuals, organisations and other actors whose interactions influence talent flow in the higher education context) (Donald *et al.*, 2018:518, 528). The findings are discussed in greater depth below.

To begin with, the research shows that students perceive great benefits from higher education. According to Donald *et al.* (2018:518), students viewed higher education as a means of enhancing their employability and life opportunities, emphasising the critical role of higher education in their career development, personal growth, and life aspirations (Donald *et al.*, 2018:518). Second, students viewed a university degree as the most recent demonstration of their academic ability and achievement, which qualified them for job opportunities (Donald *et al.*, 2018:528). However, students admitted that the global job market was competitive, and they considered their university degrees unsuitable for employment prospects, specifically students in archaeology, art, biological

sciences, chemistry, civil and environmental sciences, criminology, education, English, geography, history, music, ocean and earth sciences, philosophy, politics, psychology and social science majors (Donald *et al.*, 2018:528).

Donald *et al.* (2018:518) discovered in their study that students believed factors other than their university degree were critical to their employability in their final year. Among these were their university's reputation and their involvement in clubs and societies (Donald *et al.*, 2018:518). Furthermore, students viewed university-industry collaborations as critical to increasing their employability through initiatives such as career services, career fairs, career talks, networking opportunities, and job application assistance (Donald *et al.*, 2018:519). Finally, as regards barriers in their pursuit of career sustainability within a career ecosystem, students anticipated that gender barriers would be a primary barrier they would encounter, particularly in relation to maternity leave for women (Donald *et al.*, 2018:527). According to Donald *et al.* (2018:527), students believed that universities should bridge this barrier by reaching out to elementary and secondary schools to address gender issues (stereotypes and pay disparities) and expand perceptions of diversity in employment (Donald *et al.*, 2018:519).

A second study was conducted in 2019 by Donald *et al.* on students' self-perceptions of employability (Donald *et al.*, 2019:599). The study was conducted at a UK university with 387 students in the same specialised majors (business, engineering, law, mathematics, and modern languages) and generalist majors (archaeology, art, life sciences, criminology, education, English, geography, history, music, marine and earth sciences, philosophy, politics, psychology, and social sciences) as in the 2018 study (Donald *et al.*, 2019:610). A quantitative research approach was used to collect data. The purpose of the study was to determine undergraduates' self-perceptions of employability (Donald *et al.*, 2019:599).

According to Donald *et al.* (2019:606), employability has three dimensions – human capital, career guidance, and career ownership (protean career) – which the authors examined in their study. Based on the three dimensions, four specific objectives were established: (i) identifying the factors of human capital and examining the role of human capital on self-perceived employability; (ii) assessing the role of career counselling on self-perceived employability; (iii) examining the influence of one's career on self-perceived employability; and (iv) examining the moderating influences of gender, field of study and year of study on self-perceived employability (Donald *et al.*, 2019:606).

To measure human capital, the authors included several dimensions of human capital, namely social capital (measured with seven items from the scale of Steinfeld *et al.* [2008]); cultural capital

(measured with 11 items from the scale of Jaeger [2011]); psychological capital (measured with five items from Cook *et al.* [1981]); scholastic capital (measured with nine items from the Baruch *et al.* [2005] scale); market value capital (measured with nine items from the Esson *et al.* [2013] scale); and skills (with six items from the Jackson and Chapman [2012] scale). Career guidance was measured with three items from Holmes' (2015) scale, and career ownership was measured with seven items from Baruch's (2014) scale (Donald *et al.*, 2019:606). (Please note that the questionnaire used was not provided by the researchers.)

The results showed that human capital, career advice and career ownership were important components of self-perceived employability (Donald *et al.*, 2019:599). In addition, social capital, cultural capital, psychological capital, scholastic capital, market value capital and skills were proven to be factors of human capital that had an influence on students' self-perceived employability (Donald *et al.*, 2019:607). The results also showed that students reported higher mean scores for cultural capital, psychological capital, scholastic capital, market value capital and skills than for social capital, suggesting that salient human capital factors influenced students' self-perceived employability (Donald *et al.*, 2019:607). Furthermore, the research provided evidence that the following skills had an influence on employability: teamwork; oral communication; problem-solving; time management; literacy skills; numeracy skills; and IT skills.

Regarding the influences of gender, field of study and year of study on the dimensions of self-perceived employability, the results showed that male respondents scored higher than female respondents on all three dimensions of employability, especially male students in specialised programmes (Donald *et al.*, 2019:611). In addition, male respondents rated themselves higher than their female peers on their self-perceived employability (Donald *et al.*, 2019:609). Finally, according to Donald *et al.* (2019:608), the moderating influences of gender, field of study and year of study on self-perceived employability yielded several results. First, male participants perceived themselves as more employable. Second, students in specialised programmes such as business, engineering, law, mathematics and modern languages considered themselves more employable than students in generalist majors because they had better employment prospects in the labour market (Donald *et al.*, 2019:610). Finally, the study found that students' year of study had minimal influence on human capital and self-perceived employability. This suggests that students' final year of study had minimal to no influence on their employability (Donald *et al.*, 2019:611).

Based on the above discussion, it can be inferred that students' employability and perceptions of employability are influenced by their university degree, university reputation, personal factors (skills, knowledge, career ownership, human capital and attitudes), the external labour market

and work-integrated learning, as outlined above. The following subsection discusses students' employability in the Turkish context.

3.2.3 Turkey

Turkey is one of the few countries in the world with the lowest employment rate and one of the highest rates of labour underutilisation among members of the Organization for Economic Co-operation and Development (OECD, 2018:1). According to Take-Profit (2022), the overall unemployment rate in Turkey currently stands at 11.4% (since January 2022). The youth unemployment rate in Turkey, on the other hand, remained unchanged at 21.6% in January 2022. According to Tokyay (2021), the alarming unemployment rate among the youth has left many young people in Turkey discouraged by a labour market characterised by limited opportunities for youth employment.

There are over 200 universities in Turkey, the vast majority of which are public. Ten of these institutions are listed in the top 500 and 1 000 worldwide in the Quacquarelli Symonds (QS) and Times Higher Education (THE) World University Rankings for 2021. The following Turkish universities are ranked between 500 and 1 000 in the world university rankings: Koç University; Bilkent University; Boğaziçi University; Sabancı University; and Middle East Technical University (Course Guru, 2021; Quacquarelli Symonds, 2021c).

This section investigates students' self-perceived employability by reviewing the findings and results of employability studies conducted among students by Sumer *et al.* (2013), Karli (2016) and Ergun and Sesen (2021). The purpose of this section is to gain a better understanding of employability in the Turkish context.

Sumer *et al.* (2013) studied the employability and job satisfaction of psychology graduates in Turkey. The study included 735 bachelor's (N=324), master's (N=291) and PhD (N=120) graduates from universities in Istanbul, Ankara and Izmir in Turkey. The study followed a quantitative approach and used a self-constructed survey consisting of three sections that collected information on educational background, employment situation and job satisfaction, and finally demographic information.

The section on respondents' education included respondents' departments and institutions, as well as the year they graduated for their respective degrees (BA, MA and PhD). The second section consisted of nine questions assessing the participants' employment situation (Sumer *et al.*, 2013:190). These questions related to satisfaction with (1) salary, (2) employment rights, (3) promotion opportunities, (4) personal development opportunities, (5) career and recognition

opportunities, (6) mentoring, (7) colleagues, (8) working conditions, and (9) work in general (Sumer *et al.*, 2013:190). According to Sumer *et al.* (2013:190), respondents also reported on their employment status, the number of jobs they had changed since graduation, whether they had been working in their current field for a year, what their monthly salary was, how many hours they worked per week, and completed short surveys on job compatibility and job satisfaction. Sumer *et al.* (2013:190) also collected demographic information by asking six questions about gender, age, place of residence, marital status, number of children and membership in a professional organisation. In addition, the differences between the three groups (BA, MA and PhD) were examined based on the perceived compatibility of professional status with current job using the items: (1) "My professional status is compatible with my field in psychology"; (2) "My professional status is compatible with my level of education"; (3) "My professional status is compatible with my level of experience"; (4) "My professional status is compatible with my initial expectations"; (5) "I believe that my professional status supports my professional development" (Sumer *et al.*, 2013:190).

As regards educational background, the results showed that the majority of the respondents had postgraduate degrees in various areas of psychology, with most of them having obtained qualifications in clinical psychology, followed by social psychology, developmental psychology, experimental psychology, industrial psychology, and counselling psychology (Sumer *et al.*, 2013:190). Concerning employment situation, 206 respondents indicated that they had found a job within one month of graduation; 287 respondents indicated that they had found a job between the first and third month; 110 respondents had found a job between four and 12 months; and the remaining 132 respondents indicated that they had been looking for a job for more than one year after graduation (Sumer *et al.*, 2013:191). Regarding work experience, 176 respondents indicated that they were still working at their first job; 169 indicated that they had changed institutions or jobs at least once; 147 indicated that they had changed twice; and 243 indicated that they had changed more than twice (Sumer *et al.*, 2013:191). Prior to their current job, 147 of the respondents reported having worked in a field unrelated to psychology (Sumer *et al.*, 2013:191). According to Sumer *et al.* (2013:190), respondents with PhDs spent less time looking for a job after graduation and earned a higher salary than their counterparts with MA and BA degrees.

Based on perceived compatibility of professional status with their current job, respondents with PhDs reported higher levels of compatibility with their field of expertise, educational level and experience than respondents with MAs and BAs (Sumer *et al.*, 2013:191). The same result was predicted for respondents with MAs compared to respondents with BAs when it came to higher compatibility with their field of expertise (Sumer *et al.*, 2013:191). As regards their experience of

whether their current job matched their initial expectations and the support they received for their career development, respondents with PhDs recorded higher scores (Sumer *et al.*, 2013:191). In addition, respondents with PhDs reported more positive experiences regarding whether their current job met their initial expectations and whether they received support for their career development than respondents with MAs and BAs. However, this was not the outcome for respondents with MAs compared to those with BAs (Sumer *et al.*, 2013:191).

Respondents' satisfaction was also considered when assessing the specific advantages of having a postgraduate degree (Sumer *et al.*, 2013:192). The results suggest that respondents with a PhD were overall more satisfied with their job, salary and opportunities (Sumer *et al.*, 2013:191). Respondents with MAs and BAs, on the other hand, reported that their satisfaction was based on their salary (Sumer *et al.*, 2013:191). According to Sumer *et al.* (2013:191), concluding results from the study based on the items measured suggested that there were benefits to having a postgraduate degree, particularly at doctoral level.

In 2016, Unal Karli conducted an employability study at Turkey's Abant Izzet Baysal University, examining the perceptions of 170 students of sports science and graduates of sports departments (Karli, 2016:849). The study collected data quantitatively using the 2008 Rothwell Self-perceived Employability Scale for university students (Karli, 2016:848). However, items on participants' perceptions of academic engagement and academic performance were omitted as they were not included in the study due to cultural diversification (Karli, 2016:848).

The purpose of this study was to adapt and structurally validate Rothwell *et al.*'s (2008) Self-perceived Employability Scale for university students and to examine the effects of gender, educational level, foreign language communication ability and work experience on the dimensions of the scale. The scale used to assess self-perceived employability consists of 10 items classified into three categories: university prestige (items 1, 2, and 3); study field credibility (items 5, 6, and 7); and self-belief (items 8, 9, and 10). The item numbers correspond with Rothwell *et al.*'s (2008) original item scale (see chapter 2, table 2.4).

According to the results of the study, male and female respondents did not differ significantly on the prestige of the university, the credibility of the field of study, or the factors of self-confidence. Furthermore, no significant differences were found between older students and graduates as regards self-perception and foreign language communication skills. However, the results showed significant differences between the mean scores of senior students and graduates regarding university prestige and credibility of the field of study (Karli, 2016:854). According to Karli (2016:852), senior students believed that the prestige of their university and the credibility of their

field of study were more important factors for employability than new graduates. Karli (2016:858) argues that this could be because older students receive practical learning opportunities in relation to workplace requirements, employer aspirations and labour market demands, all of which could have a positive impact on their self-perceptions of employability.

Furthermore, the results showed that students' perceptions of employability were influenced by their level of education (senior student vs. new graduate) and work experience (Karli, 2016:848). According to Karli (2016:857), those who were still studying in sports departments had a significantly higher perception of their employability than the recent graduates. Also, the new graduates' self-belief was higher than that of the older students, and the senior students rated the prestige of their university and the credibility of the field of study significantly higher than the recent graduates (Karli, 2016:857). Karli (2016:856) argues that work experience is a vital component of employability from the perspective of both graduates and employers. Work experience, according to Karli (2016:856), is an important variable that influences participants' perceptions of employability and is a primary indicator of employability in employability studies. Overall, the results showed that the Self-perceived Employability Scale has demonstrated its construct validity and usefulness for assessing Turkish university students' perceptions of employability (Karli, 2016:848). Karli (2016:856) argues that this was evidenced by the fact that the scale showed good fit with the cut-off criteria of the fit indices used and obtained a Cronbach's alpha value of 0.81, which shows good reliability and internal consistency.

Ergun and Sesen (2021) conducted a comprehensive study on the self-perceived employability of university students. This study examined 463 business, law and engineering students enrolled in Turkish universities in Istanbul (Ergun & Sesen, 2021:6). A quantitative approach was adopted in this study, using a 34-item questionnaire with different measurement scales. To measure perceived employability, the authors used the measurement scale of Wittekind *et al.* (2010). To measure general skills, the authors selected and measured three skills: teamwork, emotional intelligence and entrepreneurial skills. In addition, the Rothwell *et al.* (2008) scale was used to measure academic achievement, and the Dacre *et al.* (2014) scale was used to measure work experience. Personal circumstances were measured using the scale of Álvarez-González *et al.* (2017) and Kristiansen and Indarti (2004). University contribution was measured using the Rothwell *et al.* (2008) scale and the Cabarello *et al.* (2015) scale. Finally, the academic advisor was measured using the Álvarez-González *et al.* (2017) scale, and the external labour market was measured using the Rothwell *et al.* (2008) scale. The study aimed at collecting data on demographic characteristics, perceived employability, generic skills, academic performance, work

experience, as well as university contributions, academic consultants and the external labour market (Ergun & Sesen, 2021:7).

The results of the study indicated that students' self-perceived employability was positively related to generic skills, academic performance and the perceived external labour market. On the other hand, work experience, academic consultants and university brands had no significant effect on students' self-perceived employability (Ergun & Sesen, 2012:10-11).

According to Ergun and Sesen (2021:11), employers in Turkey place a high value on generic skills. These skills are needed for the variety of work environments in which graduates find employment and as a result, students value them as important. These skills include, among others, teamwork, emotional intelligence, adaptability and entrepreneurial skills (Ergun & Sesen, 2021:11). The labour market, on the other hand, is an important factor in employability because it is where supply and demand meet, and students' employability skills come into play. Therefore, students attach significant importance to their academic performance because it positively affects their perception of employability and the labour market, as it is a measure of a person's success for employers, and employers generally consider a person's academic performance and/or achievements during their recruitment process (Ergun & Sesen, 2021:11).

According to the results, undergraduates' perceptions of employability were not affected by their work experience nor the contributions of their university and academic consultants (Ergun & Sesen, 2021:11). Working experience, according to Ergun and Sesen (2021:14), is believed to be a field that helps students recognise the labour market's conditions and requirements. This variable, however, had no statistically significant effect on students' employability. Ergun and Sesen (2021:11) claim that this could be because students were unaware of the importance of gaining work experience prior to graduation. Regarding university contribution, the research results showed that the notion that perceived quality of university education should contribute to students' employability was not supported in the Turkish context, meaning that students perceived their university's brand and curriculum as unimportant for their employability development (Ergun & Sesen, 2021:11). In addition, the results showed that there was no strong association between academic consultants (educational advisors who assist with educational planning) and employability (Ergun & Sesen, 2021:12). This might be because students did not perceive academic consultants as significant contributors to their career development (Ergun & Sesen, 2021:13).

In conclusion, the results of the reviewed studies in the Turkish context show that Turkish students in the aforementioned studies perceived their employability to be positively influenced by their

general skills, academic performance and the perceived external labour market. Furthermore, the studies reviewed find that educational attainment has a crucial influence on employability and that educational levels, such as having a PhD degree, have a greater impact on the workplace. This translates into higher salary, greater satisfaction and greater opportunities, which, in turn, influence employability. The following section looks at student employability in the Polish context.

3.2.4 Poland

Poland is generally considered a stable economy with an overall unemployment rate of 2.9%, which is low for a country that has experienced a systematic decline in the number of students and graduates enrolled in higher education (Domagala-Zysk *et al.*, 2021:272). Unemployment statistics recorded among the youth currently stand at 9.0% (Trading Economics, 2022a). Domagala-Zysk *et al.* (2021:272) argue that the high youth unemployment rate is no surprise considering that higher education is no longer a priority for young people in Poland because less desirable employment conditions (such as casual jobs) are displacing full-time positions.

Over the past few years, Poland's education system has undergone significant changes because of its pursuit of a world-class educational system (Times Higher Education, 2021). Unlike most European universities, which adhere to a traditional model of teaching and research across a broad range of disciplines, most Polish institutions are in the specialised private sector (Quacquarelli Symonds, 2021b; Times Higher Education, 2021). According to the Polish rankings, the top five universities in Poland are Jagiellonian University, University of Warsaw, Adam Mickiewicz University in Pozna, Gdansk University of Technology, and the Medical University of Bialystok, all of which are ranked in the top 300–500 in the Times Higher Education (THE) World University Rankings (Times Higher Education, 2021).

Several scholars, such as Domagala-Zyk *et al.* (2021:272), Kozera-Kowalska *et al.* (2021) and Marzena Swigon (2016), examined students' perceptions of their employability in the Polish context. These studies are used to give an overview of students' perceptions of employability in Poland.

Swigon conducted an employability study in 2016 on 60 master's students studying International Relations at the University of Warmia and Mazury in Poland. The study used a quantitative approach to validate Rothwell's (2008) self-perceived employability scale for university students in the Polish context. The Polish scale included Rothwell's original 16-item scale and an additional component related to personal knowledge management and information skills. According to Swigon (2016:3601), the component on personal knowledge and information skills was included

because it was relevant in Polish conditions and had a high correlation with self-perceived employability, which had been tested in other empirical studies. A total of 19 items were used in the study, and the scale was divided into five categories: students' perceptions of their university, field of study, self-belief, external labour market situation and personal knowledge management (Swigon, 2016:3612).

The first component of the study examined students' self-perceived employability and perceptions of the university (Swigon, 2016:3611). The results of the study showed that students did not know or did not agree that the status/brand of the University of Warmia and Mazury had a significant influence on their employability. Students also indicated that they did not know whether employers would hire graduates of the University of Warmia and Mazury. The results related to the reputation of the university showed that most respondents indicated that they did not know whether or did not agree that their university had an excellent reputation (Swigon, 2016:3612).

Further results show (in relation to the credibility of the field of study) that most respondents (60%) agreed that their field of study, internal relations, was not credible because there were not many opportunities in this field in the Polish context (Swigon, 2016:3613). Moreover, most students (60%) did not agree that a degree in international relations led to a specific career, which is generally considered highly desirable in Poland (Swigon, 2016:3613). As international relations are generally not considered very desirable in Poland, respondents noted that it was difficult to find work in this field, especially in the Polish context (Swigon, 2016:3613). Nevertheless, students were optimistic and believed (self-confidence) that the skills and abilities they possessed were what employers were looking for (Swigon, 2016:3614). The last component, which related to personal knowledge management, showed that adequate knowledge (information and skills) made it easier for respondents to find work and employment (Swigon, 2016:3614). In addition, respondents indicated that their studies prepared them to manage information and knowledge, making them better prepared for the world of work (Swigon, 2016:3614). Overall, the level of self-perceived employability of students at the University of Warmia and Mazury in Poland in the field of international relations was not high and no significant differences were found between male and female respondents (Swigon, 2016:3604).

In 2021, Domagala-Zyk *et al.* conducted an employability study among Polish undergraduate university students to validate the self-perceived employability scale for university students developed by Rothwell *et al.* (2008). Using a quantitative approach, 600 first-year students from the faculties of Humanities and Social Sciences at the Catholic University of John Paul II in Lublin (CUL) participated in the study (Domagala-Zyk *et al.*, 2021:273).

According to Domagala-Zyk *et al.* (2021:282), the structure of the derived model does not correspond exactly to the original model of Rothwell *et al.* (2008), which measured four dimensions of employability of higher education students, namely: self-belief; university reputation; status and credibility of the chosen field of study; and state of the external labour market. The Polish version of the self-perceived employability scale excludes the dimensions of self-belief and university reputation. Domagala-Zyk *et al.* (2021:282) argue that the structural differences from the original British version are due to social and cultural differences, as there is no tradition in Poland that emphasises engagement, motivation and self-confidence in the teaching process to the same extent as in the US or England.

The results of the study showed that students appeared to be optimistic about their employability, with mean scores ranging from 3.06 to 4.02 (neutral to agree; a five-point Likert scale was used) (Domagala-Zyk *et al.*, 2021:287). However, concerning preparation for the external labour market, students felt that their studies did not sufficiently equip them with solid employability skills that would better prepare them for good employment and make them feel comfortable navigating a complicated labour market characterised by competition, job losses, changes such as financial changes, and the fact that continuous, lifelong employment is not the norm (Domagala-Zyk *et al.*, 2021:287).

Wójcik and Krzesiński (2019) conducted a study to identify the key elements of human capital (the set of traits and characteristics [knowledge, skills, abilities and health] in which people invest and accumulate over their lifetime) of university graduates. The study was conducted at a university in Lublin in Poland among a sample of 1 375 respondents (Wójcik & Krzesiński, 2019:127). Using a self-constructed questionnaire and a quantitative approach, data were collected from graduates in social sciences, natural sciences, humanities and arts, engineering and technical sciences, medicine and health sciences, and agricultural sciences (Wójcik & Krzesiński, 2019:127). Most respondents were graduates of full-time master's programmes (Wójcik & Krzesiński, 2019:127).

The results of the study showed that students in the fields of medicine and dentistry, architecture and construction, biology and chemistry, nursing, physiotherapy and pharmacy were more likely to pursue or had pursued their learned profession because of practical work experience than students in other fields of study (Wójcik & Krzesiński, 2019:128). Practical experience was found to have a significant impact on employability and to be an important factor in obtaining employment in the learned occupations mentioned above (Wójcik & Krzesiński, 2019:128). However, it was also noted that respondents indicated that lack of or insufficient work experience was the biggest barrier to employment (Wójcik & Krzesiński, 2019:128). According to Wójcik and

Krzesiński (2019:130), respondents indicated that universities did not fully support students in obtaining future employment. One-third of students reported that they had not gained work experience during their studies, and almost one-third of students reported that they had not participated in mandatory internships with the support of their university. As Wójcik and Krzesiński (2019:127) noted, this aspect is important to note as universities should take measures to create opportunities for students to gain more experience through internships or employment during their studies, as a lack of experience can lead to a greater risk of long-term unemployment.

Respondents were asked whether they had taken steps to gain work experience before graduating (Wójcik & Krzesiński, 2019:129). During their studies, almost two-thirds of the participants gained some experience (Wójcik & Krzesiński, 2019:129). Most often, this was through mandatory internships and commission-based employment (Wójcik & Krzesiński, 2019:129). Other forms of placement included work contracts, volunteering, voluntary internships, unregistered or contractless employment, working in a company or business owned by a family member and running their own business (Wójcik & Krzesiński, 2019:129).

The study also aimed at obtaining information on the key competences required in the field of work in which the respondents were employed, as well as the graduates' strengths in relation to their professional activities and the needs of their current employers (Wójcik & Krzesiński, 2019:131). According to the results, respondents indicated that competences such as diligence and conscientiousness, self-reliance, work organisation, communication skills, stress resistance, commitment, flexibility and self-management were considered important for the workplace (Wójcik & Krzesiński, 2019:131). In addition, respondents indicated that the most common requirement in their job at the time was to develop the skills they already had based on their qualifications (Wójcik & Krzesiński, 2019:131). However, respondents working in their learned profession also reported significant discrepancies between the amount of knowledge and skills they acquired at university and the amount of knowledge and skills they actually used at work (Wójcik & Krzesiński, 2019:131). Regarding the most common requirement employers place on potential employees, the majority of respondents indicated that specific professional experience gained during studies was considered important (Wójcik & Krzesiński, 2019:130). Other requirements included a general total willingness to work, a willingness to accept flexible working hours, regular commute to locations far from their home, mobile working and business travel (Wójcik & Krzesiński, 2019:130). These requirements stem from the need for flexible management in modern organisations, which allows human capital to be adjusted to the demands of the environment (Wójcik & Krzesiński, 2019:130).

As demonstrated in the preceding section, the literature reviewed suggests that factors such as employability assets (knowledge, skills and abilities), the external labour market, work experience, the acquisition of a qualification, practical training in an enrolled programme and the development of skills learned in the enrolled programme influence students' perceptions of employability in the Polish context. A discussion of students' perceptions of employability in the African context is presented next.

3.2.5 *Sub-Saharan Africa*

There are few studies on self-perceived employability in African countries, especially in North African, Central or Middle African, East African and West African countries. Moreover, based on journal articles, dissertations and reviews, there are few country-specific studies on employability and self-perceived employability conducted in the African region. Therefore, this section focuses on employability, drawing on research findings from different sub-Saharan African regions.

In 2021, the average unemployment rates for men and women in sub-Saharan Africa were 6.7% and 6.5%, respectively (Statista, 2022). Both rates were slightly higher than the global average of 6.36% (Macrotrends, 2022; Statista, 2022). Youth unemployment reached an all-time high of 14.50%, up from 12.44% in 2019 and 2020 (Federal Reserve Bank, 2022; Statista, 2022).

Unemployment among young people is a major cause of unrest in Africa (WEF, 2021). According to the International Labour Organization (ILO) (2020c:1), young people in Africa face a variety of challenges. These range from economies that grew before the global financial and economic crisis but were unable to create enough jobs (ILO, 2020c:1) to sluggish post-crisis growth exacerbated by adverse weather conditions, low commodity prices, and the recent COVID-19 impact. According to Penar (2021), one of the main challenges for many African governments is to expand economic opportunities for the continent's 250 million young people. Penar (2021) noted that with an estimated average of 10 to 12 million young people entering the workforce each year and African countries creating only three million formal jobs, many young people remain unemployed or are forced to work in the low-wage and -productivity informal sector to make ends meet.

According to the British Council (2014:2), the employability debate has gained momentum due to Africa's multiple challenges, particularly among graduates, as concerns have grown about the ability of the continent's universities to produce employable graduates who can drive the economy. There are 1 225 accredited higher education institutions in Africa, of which 586 are public (affiliated with or operated by national, state or local governments) and 601 are private

(UniRank, 2021). The QS World University Rankings 2021 listed five African institutions among the top 500, the vast majority of which are in South Africa (Collier, 2021). The top five African universities in 2021 were the University of Cape Town, the University of the Witwatersrand, the American University in Cairo, the University of Johannesburg, and Stellenbosch University (Collier, 2021).

This section intends to shed light on students' self-perceived employability through the lens of studies conducted by Atitsogbe *et al.* (2019), Pitan and Atiku (2017), and Zakaria and Alhassan (2019), all of whom focus on employability in the African context. (Please keep in mind that there is a lack of studies on self-perceived employability in African countries, specifically Northern African, Central or Middle African, East African, and Western African countries; however, the studies discussed here provide insight into some of the factors that influence students' employability in the African context.)

Pitan and Atiku (2017:4) studied employability in the Nigerian context among 600 final-year students of four Nigerian universities. According to Pitan and Atiku (2017:4), the four universities were two federal universities, one state university and one private university covering the following fields of study: Arts/Education/Social Sciences, Pharmacy, Engineering/Technology and Science. The authors used a quantitative approach. The theoretical model developed by Bill Law and Tony Watts (2003) and supported by Rae (2007) (DOTS) was tested (see chapter 2, section 2.3.2.1). Students' perceptions were measured in relation to the following dimensions of the DOTS model: decision-making; opportunity awareness; transition learning; and self-awareness. All four dimensions of DOTS were measured on a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree), using 24 items, 21 of which were used to measure the career guidance activities of the DOTS model and three of which were used to measure students' perceived employability based on items from Jackson and Wilton's (2017) study.

The results of Pitan and Atiku's (2017:9) study clearly show that all four dimensions of the DOTS model of career guidance activities – namely self-awareness, opportunity awareness, decision-making and transition learning skills – had a significant positive influence on the employability of university students in Nigeria. In addition, the results of the study revealed that students were confident of their internal employability and employability skills (Pitan & Atiku, 2017:5). The results also showed that the development of self-awareness and opportunity awareness had a paramount influence on students' employability skills, followed by decision-making skills and transition learning skills (Pitan & Atiku, 2017:11). Pitan and Atiku (2017:11) concluded from their findings that all the studied career guidance activities (i.e., decision-making, opportunity awareness, self-awareness and transition skills) had a positive influence on students'

employability. This study, therefore, concluded that opportunity awareness, self-awareness, decision-making skills and transition learning skills are all predictors of improved student employability, as suggested by the DOTS model (Pitan & Atiku, 2017:11).

Atitsogbe *et al.* (2019) conducted an employability study in Togo, West Africa, examining the association between “two personal resources (career adaptability and general self-efficacy) and two career outcomes (self-perceived employability and entrepreneurial intentions)”. The study included 550 Togolese participants (334 university students and 216 jobseekers) from the fields of economics, business, and technical study. The following scales were used: French versions of Schwarzer and Jerusalem’s (1979) general self-efficacy scale; Rothwell *et al.*’s (2008) self-perceived employability scale for university students; Linan and Chen’s (2009) entrepreneurial intentions scale; and an adapted version of Johnston *et al.*’s (2013) career adaptability scale. According to Atitsogbe *et al.* (2019:5), the purpose of this study was to examine the impact of career adaptability and self-efficacy on two dimensional outcomes: self-perceived employability and entrepreneurial intentions of university students and jobseekers in a context of extreme unemployment and economic constraints.

The results of the study showed that “all correlations between career adaptability, general self-efficacy, self-perceived employability and entrepreneurial intentions were positive and significant for both students and jobseekers” (Atitsogbe *et al.*, 2019:6). As regards career outcomes, the two groups did not differ on perceived employability, but jobseekers performed better on entrepreneurial intentions (Atitsogbe *et al.*, 2019:6). The results of the study also revealed significant and positive correlations between occupational adaptability, self-efficacy and self-perceived employability (Atitsogbe *et al.*, 2019:6). According to Atitsogbe *et al.* (2019:9), this indicates that “occupational adaptability and general self-efficacy are significant predictors of self-perceived employability”. Furthermore, no differences were found in entrepreneurial intentions between students enrolled in economics, business or technical programmes and those enrolled in other subjects (Atitsogbe *et al.*, 2019:6). Similar results were found for jobseekers. Concerning gender, men scored higher on entrepreneurial intentions than women only in the jobseekers group (Atitsogbe *et al.*, 2019:6). Furthermore, the results of the study indicated that general self-efficacy was significantly directly and positively related to entrepreneurial intentions among university students and jobseekers, suggesting that general self-efficacy significantly predicts entrepreneurial intentions (Atitsogbe *et al.*, 2019:9).

Finally, there were no differences in entrepreneurial intentions between graduates who had been jobseekers for a relatively long time and those who had been jobseekers for a relatively short time (more or less than the median of 12 months) (Atitsogbe *et al.*, 2019:7). According to Atitsogbe *et*

al. (2019:10), the results of the study also showed that while general self-efficacy was related to entrepreneurial intentions in both subsamples, occupational adaptability was not. One possible explanation for these findings is that career adaptability is a composite of four different adaptive abilities (i.e., apprehension, control, curiosity and confidence), all of which may not contribute equally to entrepreneurial intentions (Atitsogbe *et al.*, 2019:10). Self-perceived employability, on the other hand, was positively associated with entrepreneurial intentions in both subsamples. These findings, according to Atitsogbe *et al.* (2019:10), reflected the extent to which university students' and graduates' perceptions of employability influenced their intentions to become entrepreneurs.

Moreover, for both target groups, career adaptability and self-efficacy had a strong and significant impact on self-perceived employability. According to Atitsogbe *et al.* (2019:10), this finding highlighted the crucial role of career adaptability and self-efficacy in self-perceived employability. Further results suggest that career adaptability and self-efficacy appeared to have a lower influence on entrepreneurial intentions (Atitsogbe *et al.*, 2019:10), which could be attributed to population characteristics such as context and learning. Self-efficacy was the only significant predictor of entrepreneurial intentions in both groups (Atitsogbe *et al.*, 2019:9). This, according to Atitsogbe *et al.* (2019:11), showed the confidence of students and jobseekers in their ability to cope with the stressful or challenging demands of the labour market.

Finally, a positive correlation was found between self-perceived employability and entrepreneurial intentions. Atitsogbe *et al.* (2019:10) stated that the correlation between the two career outcomes could be explained by the fact that both self-perceived employability and entrepreneurial intentions were associated with the same antecedent condition – self-efficacy. They argued that the results highlighted the importance of career adaptability and, to a lesser extent, self-efficacy as predictors of self-perceived employability in populations facing extreme unemployment in resource-constrained settings (Atitsogbe *et al.*, 2019:11).

Hudu Zakaria and Yussif Nabila Alhassan (2019) conducted an employability study to investigate Ghanaian university students' perceptions of their employability prospects. The study included 368 students from the Ghana University of Development Studies (UDS) and Tamale Polytechnic University (Zakaria & Alhassan, 2019:134). All students from the various faculties of the Ghana UDS, except medical and nursing students, and all Tamale Polytechnic University students were included in the study. Medical and nursing students were not selected for the study, as their employment in Ghana appeared to be more streamlined and secure because they were often employed in different hospitals and clinics after graduation (Zakaria & Alhassan, 2019:134). A quantitative approach and a self-constructed questionnaire developed by the authors were used

to explore how students perceived their employability based on their job preferences, what factors influenced their employability, how they assessed their chances of getting their preferred job, and how they perceived the demands of the labour market (Zakaria & Alhassan, 2019:140-143, 150).

According to Zakaria and Alhassan (2019:139), results on students' preferred employment type after graduation revealed that students considered self-employment, employment in a private organisation, employment in public service, employment in a non-governmental organisation and employment in another organisation as preferred modes of employment. The results showed that most of the students were uncertain about their prospects for their preferred occupation, and most of them rated their prospects as high and very high (Zakaria & Alhassan, 2019:140). A quarter of the students rated their prospects as hopeless, and most of them believed that they would get their preferred job after graduation. According to Zakaria and Alhassan (2019:142), the students' desperation to secure their preferred jobs while studying should be understood in the context of the current high and rising graduate unemployment, which is due to a hiring freeze in the public sector, combined with the current energy crisis in the country, which is negatively affecting private sector hiring and job stability.

The study also examined the factors that influence students' perceptions of employability. The results showed that the following factors had an impact on employability: age; residency status; access to entrepreneurial training; prospect of a preferred job; work experience; and level of study (Zakaria & Alhassan, 2019:152). This was followed by the students' perceptions of their chances of securing a preferred job. The results showed that younger and recent students, as well as those who had already worked, rated their employment prospects more favourably. In addition, students who had undergone entrepreneurial training and students who rated their chances of getting their preferred job as high were found to rate their employability more positively (Zakaria & Alhassan, 2019:154). Regarding perceived labour market requirements, the results showed that respondents considered acquiring a qualification as the most important skill needed in the labour market (Zakaria & Alhassan, 2019:144). This was followed by general skills such as communication, computer, information and technology skills (Zakaria & Alhassan, 2019:144). Also, a small number of respondents considered personal skills such as attitude, trustworthiness, honesty, intelligence and reported competence in the field as essential to graduates' employability in the labour market (Zakaria & Alhassan, 2019:145).

Overall, the results and findings of the above studies show that there are a variety of factors that influence the employability of students in sub-Saharan Africa. These factors include age, self-efficacy, self-confidence, decision-making ability, transition learning ability, academic level,

acquisition of a qualification, work experience, career adaptability, labour market conditions, and previous work experience.

3.2.6 Conclusion

The preceding section discussed global trends in student employability and self-perceived employability in different regions, specifically Australia, the UK, Turkey, Poland, and sub-Saharan Africa. Although the studies used different models, research approaches and/or measurement tools (questionnaires), and the results and findings varied from country to country, it became synoptically clear that the following variables can influence the self-perceived employability of university students: self-awareness; opportunity awareness; decision-making and transition skills; perceived employability attributes; personal factors (skills, knowledge and attitudes); practical work experience during studies; financial support; and the external and internal (if they found employment) labour market.

The next section discusses trends and perspectives in the South African context in relation to employability and students' self-perceived employability.

3.3 NATIONAL TRENDS AND PERSPECTIVES ON STUDENTS' EMPLOYABILITY AND SELF-PERCEIVED EMPLOYABILITY

Following the discussion of factors influencing students' employability in the African context, students' perceptions of employability in the South African context is elaborated on to broaden the discussion of factors influencing students' employability in Africa.

According to the latest Statistics South Africa (2021) results, there are many unemployed young people in South Africa, regardless of educational level. Trading Economics shows that South Africa's overall unemployment rate rose to 35.3% in the fourth quarter of 2021. Youth unemployment (aged 15–24) in South Africa remained unchanged at 66.50% in the fourth quarter of 2021 compared to 66.50% in the third quarter of 2021 (Statistics South Africa, 2021; Trading Economics, 2022). Unemployment among tertiary graduates was recorded at 9.3% in the first quarter of 2021 (Writer, 2021).

Young students are encouraged to pursue higher education to advance their careers (McCune *et al.*, 2010:697). Students in South Africa are instilled with a culture that views university education as the primary path to employment (Duncan, 2013). There is a total of 26 public universities spread across South Africa's nine provinces; the top five are the University of Cape Town, the University of Witwatersrand, Stellenbosch University, the University of KwaZulu-Natal, and the

University of Pretoria in local rankings (Center for World University Rankings, 2022; Writer, 2022a). As mentioned earlier, these five South African universities were also placed among the world's top 500 universities, with UCT being the only one in the top 250 in the QS World University Rankings 2021 (Writer, 2022a).

Employability in South Africa, particularly among graduates, has piqued researchers' interest. This is shown in the research of scholars such as Pitan and Muller (2019), Neneh (2019), and Botha (2021). The work of these authors is incorporated into this study to shed light on the factors that influence students' perceptions of employability in the South African context.

Pitan and Muller (2019) examined the effect of experiential learning on the relationship between university reputation and self-perceived employability among South African undergraduates. A total of 402 respondents in the fields of management, education, law, science, and agriculture at two South African universities were surveyed. The analysis was based on quantitative research methods. The authors used a modified version of Pitan and Atiku's (2017) "university student employability status questionnaire" to collect information on respondents' characteristics, judgments about their university's reputation, exposure to experiential learning (based on work experience and exposure to real-world engagements), and self-perceived employability. According to Pitan and Muller (2019:1278), all the measures in the questionnaire were found to be reliable and valid.

The results of the study confirmed that the reputation of a university can have a significant influence on experiential learning (Pitan & Muller, 2019:1280). Pitan and Muller (2019:1280) claimed that the implication of this result was that students accepted that the reputation of their university determined their exposure to experiential learning activities. Furthermore, the results revealed that experiential learning had a positive influence on self-perceived employability (Pitan & Muller, 2019:1280). According to Pitan and Muller (2019:1280), this showed that students valued exposure to experiential learning activities to improve their employability. Furthermore, this suggests that South African universities should increase their efforts to expose students to real-world experiences, particularly work experience, which would greatly benefit students in gaining practical work experience, developing self-confidence, and improving employability (Pitan & Muller, 2019:1280).

Results on experiential learning show that experiential learning has the potential to close the gap between a university's reputation and its self-perceived employability, particularly for students from disadvantaged backgrounds. Pitan and Muller (2019:1280) propose that experiential

learning can help low-ranked universities improve their relationship between reputation and perceived employability.

The findings also revealed that a university's reputation has a significant impact on perceived employability (Pitan & Muller, 2019:1280). Pitan and Muller (2019:1280) found that students enrolled in highly reputable universities tended to have a more positive perception of their employability than those who came from less reputable universities. Students seemed to understand that the graduate labour market into which they would be entering was not a level playing field in which their skills and personal characteristics would determine their success (Pitan & Muller, 2019:1280). Students understood that attending university, especially a reputable university, had a significant impact on their future opportunities (Pitan & Muller, 2019:1280).

Neneh (2019) conducted an empirical study in 2019 to determine whether personality traits play a significant role in students' self-perceived employability and whether associations are influenced by students' labour market appraisal. The study involved 296 final-year students from the Faculty of Economics and Management Sciences; the study population consisted of students of business administration, economics, industrial psychology, accounting and public management. Neneh used a quantitative research approach and used the Big Five Personality Inventory Scale (BFI) by Gosling *et al.* (2003) to measure students' personality traits, Rothwell's Self-Perceived Employability Scale for university students to measure self-perceived employability, and the Labour Market Evaluation Scale, based on Lazarus and Folkman's (1984) evaluation theory, to measure specific events that influenced a person's cognitions about an event (Neneh, 2019:263).

According to Neneh (2019:264), the results of the study showed that three personality traits – namely conscientiousness, agreeableness, and openness to new experiences – were significantly associated with self-perceived employability. In contrast, the other two personality traits, emotional stability and extraversion, were not related to self-perceived employability. The significant relationship between conscientiousness and self-perceived employability was most likely because individuals with higher levels of conscientiousness tend to be more goal-oriented and are, therefore, more likely to believe that they would find a job after graduation (Neneh, 2019:265). The positive relationship between agreeableness and self-perceived employability influenced students' attitudes towards employability, leading to more optimistic attitudes towards their future employment prospects and motivation to manage unemployment until they get, keep or change jobs. The significant relationship between openness to experience and self-perceived employability can be explained as follows: people who are open to experiences are more likely to have a broader perspective on employability, as they are more likely to have a wide range of

interests and are constantly looking for new experiences (Neneh, 2019:263). According to Neneh (2019:263), this means that they are more likely to pursue a variety of employment opportunities.

Moreover, job market appraisal was found to be significantly and positively associated with self-perceived employability. This finding supports the assumption that students who are more favourable in their assessment of the current labour market environment are more likely to have higher self-perceived employability (Neneh, 2019:268). Based on the data collected, self-perceived employability increased significantly with conscientiousness, but only among individuals who had a positive perception of the current labour market environment (Neneh, 2019:266). This means that the self-perceived employability of students who have a negative perception of the current labour market is unlikely to improve, regardless of their level of conscientiousness (Neneh, 2019:266). According to Neneh (2019: 266), this is concerning because conscientious students tend to perform better academically, which can be a motivating factor for self-perceived employability. Furthermore, the results showed that self-perceived employability is consistently higher among those who have a positive attitude towards the labour market, regardless of their level of openness to experience (Neneh, 2019: 266). However, for those who have negative perceptions of the labour market, openness to experience may help them improve their self-perceived employability to the point where they almost close the gap with those who have positive perceptions of the labour market (Neneh, 2019: 266). This means that when the labour market is bleak, individuals may rely on their openness to new experiences to develop a positive attitude towards potential employment opportunities (Neneh, 2019: 266). The reason for this could be that open-minded individuals are more likely than closed-minded individuals to consider employment opportunities outside their field of study or even to venture into self-employment (Neneh, 2019: 266).

Botha (2021) investigated the self-perceived employability of students at a South African university. In this case, a quantitative cross-sectional survey design was used. A sample of 241 undergraduate students majoring in humanities, natural sciences, agricultural sciences, theology, education, business and management, law, engineering and health sciences participated in the study. The Self-Perceived Employability Scale of University Students, developed by Rothwell *et al.* (2008), was used to measure students' perceptions of their university's reputation, their self-belief in their skills and abilities, the status and credibility of their field of study, and their status and opportunities in the external labour market (Botha, 2021:6).

As the measurement models (one factor [self-perceived employability] and two factors [internal and external employability]) analysed indicated "not a good fit", an exploratory factor analysis was conducted. The results revealed four factors: external labour market; academic engagement and

performance; self-belief in skills and abilities; and university reputation (Botha, 2021:9). The mean scores showed that the respondents scored higher on the internal dimensions of self-perceived employability than on the external dimensions (Botha, 2021:9). This means that although participants were confident in their internal employability (academic engagement and performance; self-belief in skills and abilities), they were not that confident to secure employment in the external labour market (Botha, 2021:9).

According to the results by faculty, students in the Faculty of Business and Administration were more positive about their academic engagement and performance than respondents in the Faculty of Humanities. Students in the faculties of Natural Sciences, Agricultural Sciences, Engineering, and Business and Management were more optimistic about their career prospects outside the university than students in the faculties of Humanities and Health Sciences. In addition, the study found that students in the faculties of Engineering and Business and Management were more optimistic about their job prospects in the external labour market.

According to Botha (2021:9), based on the overall results of the study, “students were relatively confident about their internal employability, but they were not very confident about their ability to find employment in the external labour market”. According to Botha (2021:9), this could indicate that students were aware of the current economic situation, high unemployment and limited opportunities in the country’s external labour market. Regarding the influence of socio-demographic variables on self-perceived employability, the results showed no significant differences between the categories of gender, year of study, and work experience (Botha, 2019:9).

Following a review of the literature by Pitan and Muller (2019), Neneh (2019) and Botha (2021), several variables were found to have a significant impact on university students’ employability, including self-confidence, confidence in skills and abilities, opportunity awareness, conscientiousness, agreeableness, openness to experience, age, ethnicity, experiential learning, university reputation, decision-making, transition learning, personal factors (skills, knowledge and attitudes), entrepreneurial intentions, academic engagement, and the external labour market.

Figure 3.2 presents a summary of the determinants known to influence students’ employability and self-perceived employability, based on the preceding literature on global and national trends and perspectives on students’ employability and self-perceived employability.

(Self-perceived) Employability	
A global and national overview (Chapter 3)	
Internal determinants	External determinants
• Human capital (psychological; technical and nontechnical skills) • Self-confidence • Self-awareness • Opportunity awareness • Agreeableness and openness to experience • Academic engagement and performance • Educational level (Bachelors, M, PhD) • Work experience • Entrepreneurial intentions	• Human capital (social; cultural; scholastic; market value) • External labour market • Field of study • University reputation

Figure 3.2: A global and national overview of external and internal determinants of employability and self-perceived employability (author's own compilation, 2022)

It can be deduced from the findings of the literature review that the external and internal labour market (if they have found employment), field of study, human capital (social, cultural, scholastic, market value) and university reputation are regarded as external factors that influence students' employability and self-perceived employability. On the other hand, the following are regarded as internal factors that influence students' employability and self-perceived employability: human capital (psychological skills); self-confidence; self-awareness; opportunity awareness agreeableness and openness to experience; skills (technical and nontechnical); decision-making skills; transition learning skills; academic engagement and performance; educational level (bachelors, master's, PhD), work experience; entrepreneurial intentions; race and ethnicity; and age.

Figure 3.2 above as well as figure 2.9 (see section 2.6, chapter 2) served as a theoretical guide for the analysis and interpretation of the empirical results in chapter 5. These diagrams allowed for a comparison of the responses of the respondents to determine whether there are similarities or differences, as well as significances, in the determinants of employability and students' self-perceived employability.

The next section discusses the socio-demographic variables that have been identified by several researchers as influencing students' perceptions of employability. In this study, the influence of

these social variables on students' self-perceived employability in their final year of study was investigated.

3.4 THE ASSOCIATION BETWEEN SOCIO-DEMOGRAPHIC VARIABLES AND SELF-PERCEIVED EMPLOYABILITY

This section examines the association between self-perceived employability and a variety of socio-demographic variables (gender, race, field of study, religiosity, geographical location, socio-economic status, parental level of education, age and previous work experience).

3.4.1 Gender

Gender is a term that has psychological and cultural connotations. If the correct terms for sex are male and female, the corresponding terms for gender are masculine and feminine; the latter can be completely independent of (biological) sex (Haralambos & Holborn, 2000:127). Gender is a social structure, but a particular one (Connell, 2009:10). Gender involves a particular relationship to bodies (Connell, 2009:10). This is recognised in the commonly used definition of gender as the expression of a natural difference – the bodily distinction of male and female (Connell, 2009:10). Gender as a social construct varies from one society to the next and is constantly evolving (Rabe, 2015:153; WHO, 2021). According to Rabe (2015:153), gender as a social construct is one of the most important forces in the socialisation of individuals. Rabe (2015:152) describe gender as a construct that is both personal and social, plural, relational, dynamic, and embedded in power relations.

Cifre *et al.* (2018:1) claim that the labour market and employment are gendered in many ways. In Spain, for example, young men under 29 are more likely to be unemployed and women are more likely to work part time (Cifre *et al.*, 2018:1). However, other studies, such as the ILO's (2022) study on the gender gap in employment contradict the fact that women are more likely to find a job than men. In the latter study, the ILO (2022) argues that it is much more difficult for women to find a job than for men.

According to Cifre *et al.* (2019:2), gender has received little attention in research on employability. However, there is some evidence that gender plays a role in conceptual and theoretical debates on employability (WHO, 2021). Past research has produced mixed results on the influence of gender on self-perceived employability, with most findings suggesting that there is no significant relationship between gender and self-perceived employability. However, some studies showed

that gender is an internal factor that can affect employability and employment prospects, as men are thought to have more influence on the labour market than women (ILO, 2017).

In a study conducted by Cifre *et al.* (2019), which examined the influence of gender, gender identity and perceived employability among 427 students (employed [N = 181] and unemployed [N = 246]) in the Spanish context, the results showed that there was a significant relationship between gender and students' perceived employability. Employed men felt more employable than the rest of the sample (employed women, and unemployed men and women) (Cifre *et al.*, 2019:1). In a study conducted by Pitan and Muller (2019:363) among 402 final-year students at two black-dominated universities in South Africa majoring in management studies, education, law and science, and agriculture, a significant difference in self-perceived employability was found between male and female students, with male students showing higher levels of self-perceived employability than their female peers (Cifre *et al.*, 2019:363). According to Cifre *et al.* (2019:363), male students' greater confidence could be attributed to the fact that they perceived themselves to have better chances in the labour market and, therefore, considered themselves more employable, but gender stereotypes could also be responsible for this result.

An employability study conducted by Vargas *et al.* (2019) aimed to validate Rothwell *et al.*'s (2008) self-perceived employability scale and examine its relationship with socio-demographic variables in Spain with a sample of 1 502 Spanish students from a wide range of disciplines, including arts and humanities, social sciences and law, engineering and architecture, health sciences, and natural sciences. They found that the average self-perceived employability score of men was higher than that of women (Vargas *et al.*, 2019:233). In contrast, Thindwa (2016) discovered a non-significant relationship between gender and employability in a study investigating factors influencing the employability of technical graduates in Malawi. The study sample comprised of 81 graduates and 30 companies and examined a range of variables such as age, gender, educational attainment and skills (Thindwa, 2016:iii). Other studies by Bezuidenhout *et al.* (2019) and Botha (2021) also support this finding. Bezuidenhout *et al.* (2019:26) found no significant difference between gender and self-perceived employability in their study examining the self-perceived employability of 725 adult learners in an open distance learning environment. Botha (2021) examined the self-perceived employability of undergraduate students at a South African university and found no significant differences between the mean scores of male and female respondents for all dimensions (factors) of self-perceived employability. The study sample consisted of 241 undergraduate students majoring in the humanities, sciences, agricultural sciences, theology, education, business and management, law, engineering, and health sciences.

Drawing on his theory of habitus, Bourdieu (2001:11) viewed gender as socially constructed and described gender inequality as the most enduring and insidious form of discrimination, limiting individuals' choices in part by shaping their preferences. Edgerton *et al.* (2014:182) emphasise that habitus operates within the framework of gendered expectations conditioned by gendered socialisation and can also be characterised by significant gender differences such as power and inequality. As an integral part of the field–habitus connection, gender enables a better understanding of the dynamics of power and inequality. Bourdieu's field theory can explain quite simply that women, as social producers within a social environment, have their own position in social spaces as a subset of social power. Their position as the dominant gender of the dominant class (Bourdieu, 2001) is difficult to discern because of the gendered hierarchies of domination, for example, patriarchal structures that occur at every level of the general social field (Lovell, 2004:49). Therefore, based on previous research findings on the relationship between gender and self-perceived employability, which produced mixed results, it can be concluded that much more research is needed to examine the relationship between gender and employability or self-perceived employability.

3.4.2 Race

According to Giddens and Sutton (2013:675), race is one of the most complex concepts in sociology, not least because most scholars now reject its supposedly "scientific" basis. Despite this, the term is still widely used in everyday life, as many people still believe that people can be divided into biologically distinct "races". Ferrante-Wallace *et al.* (2016:179) emphasises that the concept of race refers to a system of classifications used to categorise people. Haralambos and Holborn (2000:200) argue that the concept of race can be described based on biological theories, such as phenotype, which is the physical characteristics of a person, such as hair and skin colour, and genotype, which refers to the underlying genetic differences between groups of people.

Race remains an interesting and controversial factor among researchers when it comes to a person's employment prospects (Djamba & Kimuna, 2011:1). Despite the widespread assumption that hiring depends solely on a person's qualifications, in the US, for example, race is considered an influential factor in employment prospects, considering that the majority of Hispanics and African Americans are not hired for jobs that rely more on intellectual skills and abilities than manual labour, simply because they are not considered qualified for such jobs, even though some of them are (Djamba & Kimuna, 2011:1). Moreover, according to the United States Bureau of Labor Statistics, more Whites were employed in labour markets in the US in 2020 than Hispanics and African Americans combined. However, it should be noted that Whites make up the majority (77%) of the labour force in the US (U.S. Bureau of Labor Statistics, 2020). They are followed by

Blacks and Asians, who make up another 13% and 6%, respectively (U.S. Bureau of Labor Statistics, 2020). American Indians and Alaska Natives made up 1% of the labour force, while Native Hawaiians and other Pacific Islanders made up less than 1% (U.S. Bureau of Labor Statistics, 2020). Historical and current trends in global markets, particularly in the US, show that people's earnings in the labour market vary according to their race (Djamba & Kimuna, 2011:1).

In South Africa, on the other hand, the labour force participation rate by race shows that Black South Africans reached 55% and White South Africans 68.7% in the fourth quarter of 2021. In South Africa, there is no evidence that wealth inequality has declined since the end of Apartheid (Bloomberg, 2020). During colonialism and structured apartheid from the late 1940s onwards, Black South Africans were largely denied economic opportunities. However, in more than a quarter of a century of democratic rule, a Black middle class and a Black economic and political elite have emerged. However, this does not change the fact that there is still, or could be, issues of employment and race in South Africa. This means that there is still much research to be done on the influence of race on employment in South Africa.

Regarding the relationship between race and employability or self-perceived employability, previous research has produced mixed results. Oosthuizen *et al.* (2014) examined the relationship between 108 workers' career anchors and their psychosocial employability attributes as important occupational metacapacities in contemporary career development. The authors found no significant difference between racial groups (Black, African, Mixed Race, Indian and White) and their employability attributes and perceptions (Oosthuizen *et al.*, 2014:8). Similarly, in a study conducted among 647 low-wage workers in the London labour market, Croucher *et al.* (2018) found that race (defined as Black or White) had very little impact on perceived employability.

In contrast, Bezuidenhout *et al.* (2019) and Ottino *et al.* (2010) discovered racial differences in self-perceived employability. Bezuidenhout *et al.* (2019) examined 725 adult learners' self-perceived employability characteristics in an open distance learning environment. The results of the study showed that there was a significant difference between the self-perceived employability of Black, White and Indian ethnic groups, with White students reporting higher levels of employability than the other ethnic groups (Bezuidenhout *et al.*, 2019:28). Ottino *et al.* (2010) examined the relationship between personality and employability in a sample of 100 employees of a meat-processing company in South Africa. The results showed a significant difference in perceptions of employability across racial groups (Black, White and Indian), with Indian

employees perceiving themselves as more employable compared to Black and White employees (Ottino *et al.*, 2010:116).

Previous research has not provided clear-cut results when it comes to the influence of race on self-perceived employability. However, a review of the literature shows that race has a significant impact on employment, particularly in South Africa, where formal discrimination during Apartheid and the denial of opportunities have left a legacy of racial inequalities (United Nations, 2016:1).

3.4.3 *Field of study*

According to Vocabulary (2022), a field of study refers to a branch of knowledge taught and researched in higher education and is usually defined by university departments and learned societies. Humburg *et al.* (2013:8) argue that initial employment opportunities after graduation are likely to be strongly influenced by easily identifiable characteristics such as the field of study. Humburg *et al.* (2013) claim that employers place a high value on the fact that graduates' fields of study fit the tasks of a particular job description.

Pitan and Muller (2019) discovered a significant relationship between students' field of study and their self-perceived employability. The authors examined how university students perceived the likelihood of their success in the graduate job market and explored the associated effects of two demographic factors, gender and field of study. The study was conducted among 402 final-year university students in management, education, law, science and agricultural sciences (Pitan & Muller, 2019:355). The results showed that education students had higher levels of self-perceived employability, followed by management, law, and natural and agricultural sciences students (Pitan & Muller, 2019:364). These results can be attributed to the fact that the aforementioned fields of study are specialised fields of study and science-related fields (Pitan & Muller, 2019:364). In particular, education graduates showed higher levels of employability due to the high demand for qualified and competent teachers (Pitan & Muller, 2019:364).

In a study conducted by Botha, a significant difference was found between the field of study and students' self-perceived employability (Botha, 2021:10). The results revealed that students in the humanities faculty had lower levels of self-perceived employability compared to students in other disciplines (Botha, 2021:10). In addition, the study found that engineering and business and management students were more optimistic about their employment prospects in the external labour market than students in other disciplines (Botha, 2021:10). This result can be attributed to the fact that there are more employment opportunities in the external labour market for students of engineering and economics than for students of humanities and health sciences.

The results of a study conducted by Rothwell *et al.*, which examined the expectations and self-perceptions of employability of business students in the UK, found that there was a relatively weak relationship between students' field of study and their self-perceived employability (Rothwell *et al.*, 2008:8). Fulgence (2015:198), however, found a significant relationship between the field of study and students' employability. The study was conducted to determine the employability of individuals from different socio-demographic backgrounds in a sample of 402 university graduates in Tanzania. The results showed that students of engineering, medicine, business and economics rated themselves as more employable than students of mathematics, biology, humanities and languages, who were least likely to find employment in the Tanzanian context (Fulgence, 2015:117). The relationship between field of study and employability is also confirmed in a study conducted by Koloba (2017), who examined the relationship between university students' employability skills and their perception of employability. Fulgence (2015:32) asserts that a university graduate's field of study has an influence on the development of employability skills and prospects in the labour market. Field of study plays a key role in determining the type of job graduates obtain (Fulgence, 2015:93) and influences graduates' future career development (Stoyanova & Blaskova, 2014:642).

3.4.4 *Religiosity*

Religiosity refers to the importance of religion in a person's life (Macionis & Plummer, 2012:661). According to Macionis and Plummer (2012:661), Charles Glock (1959, 1962) identified five different dimensions of religiosity, namely: *experiential religiosity* (the strength of a person's emotional attachment to a religion); *ritual religiosity* (the frequency of ritual acts such as prayers and church attendance); *ideological religiosity* (the degree of a person's belief in a religious doctrine); *consistent religiosity* (the extent to which religious beliefs play a role in a person's daily behaviour); and *intellectual religiosity* (a person's knowledge of the history and teachings of a particular religion).

A person's social identity is formed by the social categories with which they identify (e.g., gender, ethnicity, class and religion) (Heliot *et al.*, 2019:155). The institutional nature of religiosity is exemplified by its ubiquitous presence in certain work environments. For example, while some employees, such as teachers in a yeshiva or parochial school, are obliged to maintain a particular religious identity, others may choose to reveal their religious identity in other settings (Heliot *et al.*, 2019:155). Religions operate in a social context where some are accepted while others are stigmatised (Heliot *et al.*, 2019:155). Little attention has been paid in the literature to the relationship between religiosity and employability and self-perceptions of employability, particularly among university students. Despite this unfortunate finding, there are studies by

authors such as De Soto *et al.* (2018) and Mahazan *et al.* (2015) that measured the relationship between religiosity and employability.

De Soto *et al.* (2018) conducted a study that examined the impact of college students' religious commitment on four key outcomes: (1) academic ethics, (2) academic performance, (3) academic honesty, and (4) personal stress. The study was conducted among 39 000 students at a large university in the southwestern United States (De Soto *et al.*, 2018:196). According to De Soto *et al.* (2018), the impact of religion on student performance has not been well studied and there is no consensus on this topic. The results of their study shed light on the moderating influence of religion on students' academic ethics (i.e., their engagement with their coursework). The results showed that no significant relationship was found between students' religiosity and their academic performance. Similarly, no statistically significant relationship was found between students' religiosity and academic integrity, or between personal stress and religiosity (De Soto *et al.*, 2018:200). De Soto *et al.* (2018) also compared the academic ethics of religious and non-religious students and found that religious students were more committed to their studies than non-religious students. However, regarding academic performance and academic honesty, religious students did not appear to be significantly different from other (non-religious) students (De Soto *et al.*, 2018:202). In concluding their study, the authors emphasised the need for further research to confirm these findings.

A second study that examined the influence of religiosity on students' perceptions of employability was conducted by Mahazan *et al.* (2015). The study examined the predictors of employability among graduates of University Sains Islam Malaysia (USIM) and used a structured Malay self-administered questionnaire among 1146 respondents majoring in Islam (Mahazan *et al.*, 2015:126). According to Mahazan *et al.* (2015:127), the study aimed to explore perceptions of employability among Islamic graduates at USIM. The results of the study showed that religiosity has a significant relationship with graduate employability and that religiosity is a variable that fully mediates the influence of other predictors on graduate employability (Mahazan *et al.*, 2015:134).

From the above, it is clear that the influence of religiosity on perceptions of employability is under-researched, thus, it is of paramount importance that further research be conducted to investigate the association between the two variables. Next, the influence of geographical location on students' employability and employability perceptions is discussed.

3.4.5 *Geographical location*

Geographical location is defined as the physical location of a person or an organisation (Jovinius, 2015:2; Mallough & Kleiner, 2001:119). According to Majid *et al.* (2020:39), it is a key factor that influences a person's individual abilities, employability and overall functioning, including physical and mental health (American Psychological Association, 2017:1). The variable of geographic location has hardly been investigated in studies on employability. However, the studies by Sadak *et al.* (2017) and Botha (2021) shed light on the influence of geographical location (where students grow up) on employability.

Sadak *et al.* conducted a study among 581 Malaysians in 2017 to investigate the level of marketability and employability of students in Malaysian tertiary institutions. The influence of geographical location was one of 10 demographic factors that were examined to determine whether they could influence the marketability and employability of Malaysian tertiary students (Sadak *et al.*, 2017:288). The results of the study revealed that students from urban areas had higher perceptions of employability than students from rural areas. One possible reason for this is that students from urban areas may have experienced that they benefitted from different resources, administrative structures and learning environments compared to students from rural areas.

In a study conducted by Botha, which examined the self-perceived employability of 241 undergraduate students from a South African university, the results showed a significant difference between the mean scores of the different geographical areas in which the respondents had grown up and their employability perceptions (Botha, 2021:9). The results suggest that students from rural areas (such as villages [traditional settlements] and farms) and small towns differ significantly from students from towns and big cities (Botha, 2021:9). According to Botha (2021:9), the results show that respondents who grew up mainly in towns and big cities held more positive opinions about their academic engagement and performance than those who grew up mainly in small cities and rural areas. Moreover, respondents who grew up mainly in big cities rated their academic engagement and achievement more positively than those who grew up mainly in towns (Botha, 2021:9).

According to Harry *et al.* (2018:7), there is a discrepancy in perceptions of employability between low-income and developed areas, because low-income areas are not designed to provide the same learning opportunities and experiences as urban or high socio-economic areas, but further research is needed on this variable.

From the above, it can be deduced that people from urban or high-income areas may have a more positive opinion about their perceived employability than people from rural or low-income areas. Following this discussion, the impact of socio-economic status on employability and students' perceptions of employability are explored.

3.4.6 *Socio-economic status*

Socio-economic status is a combined economic and social measure of a person's economic and social position relative to others, determined by income, education and occupation (Worthy *et al.*, 2020). However, the term “socio-economic status” (SES) is more commonly used to refer to socio-economic inequality (Worthy *et al.*, 2020). Worth *et al.* (2020) explain that this is because socio-economic status is usually divided into three classes (upper, middle and working class) to describe the three places a family or individual can occupy compared to others. According to Giddens (1997:243), the upper class refers to wealthy industrialists and employers who own or directly control productive resources and have what is called wealth or “old money”. The middle class refers to most white-collar workers and professionals who have a decent income that meets their needs. Finally, the working class refers to blue-collar or white-collar workers who must live on a minimum wage. In some industrialised countries such as France or Japan, there is still a fourth class (Giddens 1997:243). This fourth class reflects the underclass, which refers to people engaged in traditional types of agricultural production (Giddens 1997:243). Macionis and Plummer (2012:270) emphasise that the term socio-economic status was often used by sociological theorists such as Marx and Weber to refer to a composite ranking based on various dimensions of social inequality such as class position, social status and power.

According to the American Psychological Association (2017), a person's socio-economic status (high or low) determines their employment prospects, considering that people from low socio-economic backgrounds often receive low-income jobs because of lower levels of education, poverty and poor health, which negatively affect them. On the other hand, people from affluent socio-economic groups may receive quality educational opportunities, create an information-rich environment, and have better access to resources, which has a positive impact on them (American Psychological Association, 2017). Therefore, it could be assumed that socio-economic status is related to the quality of social capital, which improves employment prospects (Phongsavan *et al.*, 2006:2556).

The term social capital includes social networks and relationships (e.g., a family or a nation, an association, or a political party) to which an actor has access (Delva *et al.*, 2021:3). Bourdieu (1996:235) argues that social capital provides the individual actor with a structured space of

opportunities consisting of an ordered system and an identifiable network of relationships that influence their habitus. In this regard, it can be argued that students' social networks and relationships provide them with an economic advantage in today's world of social connections, because the spaces students occupy in today's labour market depend not only on their qualifications but also on the networks/"connections" they possess in order to have better influence and economic opportunities. Bourdieu (1986:51) would argue that these "connections" create an individual's habitus because they give them access to other fields that are likely to be available to them, and this ultimately accredits the actor's social field and their position (social identity) in that social field.

Ebuenyi *et al.* (2019), Harry *et al.* (2018) and Aloui and Eldin (2020:4) have identified socio-economic status as a social variable that influences the performance of graduates in the labour market. The results of the studies are discussed below.

In a study conducted by Ebuenyi *et al.* (2019:1), investigating the barriers to employment of 14 students with intellectual disabilities in Kenya, socio-economic status was found to have a significant impact on the participants' employability and employment prospects. According to the authors, this was due to students viewing their socio-economic status as a barrier to employment opportunities (Ebuenyi *et al.*, 2019:4). Furthermore, participants in the study discovered that socio-economic status was a significant predictor of their experience with mental illness (Ebuenyi *et al.*, 2019:6). This was because it determined whether they were able to buy medication or access hospital care, buy food, complete their education despite interruptions, or use self-employment as an alternative to employment (Ebuenyi *et al.*, 2019:6).

In a study conducted by Harry *et al.* (2018) among 30 final year undergraduate students, measuring perceptions of factors influencing employability (Harry *et al.*, 2018:7), it was confirmed that socio-economic status has a significant impact on students' employability. The study was conducted at a rural university in South Africa. According to the authors, the results of the study can be explained mainly by the fact that the students included in the study came from poor backgrounds and as a result were exposed to poor-quality education, which limited their chances of scanning the labour market and obtaining various opportunities (Harry *et al.*, 2018:7).

A study conducted by Aloui and Eldin (2020) looked at how social emotional competency and socio-economic factors influences the employability of 102 female graduates from the Tathleeth Faculty of Arts and Science at the University of Bisha. The authors found that these variables had a significant influence on graduates' employability. According to Aloui and Eldin (2020:9), it was discovered that socio-economic factors, such as cultural values, the nature of work and social

status, influenced some graduates' employment opportunities, regardless of their skills, which may have had an influence on the country's economy and gross domestic product (GDP) (Aloui & Eldin, 2020:9).

The above literature suggests that socio-economic status may influence one's employability perceptions and that socio-economic status may be perceived as a barrier to employment opportunities, resources and, as Bourdieu would say, to better "positioning in society". Following this discussion, the influence of parents' level of education on employability and students' perceptions of employability is explored.

3.4.7 *Parents' level of education*

It is widely recognised that parents play a key role in the development and career success of their children. This is because parental behaviour has an impact on children's socio-emotional and cognitive development (Grusec & Danyliuk, 2014:1). Within the family, children are largely judged and treated according to particularistic standards (exclusive attachment to their own group) (Haralambos & Holborn, 2000:779). According to Haralambos and Holborn (2000:779), the child's status is ascribed within the family (implying that it is fixed from birth). The family, according to Talcott Parson, has two main functions: first, primary socialisation and second, stabilisation of personality (Giddens & Sutton, 2013:422). Primary socialisation is the process by which children learn the cultural norms of the society into which they are born (Giddens & Sutton, 2013:422). In this area, the family plays the most important role in the development of the child's personality. Personality stabilisation, on the other hand, refers to the role the family plays in stabilising adult personalities and supporting emotional development (Giddens & Sutton, 2013:422).

Thus, it could be said that the child's development is primarily influenced by the particular norms and ascribed status of the family to the achieved status of the adult society to which they are exposed (Haralambos & Holborn, 2000:779). For example, parents with advanced degrees, such as doctorate degrees, make education a priority for their children and their children will reciprocate the norm set by their parents or the value they ascribe to them (Nelson, 2009:5). Their past successes serve as role models for their children and instil disciplined study habits and goal-oriented behaviour (Nelson, 2009:5). Through parental education, children are exposed to cultural capital, which Hirudayaraj (2011) defines as "knowledge, language, values, experiences, and practises associated with a dominant socio-economic group".

According to Majid *et al.* (2020:38), there has been little research on the impact of parental education on children's development, particularly as regards employability. Prenatal education is

an important indicator of socio-economic status because it predicts children's educational and behavioural outcomes (Dubow *et al.*, 2009:2).

Khan *et al.* (2015) conducted a study to examine the influence of parental education level on the academic achievement of 200 secondary school students in Rajanpur district of South Punjab. Using a quantitative approach, the results of the study confirm that parents' educational level had an impact on their children's academic performance (Khan *et al.*, 2015:76).

Moreover, Gowsalya and Kumar (2016:6) found no significant relationship between the employability of university students and the educational level of their parents. The study was conducted among 1 775 arts and science students from various institutions in and around Namakkal district in Tamil Nadu. According to the authors, the study analysed employability and its impact on arts and science students. The main objective of the study was to determine the relationship between employability and parental education.

Bourdieu's theory of cultural reproduction can explain how parental educational attainment has an impact on students' employability and perceptions of employability. According to Bourdieu (1986:17), cultural capital, which can be transformed into economic capital under certain conditions, consists of the knowledge and skills of the actor. It is assumed that differences in cultural capital and habitus between social classes begin in early childhood and accumulate over time. Actions to accumulate cultural capital require the (re)production of habitus. According to Sontange (2019:82), the characteristics and traits that (re)produce habitus occur in the form of cultural history, values and dispositions that formulate habitus. In most cases, the primary traits and characteristics that are (re)produced in the child's habitus are those shaped by the cultural history, values and dispositions of the family or parents. Bourdieu's theory thus suggests that parents with prestigious educational qualifications (e.g., honours, master's and PhDs) and prestigious white-collar jobs are more likely to have a greater influence on their children's educational attainment and perceptions of employability.

3.4.8 Age

There is no universal definition of age and age is defined in many ways. However, a common definition of age is associated with a chronological number based on the number of months or years since a person's birth (Wicklund & Kowalczyk, 2022). In relation to age and employability, previous studies have reported age differences in terms of self-perceived employability. Studies conducted by Van der Heijden (2002), Solnet *et al.* (2012) and Botha (2021) investigated the influence of age on self-perceived employability.

Van der Heijden (2002:52) investigated the perceptions of employability among 406 higher level employees. The employees were divided into three age groups: the starters (20-34 years), middle-aged (35-49 years) and seniors (50+). The results indicated that the starters considered themselves more employable compared to the middle-aged and older workers (Van der Heijden, 2002:53). Furthermore, the results revealed that the middle-aged group considered themselves more employable than the older workers. Therefore, suggesting that the older the employee, the lower his or her employability perceptions (Van der Heijden, 2002:53).

A study conducted by Solnet *et al.* (2012:41) support the findings of the study conducted by Van der Heijden (2002). Solnet *et al.* (2012) investigated the employability perceptions of 914 hospitality workers. The workers were divided into two generational groups of the working population: Generation Y (born between 1979-1994) and non-generation Y (Generation X: born between 1965-1978; Baby Boomers: born between 1945-1964). The results of the study indicated a significant difference between Generation Y and non-Generation Y workers. The Generation Y cohort considered themselves more employable than their non-Generation Y counterparts (Solnet *et al.*, 2012:43). Contrary to the aforementioned findings, a study conducted by Botha, who examined the self-perceived employability of 241 students at a South African university, found no significant differences between the mean scores of first-year and senior respondents for all the dimensions (factors) of self-perceived employability (Botha, 2021:8).

From the above, it can be argued that previous research showed mixed results for age in terms of self-perceived employability. Following this discussion, the influence of previous work experience on self-perceptions of employability are explored.

3.4.9 Previous work experience

The term “work experience” is defined as the time spent in a particular organisation or in one's own company from which learning can be achieved (Reddy, 2016). There are different types of work experience that can be listed according to different factors such as the period of time and the role one has played in certain organisations (Reddy, 2016). According to the United Kingdom Commission for Employment and Skills (UKCES) (2013:3), work experience is key to bridging the gap between education and the world of work. Work experience has long been recognised as essential to the success of rigorous higher education programmes (Helyer & Lee, 2014:349). It is an important component of employability because it enhances a person's skills (Helyer & Lee, 2014:349) and allows students and graduates to reflect on what they have learned in formal education and apply it in the workplace (Helyer & Lee, 2014:353).

A study conducted by Jackson and Wilton (2017) examined the influence of career management skills, work experience and individual characteristics among 480 business undergraduates at universities in the UK and Australia. They found that there was a significant relationship between students' perceived employability skills and work experience. According to Jackson and Wilton (2017:757), this finding can be explained by the fact that students are likely to be more aware of and have more practice in demonstrating and articulating the skills and personal attributes that are considered important for successful employment. This finding is supported by a study conducted by Beaumont *et al.* (2016:7), who examined employability in the context of higher education. The sample of the study included 57 undergraduate marine sports science students at a post-1992 higher education institution in the UK. According to the authors, work experience is an increasingly recognised factor in determining students' employment prospects and is therefore perceived as an important aspect that students value (Beaumont *et al.*, 2016:7).

The association between prior work experience and employability was also confirmed in a study by Qenani *et al.* (2014:209). Qenani *et al.* (2014) investigated students' self-perceptions by measuring their expectations of employment among a sample of 987 students in the agriculture, food, environmental science and engineering fields of study. According to Qenani *et al.* (2014:206), work experience was found to improve students' self-perceived employability. In addition, perceptions of employability increased when respondents reported that work experience gained through an internship enabled them to align their career planning with their academic planning to some extent, which increased their confidence in their employability (Qenani *et al.*, 2014:208). Contrary to these findings, a study conducted by Botha, who examined the self-perceived employability of 241 students at a South African university, found no significant differences between the mean scores of participants with and without previous and current work experience (Botha, 2021:9).

In summary, employability research remains critical as the economy shrinks and competition for graduate jobs increases (Goodman & Tredway, 2016:9). Many factors have been shown to influence student employability, including race, gender, previous work experience and socio-economic status. Other factors such as geographic origin/location, age, religiosity and parental education level have been overlooked in studies of employability and are also explored in this study to determine if there is an association between these variables and students' self-perceived employability.

The following section provides a discussion of the employability skills required in the 21st century, highlighting some of the complexities in our society, which is characterised by instant access to information, rapidly changing digital tools and the ability to collaborate conveniently on a global

scale. Today's modern economy requires the development of skills that enable one to work effectively and productively in the 21st century, and the next section highlights the respective skills that researchers and employers have found to be of utmost importance.

3.5 EMPLOYABILITY SKILLS REQUIRED IN THE 21st CENTURY

The 21st century has generated considerable debate about the workforce of the future, particularly in light of developments in the Fourth Industrial Revolution (4IR), characterised by increasing automation and technological advancement (SBPP, 2021:3). The 4IR, as defined by Schwab (2016), is a technological revolution that is fundamentally changing the way we live, work and interact with each other. It is a revolution defined by the merging of technologies that are gradually disrupting the physical, digital and biological spheres while reshaping almost every industry with respect to production, management and governance in all countries (Schwab, 2016).

4IR advances have increased the demand for reskilling, upskilling, education and redeployment (WEF, 2021a:3). The South African Board for People Practice (SABPP) (2021:3) defines reskilling as the process by which individuals acquire new skills in order to move into a completely new role. In contrast, upskilling is the acquisition of new skills to stay in or move up in a job due to changing skill requirements, focusing on specific skills that are in demand (SABPP, 2021:6).

Today's labour market requires skills that draw on current education systems to provide the flexibility that lifelong learners need in the workplace (WEF, 2021a:2). Global economic changes have brought the world of work to a crossroads where skills are becoming the currency of the labour market (WEF, 2021a:2). The WEF (2021a) highlights the importance of a reskilling revolution to prepare for the 4IR and the associated technological changes in the new world of work (SABPP, 2021:3). This is because skills are a vital component of employability, which refers to the abilities that individuals need to acquire to advance in and between jobs and to adapt to changing technological and labour market conditions (ILO, 2013:1).

Employment opportunities for the future workforce will require students to adapt their skills to emerging trends in the workplace. Table 3.2 summarises the skills that individuals need to acquire in order to succeed in the 21st century workplace and in the 4IR. The table includes data from a variety of sources, including Deloitte (2018), Doyle (2020), Herrity (2022), Kaplan (2022), and Scott (2021), Tarver (2021) and TechnoFunc (2020), among others.

Table 3.2: Skills individuals required for the world of work in the 21st century and the 4IR

Skills	Description	Author
Complex problem-solving	A set of self-regulatory psychological processes and activities required in dynamic environments to achieve ill-defined goals that routine actions cannot meet. Innovative tactics and a diverse set of strategies must be used.	Dorner and Funke (2017:6) Aleksanyan (2021)
Critical thinking	Self-guided, self-disciplined thinking that attempts to reason at the highest level of quality in a fair-minded way.	Elder (2007) Doyle (2020a) Doyle (2020b)
Creativity	The ability to think about a task or a problem in a new or different way, or the ability to use the imagination to generate new ideas.	Birt (2022) Hansen (2018)
Coordinating with others (collaboration)	The ability to collaborate with one or more people to complete a project or task, or to develop ideas or processes.	Herrity (2022) Doyle (2020c) Kaplan (2022)
Emotional intelligence	The ability to understand and manage your emotions and the emotions of others.	Landry (2019) Moore (2022)
Judgement and decision-making	The ability to combine personal qualities with relevant knowledge and experience to form opinions and make decisions.	Sysoeva (2020) Likierman (2020)
Negotiation	A set of characteristics such as communication, persuasion, planning, strategising, and cooperation that enable two or more parties to reach an amicable agreement.	Herrity (2022b) Vojvodić <i>et al.</i> (2020)
Cognitive flexibility	The ability of an individual to adapt their behaviour and thinking in response to their surroundings.	Foothills Academy (2018) Miller (2021)
Workforce readiness	This is fundamental to individuals' entry to and ongoing success in the workplace, ranging from initial job search to maintaining continuous employment.	Deloitte (2018) Scott (2021)
Soft skills	Include personal characteristics, social skills and communication abilities that contribute to interpersonal relationships and interactions with others.	Deloitte (2018) Doyle (2021)
Technical skills	Knowledge and capabilities to perform specialised tasks.	Deloitte (2018) TechnoFunc (2020)
Entrepreneurship	Knowledge and abilities that aid in the creation and development of a workplace opportunity or idea.	Deloitte (2018) Tarver (2021)

Source: Author's own compilation (2022)

The above-mentioned skills are discussed below in more detail.

- **Complex problem-solving skills**

Dorner and Funke (2017:6) define complex problem-solving skills as “a set of self-regulatory psychological processes and activities required in dynamic environments to achieve ill-defined goals that routine actions cannot meet”. The problem-solving process combines cognitive, emotional and motivational aspects, particularly in high-stakes situations (Dorner & Funke, 2017:6). The process usually involves knowledge-rich requirements and collaboration among different persons. According to Aleksanyan (2021), employers in the labour market are prioritising complex problem-solving skills because of the rapidly shifting global economy. This implies that this skill can be used in any industry, in all fields, from business to technology and healthcare (Aleksanyan, 2021). Complex problem-solving is an essential skill because it enables for critical thinking and innovative solutions (Aleksanyan, 2021).

- **Critical thinking**

Critical thinking is self-directed, self-disciplined reasoning that strives for the highest level of quality while remaining objective (Elder, 2007). According to the WEF (2021a:19), critical thinking abilities include the ability to generate novel ideas, improvements and solutions through the combination of ideas or information and the establishment of connections between fields and perspectives. Critical thinking refers to the ability to objectively analyse data and reach a reasoned conclusion (Doyle, 2020a). It entails assessing data, facts, observable phenomena and research findings (Doyle, 2020a). Individuals with a high level of critical thinking are capable of detecting patterns, observing and interpreting information, and capitalising on new ideas to gain economic or social value (Doyle, 2020b).

- **Creativity**

The term “creativity” refers to the ability to think about a task or a problem in a new or different way, or the ability to use the imagination to generate new ideas (Birt, 2021a). According to the WEF (2021a:19), it involves a person’s ability to imagine a new idea or concept as well as something that does not exist. It is a feature that promotes teamwork and a process that allows employees to seek out new information, knowledge and novel ways to complete tasks in an original manner – a spontaneous approach to completing tasks that have not previously been completed (Hansen, 2018; Viola, 2019).

- **Coordinating with others (collaboration)**

The ability to coordinate with others/collaborate is the ability to work with one or more people to complete a project or task, or to develop ideas or processes (Herrity, 2022a). Understanding a

variety of perspectives, managing priorities from everyone in the group, and meeting expectations as a reliable member of a team are all examples of collaboration skills (Doyle, 2020c). Collaborative skills include several other skills such as written communication, verbal communication, active listening, feedback, and inclusivity skills (Kaplan, 2022).

- **Emotional intelligence**

The ability to recognise, manage and comprehend emotions is referred to as emotional intelligence (Landry, 2019). This includes being able to recognise and interpret one's own emotions as well as the emotions of others (Landry, 2019). These abilities have been linked to a variety of benefits, including academic achievement, decision-making abilities, and overall life success (Cherry, 2022b). Some experts believe that emotional intelligence, or EQ, is more important than intelligence (Cherry, 2022b). Emotional intelligence skills are believed to be huge contributors to our overall success in life due to their influence on our ability to self-manage and motivate (Moore, 2022).

- **Judgement and decision-making**

Judgement and decision-making is the ability to combine personal qualities with relevant knowledge and experience to form opinions and make decisions (Likierman, 2020). Sysoeva (2020) defines judgement and decision-making skills as the ability to make well-considered and effective decisions, reach reasonable conclusions, and form objective opinions. Overall, it is an important skill that demonstrates one's ability to objectively assess situations or circumstances using all the relevant information and apply past experience in order to come to a conclusion or make a decision (May, 2021).

- **Negotiation**

Negotiation skills are a set of skills such as communication, persuasion, planning, strategising, and cooperation that enable two or more parties to reach an amicable agreement (Herrity, 2022b). It is a "give and take" process that results in a compromise in which each side makes a concession for the benefit of everyone involved (Vojvodić *et al.*, 2020:48). According to Herrity (2022b), negotiation is a sought-after leadership skill that helps businesses to achieve their goals. Negotiation skills are characterised as a frontline skill that are essential in the workplace because they help to build relationships, avoid future conflicts and foster a business-friendly environment (Vojvodić *et al.*, 2020:50). Moreover, negotiation skills entail the following abilities: communication, emotional intelligence, adaptability, problem-solving, decision-making and active listening (Herrity, 2022b).

- **Cognitive flexibility**

Cognitive flexibility is a broad term that generally refers to the ability to adapt one's actions and thoughts to one's environment (Foothills Academy, 2018). Cognitive flexibility is important at both the micro and macro levels of the workplace (Miller, 2021). This allows one to coordinate multiple concepts at once to improve cognitive function (Miller, 2021). Cognitive flexibility allows us to creatively solve problems, adapt to situations and act appropriately in a variety of situations (Miller, 2021).

- **Workforce readiness**

According to Deloitte (2018:16), workplace readiness refers to the basic skills individuals acquire for entry to and sustained success in the workplace, from initial job search to maintaining continuous employment. Sattar (2019) argues that these skills include the competence and willingness of workers to change and adapt to the demands of the workplace. Job readiness skills are important because they ensure that workers have the basic academic, critical thinking and personal skills needed for sustained employment (Scott, 2021). Regarding employability skills, Scott (2021) highlights that applicants who have job readiness skills are better suited for most vacancies than those who lack these skills. Employers look for applicants who can perform the required tasks with the required skills (Scott, 2021). Therefore, applicants with workplace readiness skills are employable because they can make informed decisions, acquire new knowledge and easily adapt to different work situations (Scott, 2021).

- **Soft skills**

Deloitte (2018:16) defines soft skills as personal attributes, social skills and communication skills that support interpersonal relationships and interactions with others. According to Doyle (2021), soft skills are important because they are often the reason employers decide whether to retain or promote an employee. Soft skills are different from hard skills (also known as technical skills), which are directly relevant to the job one is applying for. These are often more quantifiable and easier to learn than soft skills (Doyle, 2021). Communication, critical thinking, leadership, positive attitude, teamwork and work ethic are the most important soft skills that employers value (Doyle, 2022).

- **Technical skills**

Technical skills are defined as the knowledge and abilities individuals possess to perform specialised tasks (Deloitte, 2018:16). According to Chan (2022), technical skills are used to perform practical tasks in the fields of science, art, technology, engineering and mathematics and

usually require the use of specific tools and the technologies needed to use those tools. According to TechnoFunc (2020), technical skills are a fundamental skill and can help people work more efficiently, increase self-confidence and make them a more valuable candidate for employers.

- **Entrepreneurship**

According to Deloitte (2018:16), entrepreneurial skills include knowledge and skills that support success in creating and building a business opportunity or idea. According to Herrity (2020), entrepreneurial skills can encompass a wide range of different skills, such as technical skills, leadership and business management skills, and creative thinking. As entrepreneurial skills can be used in many different occupations and industries, developing one's entrepreneurial skills can mean developing several types of skills (Herrity, 2020). According to Tarver (2021), this skill is of paramount importance, as entrepreneurs play a key role in any economy, using the necessary skills and initiative to anticipate needs and bring innovative ideas to market. Entrepreneurship that proves successful in taking risks in creating a start-up is rewarded with profits, fame and further opportunities for growth (Tarver, 2021), which is why it is important for employers to hire candidates who can drive and grow their business.

To summarise, the above-mentioned skills are essential skills that will be required in workplaces in the 21st century and the 4IR. Developing these skills and abilities require exposure to educational programmes that would assist students in acquiring the necessary knowledge and skills to enhance their employability, increase their employment prospects and secure decent employment. The following section examines the role of higher education in fostering students' employability skills development.

3.6 THE ROLE OF HIGHER EDUCATION IN DEVELOPING STUDENTS' EMPLOYABILITY SKILLS

Employability is determined by several factors, including the level of education and type of degree, the physical and mental health of jobseekers, labour mobility, the availability of coordinating factors of production, such as capital and entrepreneurship, and the stage and growth rate of the economy (Chhaya, 2016:1). Employability is seen as a responsibility of higher education, with mechanisms such as supervised work experience incorporated into the undergraduate curriculum (Gracia, 2009:2). Education is a critical component of employability because it enables people to know and understand the world and all that is happening in it in social, political, educational and economic terms (Chhaya, 2016:6).

Employability is based on teachable skills that can be taught in both the classroom and workplace (Bhola & Dhanawade, 2013:51). There has been much discussion about the concept of employability, particularly the role of higher education in developing employability skills (Gracia, 2009:2). Recently, employers have been able to hire their current employees on a part-time training-and-development basis, as higher education operates in a knowledge-based economy characterised by the rapid obsolescence of technical and practical skills (Boahin, 2018:22; Gracia, 2009:2).

Moreover, according to the South African Government (2018), higher education is responsible for the development of educated and skilled people who can compete in sustainable, diverse and knowledge-intensive international economies. Higher education serves as a catalyst for the development of an educated community that understands the values of governance systems, appreciates the complexity of global cultures, economies and relationships, and recognises the importance of being at the forefront of innovation and research (Teague, 2015:15). Furthermore, higher education is important to the world, especially in the 21st century, because it plays a crucial role in shaping the future of our society (Teague, 2015:2).

According to Teague (2015:2), higher education is important for a country's ability to compete in the global marketplace as well as for its economic strength, social well-being and position. This is because higher education produces a diverse workforce that strengthens a country's economy by increasing the profitability, productivity, innovation and social responsibility of existing businesses (Teague, 2015:2), thereby increasing the country's gross national product (GNP) and gross domestic product (GDP).

From the above, it is clear that higher education is critical to enhancing employability. In particular, higher education provides individuals with the knowledge and skills they need to advance in their careers while contributing significantly to economic growth and production. Therefore, integrating employability into the core of higher education should be a global priority to close the skills gap and better prepare graduates to enter or advance in the labour market.

3.7 CONCLUSION

The purpose of this chapter was to provide a global and national overview of student employability and self-perceived employability. The chapter comprised five main themes. The chapter started with a global overview of students' employability and self-perceived employability. This section examined the employability and self-perceived employability of students in five regions: Australia, the UK, Turkey, Poland, and Africa. The studies reviewed in this section identified several

variables that may influence the self-perceived employability of tertiary students in these respective countries. These variables include self-awareness, opportunity awareness, decision-making and transition skills, perceived employability attributes, personal factors (skills, knowledge and attitudes), practical work experience while studying, financial support, and the external and internal labour market (if they found employment).

The second section provided a national overview of students' employability and self-perceived employability. Several factors were identified as significant determinants of the employability of university students, namely self-confidence, confidence in skills and abilities, opportunity awareness, conscientiousness, agreeableness, openness to experience, age, ethnicity, experiential learning, university reputation, decision-making, transitional learning, personal factors (skills, knowledge and attitudes), entrepreneurial intentions, academic engagement, and the external labour market. The evidence gathered in this section was most relevant to this study as its findings were compared with some of the findings of several South African researchers on employability and self-perceived employability of students in South Africa and also contributed to the scope of employability research in South Africa.

The third section focused on discussing the relationship between selected socio-demographic variables and employability or self-perceived employability of students. Many of the factors listed in this section were found to influence students' employability, including race, gender, previous work experience and socio-economic status. Other factors such as geographic location, age, religiosity and parental education level yielded mixed results and have been overlooked in employability studies. Therefore, this study examined these factors and assessed the results with respect to their influence on the self-perceived employability of final-year undergraduate students at a South African university.

The fourth section gave an overview of the skills required in the 21st century. Several skills were discussed that are of utmost importance in the 21st-century world of work. These skills include complex problem-solving, critical thinking, creativity, coordination with others (collaboration), emotional intelligence, judgement and decision-making, negotiation skills, cognitive flexibility, work readiness, soft skills, technical skills and entrepreneurship. These skills are important to navigate the 21st-century job market and many employers place a high value on the possession of these skills.

The final section looked at the role of higher education in developing students' employability. This section discusses the importance of higher education in enhancing students' employability, as it provides individuals with the knowledge and skills they need to progress in their careers while

also making an important contribution to economic growth and production. In addition to the fact that higher education enhances individuals' knowledge and experience, this section also pointed out that higher education often leads to better career opportunities, higher salaries, greater cultural awareness and a life with more choices and opportunities.

Based on the literature reviewed, it was found that the external labour market, field of study, university reputation, and personal skills and attributes are widely and increasingly recognised factors influencing the employability, self-perceived employability and employment prospects of students in Australia, the UK, Poland, Turkey, and sub-Saharan Africa. These results and findings, as discussed in section 3.2, are synonymous with what scholars such as Rothwell *et al.* (2008) identify as important factors influencing students' self-perceived employability, namely the external labour market, university reputation and field of study. Furthermore, the socio-demographic variables influencing the employability and self-perceived employability of students were discussed in section 3.3. The findings of the literature review indicated that the most common socio-demographic variables that influence students' perceptions of employability and that are increasingly recognised in employability literature include race, gender and socio-economic status, which can easily be interpreted from the Bourdieusian lens that allows an appropriate emphasis on the relationship between an individual's habitus and the social space (defined by a structure that perpetuates inequality and influences a person's social status, identity and position) in which work is undertaken. Figure 3.3 presents a theoretical diagram that brings together both figure 3.2 (see section 3.3) and figure 2.9 (see section 2.6, chapter 2) to illustrate the interplay between external and internal determinants of employability and self-perceived employability.

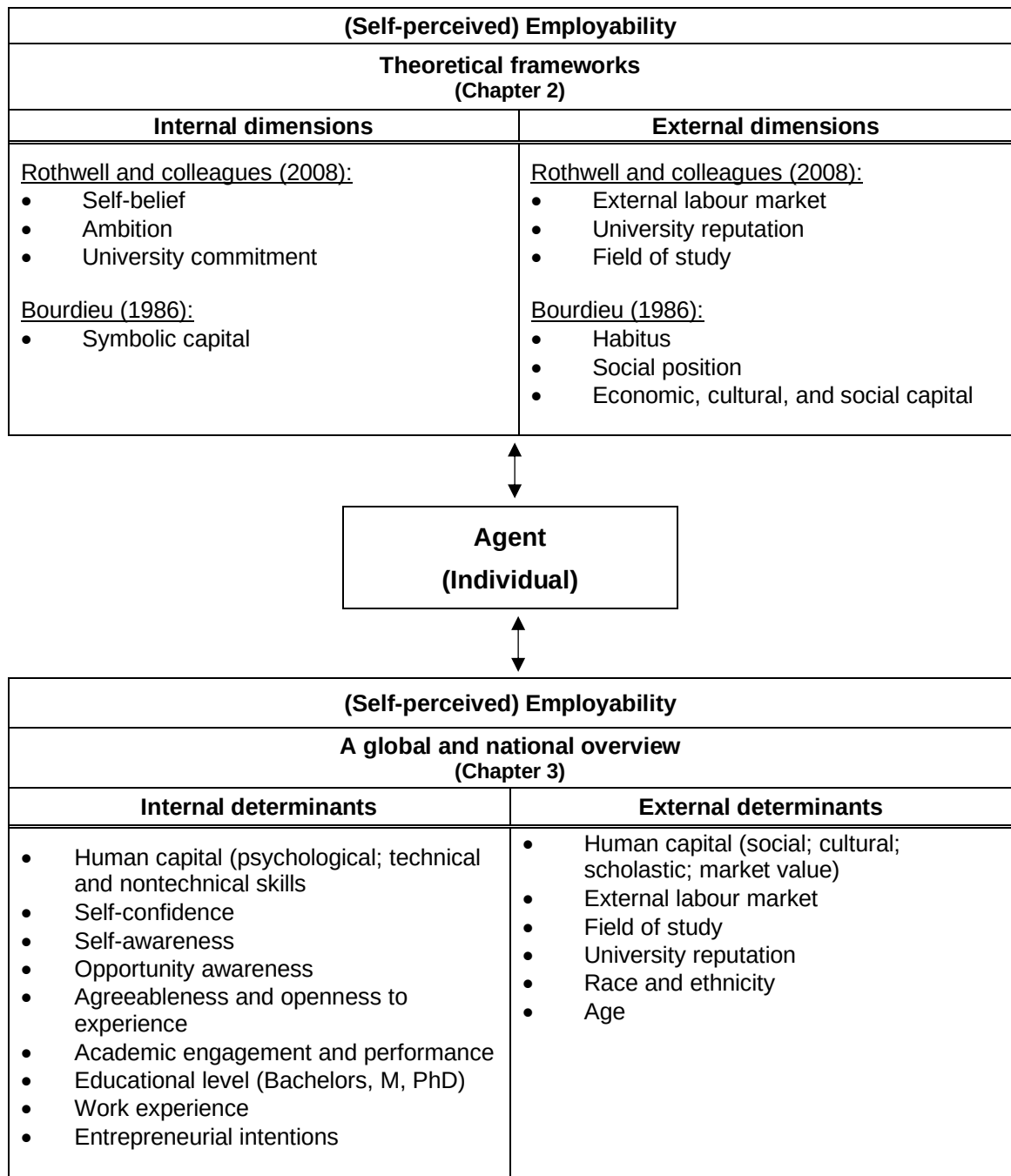


Figure 3.3: Determinants of employability and self-perceived employability according to the theoretical frameworks used in the study and the global and national overview (author's own compilation, 2022)

Figure 3.3 shows the internal and external determinants listed in chapters 2 (theoretical frameworks) and 3 (a global and national overview) that influence students' self-perceived employability and employability. The diagram represents the interaction between structural factors that exhibit dialectics (figure 3.3) and is therefore used as the primary diagram for the discussion and interpretation of the empirical results (chapter 5). The diagram considers both the

dichotomy of agency and structure, with the interplay between the field of practice, which includes structural determinants (internal and external) and the habitus (which is shaped and acquired through the structures actors encounter in social fields). The diagram only depicts the structural determinants that influence the employability of actors (respondents) based on the employability and self-perceived employability literature discussed in chapters 2 and 3. In chapter 5, the external and internal determinants depicted in figure 3.3 are used as reference point to determine whether the determinants have a significant effect in this study, which is set in the South African context, characterised in particular by multiracialism, multiculturalism, Africanism and an economy with high unemployment, especially among young people. The following chapters (4 and 5) present and discuss the empirical results of the study.

CHAPTER 4

EMPIRICAL RESULTS AND ANALYSES: DESCRIPTIVE STATISTICS, AND RELIABILITY AND VALIDITY OF THE SCALES USED

4.1 INTRODUCTION

The previous chapters provided a theoretical overview of employability, in general, and self-perceived employability, in particular. Chapter 1 provided the introduction to the study, presented the problem statement, research questions and objectives, and outlined the research methodology followed. Chapter 2 discussed the theoretical framework of the research and outlined the different perspectives on employability and self-perceived employability. Chapter 3 discussed the global and national trends and perspectives relating to students' employability and self-perceived employability. The chapter also gave an overview of the skills required for the 21st century and elaborated on the role of higher education in the development of students' employability.

This chapter presents and discusses the empirical results of the study (Part 1), namely the socio-demographic information of the respondents, the descriptive statistics, and reliability and validity of the scales used in the study. As the methodological approach used was described in detail in chapter 1 (see 1.7), this chapter first focuses on the exposition of the methodology, after which the results of the study are presented and discussed.

4.2 AN EXPOSITION OF THE RESEARCH METHODOLOGY

This section explains the quantitative research design and the rationale for its use in the study. This is followed by a discussion of the population and sample of the study and the data collection and measurement instruments used in the study. Following this discussion, the tests used to analyse the data are discussed. These were confirmatory factor analysis; exploratory factor analysis; descriptive statistics; independent samples t-tests; ANOVA tests; effect sizes; and Spearman's rank-order correlation test. Next, the research design of the study is outlined.

4.2.1 *Research design*

As explained in chapter 1, a quantitative research design was used to determine the self-perceived employability of final-year undergraduate students at a South African university. According to Kumar (2014:14), quantitative research is a research method rooted in the philosophy of rationalism; it follows a rigid, structured and predetermined set of procedures for

investigation; it aims to quantify the extent of variation in a phenomenon; it emphasises the objectivity of the process and the measurement of variables; it believes in validation based on a large sample; it emphasises the validity and reliability of the results; and it communicates the results “in an analytical and aggregate manner, drawing conclusions and inferences that can be generalised”. As a deductive method, quantitative research involves the use of numerical representations and manipulation of observations to describe and explain the phenomenon under study (Babbie, 2013:414, 438).

In quantitative research, there are two basic ways to analyse numerical data (Maxwell, 2009:302). The first is to summarise the data into meaningful forms/indicators that are easy to understand, compare and communicate (Bickman & Rog, 2009:302). These indicators are referred to as descriptive statistics (Bickman & Rog, 2009:302). The second general category consists of techniques for estimating population parameters, hypothesis testing or prediction (Bickman & Rog, 2009:302). These techniques are referred to as inferential statistics. All tests of statistical significance are examples of this type of quantitative data analysis (Bickman & Rog, 2009:302). In inferential statistics, it is important to use random and unbiased sampling techniques, especially when the sample of the study is not representative of the population. In this way, ethical issues such as biased analysis and reporting of results – which are major challenges for quantitative research – can be addressed (Babbie, 2013:439). Descriptive methods, on the other hand, present results through simple statistics and graphical representations (Sarantankos, 2013:436). The most used methods of descriptive data analysis and presentation are: (1) measures of central tendency (mean, mode and median); (2) measures of relative position (percentiles, quartiles and standard values); and (3) measures of association/relationship between variables (Pearson’s correlation coefficient [r] and Spearman’s rank-order correlation coefficient [ρ]) (Bickman & Rog, 2009:302; Sarantankos, 2013:437). The most used significance tests in quantitative research are chi-square, independent sample t-tests and ANOVAS (Sarantankos, 2013:437).

This study used a quantitative approach, as it allows for a systematic investigation of the research topic; quantifiable data can be collected from a large group; the data captured can be analysed using statistical and computational techniques, which saves energy and resources; and the findings can be generalised to a large group as suggested by Eyisi (2016:94) and Gorard (2001:3). Furthermore, quantitative research enabled the researcher to examine the relationship between the socio-demographic variables and students’ self-perceived employability. The following subsection deals with the study population and sample.

4.2.2 *Population and sampling*

The research setting for the study was limited to one university in South Africa. The university was selected on an availability basis (convenient sampling). The target population of this study comprised of all final-year undergraduate students at the different sites of delivery of the University. In total, 10 875 final-year undergraduate students were enrolled at the university under investigation at the time of the present study (Campus A: 5 818; Campus B: 1 764; Campus C: 3 293). A complete survey of the target population was undertaken, but as not all students participated in the research, it resulted in a non-probability sample. Thus, convenience sampling was used to collect the data from the target population. In total, 514 respondents participated in the survey (see section 4.3.1).

4.2.3 *Data collection and measurement instrument*

A Web-based survey was used to collect the data. A self-administered coded questionnaire was used as a data collection instrument. The questionnaire comprised of four sections. Section A contained biographical questions, which included questions on gender, race, field of study, religiosity, geographical location, socio-economic status, parental level of education, and previous work experience.

For Section B, the 16-item questionnaire developed by Rothwell *et al.* (2008) to determine university students' self-perceived employability was used. The scale includes external and internal dimensions of employability. External dimensions of employability involve perceptions of the state of the external labour market, the strength of the university's brand, and the status and credibility of the field of study. Internal dimensions include perceptions of self-belief (i.e., respondents' confidence in their skills and abilities). The scale has acceptable reliability and construct validity: Cronbach's alpha for the one-dimensional model (16 items) measured 0.75. For the two-dimensional model, a Cronbach's alpha value of 0.76 was obtained for external employability and 0.66 for internal employability.

For Section C, the six-item Ambition Scale developed by Rothwell *et al.* (2008), adapted from Greenhaus *et al.* (1990:86) and Nabi (2001:464), was used. The scale has acceptable reliability and construct validity: Cronbach's alpha measured 0.76.

For Section D, the eight-item University Commitment Scale developed by Rothwell *et al.* (2008), adapted from Tsui *et al.* (1997), was used. At the analysis stage, the authors removed one item – "I would have accepted almost any type of course offer in order to come to this University" – as data screening revealed that this item skewed the results and had an adverse effect on the

internal reliability. The seven-item scale has acceptable reliability and construct validity: Cronbach's alpha measured 0.87. For this study, the deleted item was retained; thus the eight-item scale was used. For all scales (Self-Assessment of Employability, Ambition, and Commitment to University), a five-point Likert scale was used, ranging from strongly disagree (1) to strongly agree (5).

An invitation to participate in the survey was posted on the e-learning platform of the university under investigation. The Corporate relations and marketing section of the university assisted the researcher with this process. The invitation included detailed information about the survey, an informed consent form and a link to the survey. Once informed consent was given, the respondents were directed to the online survey to complete the questionnaire and submit it electronically. The statistical consultation services of the university under investigation assisted with creating the survey, received the electronic completed questionnaires, and processed the data using SPSS version 27.

According to Andrews *et al.* (2003:2), an online survey is a quick and effective survey that allows others to collect copious amounts of data and automate the review and storage of survey responses through database technology and a hypertext markup language (HTML) user interface. These surveys are short and effective, easy to administer and customisable (Mahmutovic, 2021). They also allow for larger sample sizes, participant convenience, flexibility, and they minimise costs (Mahmutovic, 2021).

4.2.4 Data analyses

As indicated above, the statistical consultation services of the university under investigation assisted with processing the data using SPSS version 27. Confirmatory factor analyses, exploratory factor analysis, descriptive statistics, independent-samples t-tests, ANOVA tests, effect sizes, and Spearman's rank-order correlation tests were used to analyse the data.

4.2.4.1 Descriptive statistics

Descriptive statistics are commonly used at the beginning of quantitative data analysis (Islam, 2020:14). These statistics organise and summarise or describe the characteristics of a data set (Bhandari, 2020; Hayes, 2022). Commonly used descriptive statistics include frequency distributions (count, percentage, frequency), measures of central tendency (mean, median, and mode), and measures of dispersion (range, standard deviation, and variance). Measures of central tendency establish the distribution of a set of data using different points; measures of variability or dispersion describe the spread of data within the set; and frequency measures are

commonly used to represent the number of occurrences of different values (Islam, 2020:14; Smith & Logan, 2021). Other descriptive statistics include position measures (quartiles and percentiles) that describe how values relate to each other (Brock & Logan, 2022).

Descriptive statistics in this study are reported as mean and standard deviation. The arithmetic mean or average “is a measure of central tendency” (Mishra *et al.*, 2019:68). It is “a mathematical average of a set of data” and can be calculated by dividing the sum of the observations by the number of observations (Mishra *et al.*, 2019:68).

The standard deviation is calculated as the square root of the variance by determining the deviation of individual data points from the mean (Anderson & Bellucco-Chatham, 2021). The further the data points are from the mean, the higher the variance within the data set; thus, the more scattered the data, the higher the standard deviation (Anderson & Bellucco-Chatham, 2021).

4.2.4.2 Validity and reliability

Confirmatory factor analyses were conducted to validate the factor structure of the Self-perceived Employability (Section B), Ambition (Section C) and Commitment to University (Section D) scales. Three goodness-of-model-fit indices were used to determine how well the data of the sample fit the measurement models. Hancock and Mueller (2010) suggested to report multiple model fit indices, preferably from three broad classes. The following model fit indices were used: the chi-squared statistic divided by degrees of freedom (CMIN/DF); the comparative fit index (CFI); and the root mean square error of approximation (RMSEA) with its 90% confidence intervals. CFA is a statistical method for confirming the factor structure of a set of observed variables (Suhr, 2006:1).

CFA is a multivariate statistic used to estimate the structure of an instrument and “how well the measured variables represent the number of constructs” (Bastos, 2021) – that is, “the relationships between observed measures or indicators (e.g., test items, test scores, results of behavioural observations) and latent variables or factors” (Brown & Moore, 2013:2). A latent or “hidden” variable is a variable that is not directly measurable or observable (Glen, 2021; IGI Global, 2022). The latent variable is the cause of the item value of the scale. Thus, the strength or quantity of the latent variable is the cause of an item (or group of items) taking on a particular value. In other words, each item gives an indication of how strongly it (the observable variable) is associated with the latent variable (IGI Global, 2022).

CMIN/DF is the chi-square fit statistics divided by the degrees of freedom (Cucos, 2022). The Chi-square value (called CMIN) is used to test if the data do not fit the model. CMIN shows if the sample data and hypothetical model are an acceptable fit in the analysis. If CMIN is significant, the model can be considered unsatisfactory (Cucos, 2022). The degree of freedom (DF) measures the number of independent values that can diverge without obstructing any limitations in the model (Cucos, 2022). A CMIN/DF value smaller than 3 indicates an acceptable fit (Kline, 1998, as cited in Cucos, 2022), and a value smaller than 5 indicates a reasonable fit (Marsh & Hocevar, 1985, as cited in Cucos, 2022). Mueller (1996) emphasised that the interpretation of the size of the CMIN/DF value depends to a large extent on the point of view of the investigator and suggests that values as high as 3 and 4, or even 5 can still be an indication of a good model data fit.

The comparative fit index (CFI) – also called the Bentler comparative fit index – compares the fit of an existing model to a null model where the indicator variables (and hence the latent variables) are assumed to be uncorrelated (the “independence model”) (Shadfar & Malekmohammadi, 2013:586). The value of CFI ranges between 0 and 1: a value close to 1 indicates excellent fit (Hu & Bentler, 1999, as cited in Cucos, 2022; Shadfar & Malekmohammadi, 2013:586) and a value of 1 perfect fit (Hu & Bentler, 1999, as cited in Cucos, 2022). According to Hair *et al.* (2010) and Mueller (1996), values above 0.9 indicate a good overall fit.

RMSEA is the root mean square error of approximation. It is a popular and widely used index for model fit, in part because it does not require comparison to a null model (Kenny, 2020; Shadfar & Malekmohammadi, 2013:587). It is one of the goodness of fit indices that is less affected by sample size, although it overestimates goodness of fit for small sample sizes (Shadfar & Malekmohammadi, 2013:587-88). To measure the goodness of fit of a model, it is suggested that RMSEA values below 0.05 are good, values between 0.05 and 0.08 are acceptable, values between 0.08 and 0.1 are marginal, and values above 0.1 are poor (Kim *et al.*, 2016:3). According to Hu and Bentler (1999:1), a RMSEA value less than or equal to 0.06 is the “cut-off” for a good model data fit. Blunch (2008) suggests that models with RMSEA values of 0.10 and larger should not be accepted. The RMSEA is usually reported with its confidence intervals.

4.2.4.3 The independent samples t-test

The independent samples t-test is a statistical procedure for comparing the means of two different groups on a continuous variable (Pallant, 2016:244). For example, the independent samples t-test is used to compare the means of men and women on a continuous variable (e.g., self-perceived employability). The independent sample t-test can only compare the means of two (*only*

two) groups. It cannot make comparisons between more than two groups (Kent State University, 2022). Thus, to conduct a t-test, a categorical (independent) variable and a continuous (dependent) variable are required. The general assumptions about conducting a t-test for independent samples include the following:

- The scale of measurement of the dependent variable follows a continuous or ordinal scale and is measured at the interval or ratio level (Hayes *et al.*, 2021; Pallant, 2016:207).
- The scores are obtained using a random sample from the population (Pallant, 2016:207).
- The dependent variable should follow a normal distribution if the sample size is small. However, when the sample size is large (e.g., 30+), it is not crucial that the distribution is normal (Maverick, 2021; Pallant, 2016:207).
- Observations must be independent of each other; thus, each observation (or measurement) should not be influenced by another observation or measurement (Maverick, 2021; Pallant, 2016:207).
- Homogeneity of variance – thus, samples are obtained from populations with equal variances. The standard deviations of samples are approximately equal when equal (homogeneous) variance is present (Hayes *et al.*, 2021; Pallant, 2016:207).

The results of the independent sample t-tests are interpreted as follows: If the significance value (Sig. 2-tailed) is greater than 0.05, there is no significant difference between the means of the two groups on the dependent variable. If the significance value (Sig. 2-tailed) is equal to or less than 0.05, there is a significant difference between the means of the two groups on the dependent variable (Pallant, 2016:247).

4.2.4.4 Analysis of Variance (ANOVA)

The ANOVA test is considered an extension of the t-test, as it tests for a significant difference between more than two group means (population means) of the data collected (Pathak, 2021). Unlike t-tests, ANOVA is a useful statistical tool when comparing the means of more than two groups (Kent State University, 2022). A one-way ANOVA measures the interrelationship of one independent variable on a dependent variable (Surbhi, 2017). A two-way ANOVA measures the interrelationship of two independent variables on a dependent variable (Surbhi, 2017).

A one-way ANOVA was used in this study to measure the interrelationship of one socio-demographic variable (e.g., Campus) on the dependent variable “self-perceived employability”.

According to Statistics Solutions (2013), like the t-test, ANOVA is also a parametric test and has the following assumptions:

- The data should be normally distributed, but if the sample size is large (e.g., 30+), it is not critical to test whether this assumption holds.
- Homogeneity of variance – meaning that the variances of the dependent variable in each group should be approximately equal.
- The observations should be independent of each other – thus, the value of one observation should not be related to any other observation.

The results of the ANOVA are interpreted as follows: If the value of significance (Sig.) is less than or equal to 0.05, there is a significant difference somewhere between the means of the different groups on the dependent variable (Pallant, 2016:259). To determine which group is different from which group, the results of the post-hoc tests should be examined.

4.2.4.5 Spearman rank-order correlation coefficient

Spearman's rank-order correlation is a useful measure for determining “the strength and direction of association between two ranked variables” (Patel, 2021). Spearman's rank-order correlation is used to measure the strength and direction of the monotonic relationship between two variables. According to Laerd Statistics (2021), the Spearman rank-order correlation is the non-parametric version of Pearson's product-moment correlation. The Spearman rank-order correlation coefficient measures the strength and direction of a monotonic relationship between two data sets when they are ordered (Laerd Statistics, 2021; Patel, 2021). A monotonic relationship implies that (a) if the value of one variable increases, the value of the other variable also increases; or (b) if the value of one variable increases, the value of the other variable decreases (Laerd Statistics, 2021). The Spearman rank-order correlation coefficient (r_s) can take values between +1 and -1 (Laerd Statistics, 2021). A r_s of +1 indicates perfect correlation between ranks; a r_s of zero indicates no correlation between ranks; and a r_s of -1 indicates perfect negative correlation between ranks. The closer r_s is to zero, the weaker the correlation between ranks (Laerd Statistics, 2021). According to Laerd Statistics (2018), the calculation of Spearman's rank-order correlation coefficient and the subsequent significance test assume that the following data assumptions hold:

- First, the two variables represent paired observations.
- Second, the relationship between the two variables is monotonic. A monotonic relationship exists when both variables increase together, or when one variable increase while the other decreases.

The Spearman rank-order correlation coefficient is a non-parametric measure (Laerd Statistics, 2018): it can be used when two variables are not normally distributed. Furthermore, it is not very sensitive to outliers, meaning that valid results can still be obtained when there are outliers in the data.

4.2.4.6 Effect sizes

Effect size indicates how meaningful the relationship between variables or the difference between groups is (Bhandari, 2022). It indicates the practical significance of a research outcome (Bhandari, 2022). A large effect size means that a research finding is important in practice, while a small effect size indicates limited practical application (Bhandari, 2022). Cohen's *d* is a suitable effect size to measure the effect size of the difference between two means. For example, it can be used when reporting the results of t-tests and ANOVA (McLeod, 2019). According to Cohen, a *d*-value of 0.2 is considered a “small” effect size, a *d*-value of 0.5 is considered a “medium” effect size, and a *d*-value of 0.8 is considered a “large” effect size (McLeod, 2019). This means that if the difference between the means of two groups is less than 0.2 standard deviations, the difference is negligible, even if it is statistically significant (McLeod, 2019).

Next, the results of the study are presented and discussed. First, the socio-demographic information of the respondents is presented and discussed. This is followed by the descriptive statistics and factor analyses of the continuous variables (religiosity, self-perceived employability, ambition, and university commitment). The results of the independent samples t-tests, ANOVAs, effect sizes and Spearman's rank-order correlation coefficient are then presented and discussed, which also show the relationship between the socio-demographic variables and the continuous variables used in the study.

4.3 EMPIRICAL RESULTS AND ANALYSIS

This section presents and discusses the results and analyses of the study.

4.3.1 Socio-demographic information

This study was conducted at a tertiary institution in South Africa and aimed to determine the self-perceived employability of final-year undergraduate students. A total of 514 respondents participated in the survey. Although 514 respondents completed the questionnaire, some respondents did not complete all sections of the questionnaire. However, these questionnaires were not completely ignored. Only the sections that were satisfactory and contained valuable and useful information were retained. Therefore, the number of responses varied from question to question. Table 4.1 shows the socio-demographic information of the respondents.

Table 4.1: Socio-demographic information

Biographical information			
Question	Category	N	%
At which campus are you studying?	Campus A	258	50.2
	Campus B	104	20.2
	Campus C	152	29.6
In what mode are you studying?	Full-time classroom-based	444	86.4
	Part-time classroom-based	5	1.0
	Full-time distance-based (correspondence learning)	50	9.7
	Part-time distance-based (correspondence learning)	15	2.9
With which gender do you identify yourself?	Male	198	38.8
	Female	309	60.6
	Other	3	0.6
With which racial group do you classify yourself?	Black African	378	74.6
	White	98	19.3
	Indian/Asian	8	1.6
	Coloured	16	3.2
	Other	7	1.4
What is your age in years?	20	55	10.8
	21	142	27.9
	22	89	17.5
	23	74	14.5
	24	46	9.0

Biographical information			
Question	Category	N	%
	25 years and older	103	20.2
In what faculty are you currently registered?	Humanities	113	22,0
	Natural and Agricultural Sciences	102	19.9
	Theology	3	0.6
	Education	51	9.9
	Economic and Management Sciences	157	30.6
	Law	19	3.7
	Engineering	13	2.5
	Health Sciences	55	10.7
In which type of geographical location did you mainly grow up?	Big city: e.g. Johannesburg/Pretoria/Cape Town/Bloemfontein/Port Elizabeth/Durban	130	25.7
	Small city: e.g. Polokwane/Vaal Triangle/Vereeniging/Rustenburg/Mafikeng/Potchefstroom/Klerksdorp/Mbombela/George/Richards Bay/Kimberley/Upington	184	36.4
	Town: e.g. Bethlehem/Wolmaransstad/Coligny/Kroonstad/Viljoenskroon/Vryburg/Standerton/Thabazimbi/Lichtenburg/Zeerust/Bela-Bela/Bultfontein	110	21.7
	Village/Traditional settlement/Farm in a rural area	82	16.2
What is your mother's/female guardian's highest level of education?	Have no living mother or female guardian	36	7.0
	None/No formal education	46	9.0
	Primary education (complete or partial)	28	5.5
	Secondary education, but no matric/Grade 12	90	17.6
	Matric/Grade 12	109	21.3
	A college diploma/certificate	95	18.6
	An undergraduate degree	50	9.8
	A postgraduate degree	57	11.2
What is your father's/male guardian's highest level of education?	Have no living father or male guardian	111	22.1
	None/No formal education	32	6.4
	Primary education (complete or partial)	30	6.0
	Secondary education, but no matric/Grade 12	62	12.3
	Matric/Grade 12	85	16.9

Biographical information			
Question	Category	N	%
	A college diploma/certificate	91	18.1
	An undergraduate degree	42	8.3
	A postgraduate degree	50	9.9
How would you describe your mother's/female guardian's occupation?	Have no living mother or female guardian	46	9.2
	Higher managerial, administrative or professional (e.g. chief executive officer or surgeon)	24	4.8
	Intermediate managerial, administrative or professional (e.g. bank manager, teacher or lecturer)	102	20.4
	Supervisory, clerical, junior administrative or professional (e.g. shop floor supervisor, bank clerk or sales person)	48	9.6
	Skilled manual worker (e.g. electrician or plumber)	17	3.4
	Semi- and unskilled manual worker (e.g. farm labourer, refuse collector)	49	9.8
	Self-employed (working for oneself) or business owner	77	15.4
	State pensioner or unemployed (e.g. pensioner without private pension or person living on basic benefits)	133	26.5
	Other	5	1.0
How would you describe your father's/male guardian's occupation?	Have no living father or male guardian	141	28.4
	Higher managerial, administrative or professional (e.g. chief executive officer or surgeon)	33	6.6
	Intermediate managerial, administrative or professional (e.g. bank manager, teacher or lecturer)	62	12.5
	Supervisory, clerical, junior administrative or professional (e.g. shop floor supervisor, bank clerk or sales person)	35	7.0
	Skilled manual worker (e.g. electrician or plumber)	48	9.7
	Semi- and unskilled manual worker (e.g. farm labourer, refuse collector)	29	5.8
	Self-employed (working for oneself) or business owner	63	12.7
	State pensioner or unemployed (e.g. pensioner without private pension or person living on basic benefits)	80	16.1
	Other	3	0.6
What is your primary source of financial support?	Earned income	50	9.9
	Business income (I own a business)	2	0.4
	Family support (including alimony)	117	23.1
	Bursary/Scholarship	318	62.7
	Grant	19	3.7

Biographical information			
Question	Category	N	%
	Other	1	0.2
What is the ability of your family's household to provide in their needs?	Don't know how to classify my family's household	19	3.7
	Cannot or rarely provide the basics – have help from other sources	13	2.6
	Struggling to make ends meet (don't always manage to cover our basic needs)	93	18.3
	Just manage to make ends meet (cover our basic needs)	129	25.4
	Living an adequate life (generally have what we need in terms of food, clothing, living costs, transport, etc.)	181	35.6
	Well off (live a comfortable, privileged life, but not excessively)	58	11.4
	Affluent (more than just comfortable, but not extremely rich)	13	2.6
	Extremely rich (may for example have multiple cars, homes, travel – including overseas travel – the very best in clothing, technology, cars, etc.)	2	0.4
Do you have any previous/current work experience, e.g. working as a waiter, cashier, clerk, voluntary worker, etc.?	Yes	278	53.8
	No	235	45.5

Section A of the questionnaire asked students about their mode of study, gender, race, age, faculty and geographical region of origin; the highest educational attainment of their parent(s) or guardian(s) (male and female); the type of occupation their parent(s) or guardian(s) (male and female) were employed in; the main source of their financial support; and their past/current work experience. The following subsections discuss the results of these socio-demographic variables.

4.3.1.1 Campus

From table 4.1, it is evident that the majority of the respondents (50.2%; N = 258) were from Campus A; 29.6% (N = 152) from Campus C; and 20.2% (N = 104) from Campus B. The anonymity and the confidentiality of the university was protected; therefore, the names of the university and campuses are not mentioned in the discussion of the results.

4.3.1.2 Mode of study

As regards mode of study, the results show that a large majority of the respondents (86.4%; N=444) were studying full-time classroom-based; 1.0% (N = 5) were studying part-time classroom-based; 9.7% (N = 50) were studying full-time distance-based; and 2.9% (N = 15) were studying part-time distance-based.

4.3.1.3 Gender

The breakdown of respondents by gender shows that most respondents were female (60.6%; N=309); 38.8% (N=198) were male; and 0.6% (N=3) identified with other genders.

4.3.1.4 Race

The breakdown of respondents by race shows that a large majority of the respondents (74.6%; N = 378) were Black African; 19.3% (N = 98) were White; 1.6% (N = 8) were Indian/Asian; 3.2% (N = 16) were Coloured; and 1.4% (N = 7) identified with other racial groups.

4.3.1.5 Age

From table 4.1, it is clear that most of the respondents (27.9%; N = 142) were 21 years old, followed by respondents who were 25 years old and above (20.2%; N = 103), 22 years old (17.5%; N = 89), and 23 years old (14.5%; N = 74). Respondents aged 24 (9.0%; N = 46) made up the smallest percentage.

4.3.1.6 Faculty

The breakdown of respondents by faculty shows that most respondents (30.6%; N = 157) came from the Faculty of Economic and Management Sciences. This is followed by respondents from the faculties of Humanities (22.0%; N = 113) and Natural and Agricultural Sciences (19.9%; N = 102). The lowest proportion of respondents came from the fields of health sciences (10.7%; N = 55), education (9.9%; N = 51), law (3.7%; N = 19), engineering (2.5%; N=13), and theology (0.6%; N = 3).

4.3.1.7 Geographical location

Pertaining to geographical location in which the respondents mainly grew up, the results show that the majority (36.4%; N = 184) of the respondents in the study were from small cities. This is

followed by students from big cities (25.7%; N = 130), towns (21.7%; N = 110) and villages, farms in rural areas or traditional settlements (16.2%; N = 82).

4.3.1.8 Level of education of parent(s) or guardian(s)

Regarding the highest level of education of their mother or female guardian, the results of the study show that most respondents (21.3%; N = 109) indicated that their mother or guardian had obtained a matric diploma (Grade 12) as their highest educational attainment, followed by a college diploma/certificate (18.65; N = 95) and a secondary school diploma but not a matric diploma/Grade 12 (17.6%; N = 90). A small number of respondents indicated that their mother or female guardian had obtained a postgraduate degree (11.2%; N = 57) and an undergraduate degree (9.8%; N = 50). The results also show that 9.0% (N = 46) of the respondents indicated that their mother or female guardian had no formal education, 5.5% (N = 28) indicated that their mother or female guardian had a primary education, and 7% (N = 36) indicated that they had no mother or female guardian.

Concerning the highest educational qualification of their father or male guardian, the results show that the majority (22.1%; N = 111) of the respondents reported not having a father or male guardian. Looking at the results based on respondents who had a father or male guardian, the results show that 18.1% (N = 91) of the respondents indicated that their father or male guardian had a college diploma or certificate, followed by a matric diploma (Grade 12) (16.9%; N = 85), and secondary education but no matric diploma (Grade 12) (12.3%; N = 62). A small number of respondents reported that their father or male guardian had obtained a postgraduate degree (9.9%; N = 50), an undergraduate degree (8.3%; N = 42) and a primary education (6.0%; N = 30). Moreover, 6.4% (N = 32) of the respondents indicated that their father or male guardian had no formal education.

4.3.1.9 Occupations of parent(s) or guardian(s)

Table 4.1 gives the breakdown of the occupations of the respondents' parents or guardians. Regarding the occupations of mother or female guardians, the results show that 9.2% (N = 46) of the respondents reported not having a living mother or female guardian. The majority of the respondents (26.5%; N = 133) reported that their mother or female guardian was a pensioner or unemployed, followed by 20.4% (N = 102) who indicated that their mother or female guardian was in intermediate managerial, administrative or professional occupations, and 15.4% (N = 77) indicated that their mother or female guardian was self-employed or a business owner. A smaller number of respondents indicated that their mother or female guardian was employed as a semi-

skilled worker (9.8%; N = 49) and in supervisory, clerical, administrative or professional occupations (9.6%; N = 48). A very small number of respondents indicated that their mother or female guardian (4.8%; N = 24) was employed in higher managerial, administrative or professional occupations as skilled manual workers (3.4%; N = 17) and in other occupations (1.0%; N = 5).

The breakdown of the occupations of the father or male guardian of the respondents shows that 28.4% (N = 141) of the respondents reported not having a living father or male guardian. The majority of the respondents (16.1%; N = 80) indicated that their father or male guardian is a pensioner or unemployed, followed by 12.7% (N = 63) who indicated that their father or male guardian is self-employed or a business owner, and 12.5% (N = 62) who indicated that their father or male guardian is in intermediate managerial, administrative or professional occupations. A small number of respondents (9.7%; N = 48) indicated that their father or male guardian was employed as a skilled manual worker, followed by 7.0% (N = 35) who indicated that they were employed in supervisory, clerical, administrative or professional occupations, and 6.6% (N = 33) that indicated that they were employed in higher managerial, administrative or professional occupations. The lowest percentages were reported for fathers or male guardians who were employed as semi-skilled workers (5.8%; N = 29) and in other occupations (0.6%; N = 3).

4.3.1.10 Financial support

The breakdown of respondents by the primary source of their financial support shows that almost two-thirds of the respondents (62.7%; N = 318) reported that they had financial support through scholarships, followed by family support (including alimony) (23.1%; N = 117) and earned income (9.9%; N = 50). Grants (3.7%; N = 19), business income (own business) (0.4%; N = 2) and other forms of financial support (0.2%; N = 1) accounted for the lowest percentages.

4.3.1.11 Family household

Regarding the ability of family households to meet their needs, 3.7% (N = 19) of the respondents mentioned they did not know how to classify their family household. Most respondents (35.6%; N = 181) reported that they were living an adequate life, 25.4% (N = 129) indicated that they just manage to make ends meet, 18.3% (N = 93) were struggling to make ends meet, and 11.45% (N = 58) were living well. A small number of students revealed that they were unable or rarely able to provide for their basic needs (2.6%; N = 13), were affluent (2.6%; N = 13), and were extremely rich (0.4%; N = 2).

4.3.1.12 Previous work experience

As regards the respondents' past/current work experience, the results revealed that the majority of the respondents (53.8%; N = 278) had work experience, while 45.5% (N = 235) indicated that they had no previous work experience.

4.3.2 *Reliability and validity of religiosity*

Section A of the questionnaire captured respondents' perceptions of their religiosity. A five-point Likert scale was used, consisting of the following categories: “strongly disagree” (1), “disagree” (2), “neutral” (3), “agree” (4), and “strongly agree” (5). The mean of the scale was measured according to its position on the Likert scale. The closer the mean was to 5, the more positive the respondents' perceptions were; the closer it was to 1, the more negative the respondents' perceptions were. Table 4.2 presents the descriptive statistics of religiosity.

Table 4.2: Descriptive statistics of religiosity

Descriptive statistics of religiosity						
No.	Item	N	Minimum	Maximum	Mean	Standard deviation
1.	My religious beliefs are important to me.	510	1	5	4.08	1.211
2.	Attending religious/spiritual services is important to me.	510	1	5	3.65	1.269
3.	Praying is important to me.	508	1	5	4.28	1.181
4.	Reading religious/spiritual material (such as books, magazines, pamphlets) is important to me.	509	1	5	3.62	1.198
5.	It is important to me to participate in religious activities with others, e.g. worshipping, cell groups, etc.	509	1	5	3.45	1.264
6.	Religious values guide me in making important decisions.	507	1	5	3.82	1.231
7.	I actively obey (adhere to) the specific practices my religion prescribes.	508	1	5	3.51	1.191
8.	It is important to me to practise religious activities in private.	506	1	5	3.65	1.268
9.	Religious beliefs and values guide me in making daily decisions and how I act.	505	1	5	3.66	1.236
10.	My religious beliefs and values guide me in how I respond to difficult challenges or life changes.	510	1	5	3.89	1.264

From table 4.2, it is evident that, on average, the responses of the respondents leaned towards the positive side of the scale. The mean scores for all the items in the religiosity scale were greater than 3.4, indicating that the majority of the respondents held the opinion that religion was important and guided them in their decisions, actions and practices. The highest mean score was obtained for the item “praying is important to me”, and the lowest for “it is important to me to participate in religious activities with others, e.g., worshipping, cell groups, etc.”

An exploratory factor analysis was conducted on the 10 Likert-type scale items measuring students’ perceptions of their religious beliefs and practices. Principal component analysis and oblimin rotation were used. The results of the exploratory factor analyses are presented and discussed below.

Table 4.3 presents the results of the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy and Bartlett’s test of sphericity. The KMO test determines how suitable the data are for factor analysis and whether factor analysis is warranted based on the correlations (Eiselen & Uys, 2021:66). The KMO “represents the squared partial correlations between variables” (Field, 2009:647). The KMO statistic varies between 0 and 1. A value close to 0 indicates dispersion in the correlation pattern (hence, factor analysis is probably inappropriate). Values close to 1.0 indicate that the patterns of correlations are relatively compact and, therefore, factor analysis should produce reliable factors (Field, 2009:647). According to Eiselen and Uys (2021:61), the values should be greater than 0.6, otherwise the correlations between pairs of items is not sufficient to proceed with factor analysis. Hutcheson & Sofroniou (1999, as cited in Field, 2009:647) suggested that KMO “values between 0.5 and 0.7 are mediocre, values between 0.7 and 0.8 are good, values between 0.8 and 0.9 are great and values above 0.9 are superb”.

Table 4.3: KMO and Bartlett’s test of sphericity

KMO and Bartlett's test		
KMO measure of sampling adequacy		0.946
Bartlett's test of sphericity	Approx. chi-square	5158.724
	df	45
	Sig.	0.000

Table 4.3 shows that the KMO yielded a value of 0.946, and the p-value was less than 0.05, indicating that the correlation between the items was sufficient for factor analysis and that the null hypothesis could be rejected.

Table 4.4 presents the total variance explained for religiosity. The total variance explained indicates the variation (variance) each factor explains – that is, how much of the specific linear combination of all items is explained by that factor (Eiselen & Uys, 2019:105).

Table 4.4: Total variance explained

Component	Initial Eigenvalues		Cumulative %	Extraction Sums of Squared Loadings		
	Total	% of Variance		Total	% of Variance	Cumulative %
1	7.345	73.450	73.450	7.345	73.450	73.450

Table 4.4 shows that only one factor (religiosity) was extracted by Kaiser's criteria (see Field, 2005:652) which explains 73.450% of the total variance of religiosity.

The results of the component matrix are presented in table 4.5. According to Field (2009:664), the component matrix (also called the rotated factor matrix in factor analysis) is a matrix of the factor loadings for each variable onto each factor.

Table 4.5: Component matrix^a

Religiosity		
	Items	Factor Religiosity
6	Religious values guide me in making important decisions.	0.923
10	My religious beliefs and values guide me in how I respond to difficult challenges or life changes.	0.908
9	Religious beliefs and values guide me in making daily decisions and how I act.	0.889
1	My religious beliefs are important to me.	0.884
7	I actively obey (adhere to) the specific practices my religion prescribes.	0.867
2	Attending religious/spiritual services is important to me.	0.859
3	Praying is important to me.	0.856
4	Reading religious/spiritual material (such as books, magazines, pamphlets) is important to me.	0.838
5	It is important to me to participate in religious activities with others, e.g. worshipping, cell groups, etc.	0.835
8	It is important to me to practise religious activities in private.	0.689

Table 4.5 shows that the 10 items (Q1, Q2, Q3, Q4, Q5, Q6, Q7, Q8, Q9, Q10) loaded strongly on the religiosity factor, with values ranging from 0.689 to 0.923. According to Field (2005:644), a loading of an absolute value of more than 0.3 is regarded as important; however, the significance of a factor loading will depend on the sample size. Stevens (2002, as cited in Field, 2009:644) recommended that for a sample size of 50, a loading of 0.722 is regarded as significant, for 100 the loading should be greater than 0.512, for 200 it should be greater than 0.364, for 300 it should be greater than 0.298, for 600 it should be greater than 0.21, and for 1 000 it should be greater than 0.162.

Table 4.6 presents the reliability statistics of religiosity. The reliability statistic, according to Field (2009:784) and IBM (2021b), measures the reliability of a scale.

Table 4.6: Reliability statistics of religiosity

Reliability statistics			
Factor	Cronbach's alpha	Cronbach's alpha based on standardised Items	Number of items
Religiosity	0.960	0.960	10

The religiosity factor obtained a Cronbach's alpha of 0.960, which is greater than the required value of 0.7 and indicates high reliability and internal consistency, according to Field (2009:675). Table 4.7 presents the descriptive statistics of the religiosity factor.

Table 4.7: Descriptive statistics of religiosity

Descriptive statistics					
	N	Minimum	Maximum	Mean	Std. deviation
Religiosity	511	1.00	5.00	3.7619	1.05086

The mean score of the factor was 3.76, which means that the respondents' responses were on average towards "agree" (4) for the statements on religiosity. (The Likert scale used ranged from 1 [strongly disagree] to 5 [strongly agree]). It can be inferred that, on average, respondents agreed that religion was important in their lives and it influenced their actions and practices. The next section presents and discusses the results of the confirmatory factor analyses conducted on the Self-Perceived Employability Scale.

4.3.3 Self-perceived employability

This section presents the descriptive statistics and the results of the confirmatory factor analyses of the Self-Perceived Employability Scale.

4.3.3.1 Descriptive statistics

Section B of the online questionnaire measured students' self-perceived employability. The scale developed by Rothwell *et al.* (2008) were used. A five-point Likert scale with the following response categories was used: “strongly disagree” (1), “disagree” (2), “neutral” (3), “agree” (4) and “strongly agree” (5). The descriptive statistics were interpreted and reported by mean and standard deviation. The mean was measured by its position on the Likert scale. The closer the mean is to 5, the more positive the respondents' opinion; the closer it is to 1, and the more negative the respondents' opinion, with 3 being a neutral value. Table 4.8 shows the descriptive statistics of the items in the Self-Perceived Employability Scale.

Table 4.8: Descriptive statistics of self-perceived employability

Descriptive statistics of self-perceived employability						
No.	Item	N	Minimum	Maximum	Mean	Standard deviation
1.	I achieve high grades in my studies.	512	1	5	3.67	0.852
2.	I regard my academic work as top priority.	512	1	5	4.35	0.773
3.	Employers are eager to employ graduates from my university.	510	1	5	3.57	1.008
4.	The status of this university is a significant asset to me in job seeking.	511	1	5	3.91	0.976
5.	Employers specifically target this university in order to recruit individuals from my subject area(s).	510	1	5	3.26	0.964
6.	My university has an outstanding reputation in my field of study.	510	1	5	3.83	0.940
7.	Many more people apply for my degree than there are places available.	509	1	5	3.34	1.062
8.	My chosen subjects rank highly in terms of social status.	510	1	5	3.50	1.035
9.	People in the career I am aiming for are in high demand in the external labour market.	509	1	5	3.64	1.066
10.	My degree is seen as leading to a specific career that is generally perceived as highly desirable.	510	1	5	3.64	1.109

Descriptive statistics of self-perceived employability						
No.	Item	N	Minimum	Maximum	Mean	Standard deviation
11.	There is generally a strong demand for graduates in the labour market at the present time.	507	1	5	3.32	1.163
12.	There are plenty of job vacancies in the geographical area where I am looking for work.	506	1	5	2.94	1.183
13.	I can easily find out about job opportunities in my chosen field of study.	505	1	5	3.24	1.196
14.	The skills and abilities that I possess are what employers are looking for.	506	1	5	3.84	0.952
15.	I am generally confident about success in job interviews and selection events.	511	1	5	3.63	1.096
16.	I feel I could get any job as long as my skills and experience are reasonably relevant.	510	1	5	3.90	1.082

Table 4.8 above shows that the mean scores for the individual items of the Self-Perceived Employability Scale ranged from 2.94 to 4.35, indicating that the respondents' answers ranged on average between “disagree” (2) and “agree” (4). The following items obtained the highest mean scores: question 2 (I regard my academic work to be a top priority; $M = 4.35$); question 4 (The status of this university is a significant asset to me in job seeking; $M = 3.91$) and question 16 (I feel I could get any job as long as my skills and experience are reasonably relevant; $M = 3.90$). The following items obtained the lowest mean scores: question 12 (There are plenty of job vacancies in the geographical area where I am looking for work; $M = 2.94$); question 13 (I can easily find out about job opportunities in my chosen field of study; $M = 3.24$); and question 5 (Employers specifically target this university in order to recruit individuals from my subject area(s); $M = 3.26$).

4.3.3.2 Reliability and confirmatory factor analysis of the measurement models

A confirmatory factor analysis was conducted on the 16 items measuring undergraduate students' self-perceived employability to test the structure and relationships between the latent variables underlying the data. Two measurement models were tested: a one-factor model (measuring the self-perceived employability construct) and a two-factor model (measuring internal [6 items] and external [10 items] dimensions of self-perceived employability). Internal employability was measured by B1, B2, B13, B14, B15 and B16 (6 items) and external employability by B3, B4, B5, B6, B7, B8, B9, B10, B11 and B12 (10 items).

4.3.3.2.1 Self-perceived employability: One-factor model (16 items)

Figure 4.1 shows the results of the confirmatory factor analysis for the one-factor model of self-perceived employability with standardised regression weights.

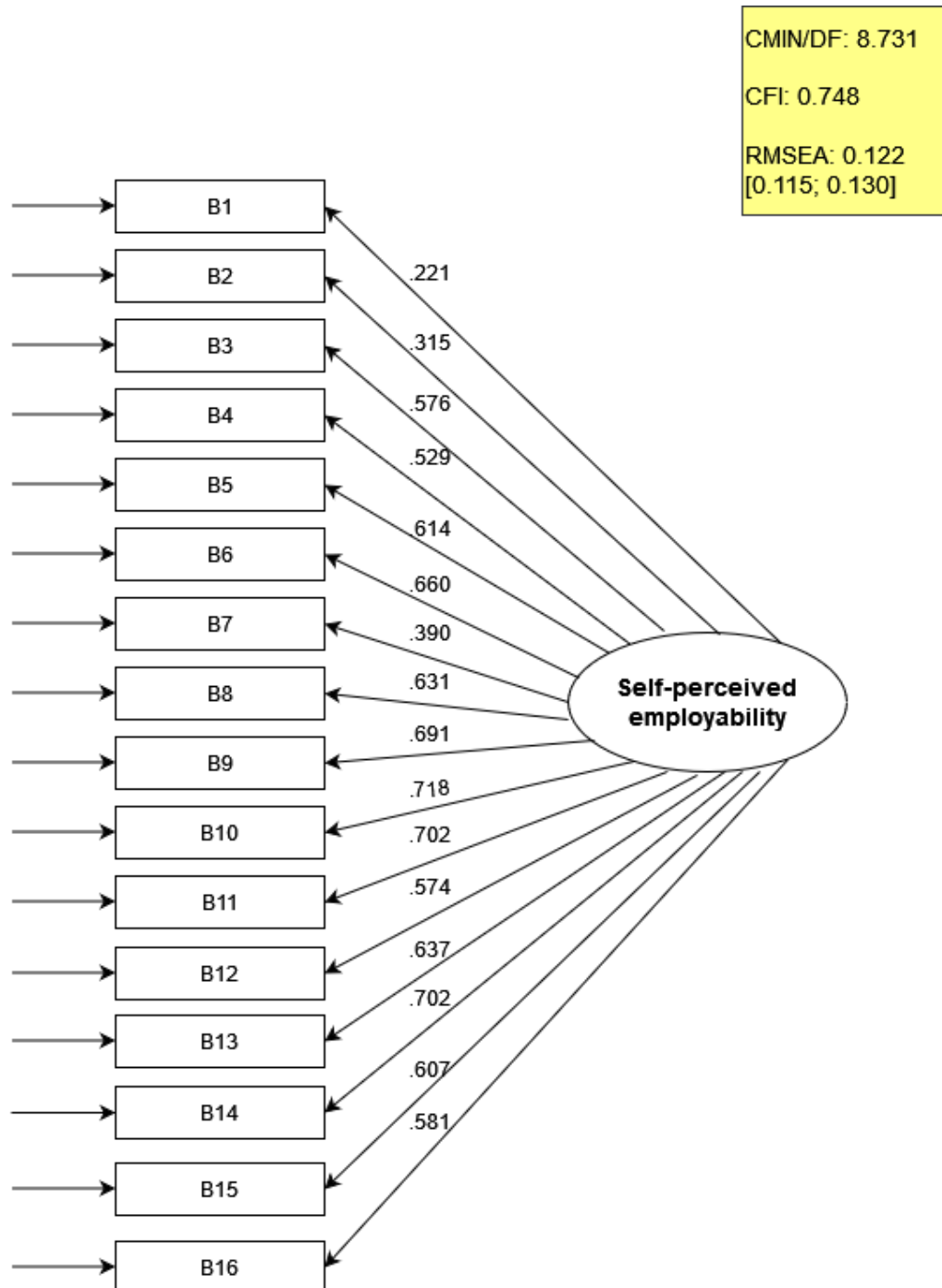


Figure 4.1: Confirmatory factor analysis results for the one factor self-perceived employability model with standardised regression weights

The confirmatory factor analysis showed that all factor loadings were statistically significant at the 0.05 level. The factor loadings for the one-factor model ranged between 0.221 to 0.718 (see figure 4.1). Only one item, question B1 obtained a value of 0.221; the item was retained because of its theoretical importance. Stevens (2002, as cited in Field, 2009:644) suggested that meaningful loadings should be greater than 0.298 when the sample size is greater than 300 but less than 600.

Table 4.9 shows the Goodness-of-Model-Fit Indices (GFIs) for the one-factor model of self-perceived employability. According to Field (2009:786), goodness-of-fit is an index that measures how well a model fits the data from which it was generated, thus, the sampled data. Three GFIs were used in this study, namely CMIN/DF, CFI and RMSEA.

Table 4.9: Goodness-of-model-fit indices of the one-factor self-perceived employability model (16 items)

Index	Decision rule	Author	Model score	Outcome
CMIN/DF	Close to 1; 3–5 still satisfactory	Kline (1998, as cited in Cucos, 2022) Mueller (1996) Paswan (as cited in Shadfar & Malekmohammadi, 2013:585)	8.731	Not good fit
CFI	≥ 0.9 (good fit)	Hair <i>et al.</i> (2010) Mueller (1996)	0.748	Not good fit
RMSEA	0.01 (excellent) 0.05 (good) 0.08 (mediocre) < 0.10 (still satisfactory)	Institute for Digital Research and Education (2021) Brown and Moore (2012:6) Hu and Bentler (1999:1) Blunch (2008)	0.122 [0.115;0.130]	Not good fit

As explained in section 4.2.4.2, a hypothetical model is considered a good fit with the sample data if the CMIN/DF value is close to 1 (Kline, 1998, as cited in Cucos, 2022; Mueller, 1996; Paswan as cited in Shadfar & Malekmohammadi, 2013:585); however, values ranging between 2 to 5 are still satisfactory (Mueller, 1996; Paswan as cited in Shadfar & Malekmohammadi, 2013:585), the CFI is greater than 0.9 (Hair *et al.*, 2010; Mueller, 1996) and the RMSEA is less than equal to 0.10 (Blunch, 2008; Brown & Moore, 2012:6; Hu & Bentler, 1999:1; Institute for Digital Research and Education, 2021). From table 4.9, it is evident that the CMIN/DF of the measurement model obtained a value of 8.731, indicating not a good fit. The measurement model yielded a CFI value of 0.748, which is smaller than the cut-off value of 0.9. Furthermore, the

measurement model obtained an RMSEA value of 0.122 with a 90% confidence interval of 0.115 (low) and 0.130 (high), indicating not a good model data fit. Thus, it can be concluded, based on the confirmatory factor analyses, that the one-factor structure of the Self-Perceived Employability Scale did not fit well to the data of the sample. Table 4.10 presents the reliability statistics of the measurement model.

Table 4.10: Reliability statistics of the one-factor self-perceived employability model

Reliability statistics			
Factor	Cronbach's alpha	Cronbach's alpha based on standardised Items	Number of items
Self-perceived employability	0.886	0.885	16

Table 4.10 shows that the one factor model of self-perceived employability achieved a Cronbach's alpha coefficient of 0.886, which measured well above the required value of 0.7 and indicated high reliability and internal consistency of the scale, as suggested by Field (2009:675). The next section discusses the results of the confirmatory factor analyses conducted on the two-factor model (measuring internal and external dimensions) of self-perceived employability.

4.3.3.2.2 Self-perceived employability: Two-factor model (16 items)

A confirmatory analysis was conducted on the two-factor model (measuring internal and external dimensions) of self-perceived employability. Internal employability was measured by B1, B2, B13, B14, B15 and B16 (6 items) and external employability by B3, B4, B5, B6, B7, B8, B9, B10, B11 and B12 (10 items). Figure 4.2 shows the results of the confirmatory factor analysis for the two-factor model of self-perceived employability with standardised regression weights.

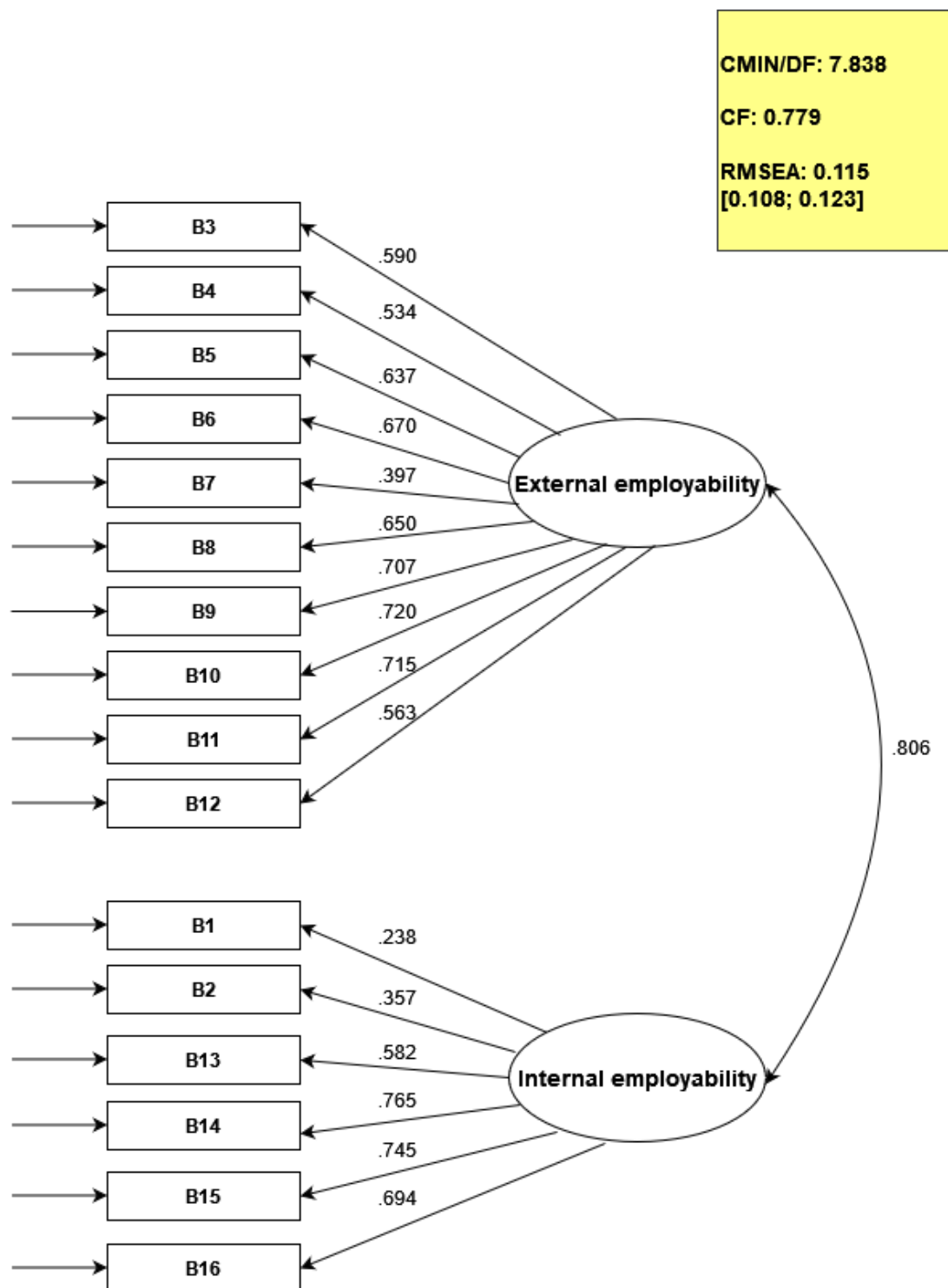


Figure 4.2: Confirmatory factor analysis results for the two factor self-perceived employability model (16 items) with standardised regression weights and correlations

The results of the confirmatory factor analysis shows that all factor loadings were statistically significant at the 0.05 level. Factor loadings for external employability ranged from 0.397 to 0.720 and for internal employability from 0.238 to 0.765. Only B1 (0.238) had a factor loading below 0.3; the item was retained due to its theoretical importance. Table 4.11 presents the results of the goodness-of-model-fit indices, namely CMIN/DF, CFI and RMSEA with its 90% confidence intervals.

Table 4.11: Goodness-of-model-fit indices of the two-factor self-perceived employability model (16 items)

Index	Decision rule	Author	Model score	Outcome
CMIN/DF	Close to 1; 3–5 still satisfactory	Kline (1998, as cited by Cucos, 2022) Mueller (1996) Paswan (as cited by Shadfar & Malekmohammadi, 2013:585)	7.838	Not good fit
CFI	≥ 0.9 (good fit)	Hair <i>et al.</i> (2010) Mueller (1996)	0.779	Not good fit
RMSEA	0.01 (excellent) 0.05 (good) 0.08 (mediocre) < 0.10 (still satisfactory)	Institute for Digital Research and Education (2021) Brown and Moore (2012:6) Hu and Bentler (1999:1) Blunch (2008)	0.115 [0.108;0.123]	Not good fit

From table 4.11, it is evident that the CMIN/DF of the measurement model obtained a value of 7.838, indicating not a good fit, according to Kline (1998, as cited in Cucos, 2022), Mueller (1996) and Paswan (as cited in Shadfar & Malekmohammadi, 2013:585). The measurement model yielded a CFI value of 0.779, which is smaller than the cut-off value of 0.9 (Hair *et al.*, 2010; Mueller, 1996). Furthermore, the measurement model obtained an RMSEA value of 0.115 with a 90% confidence interval of 0.108 (low) and 0.123 (high), indicating not a good model data fit as suggested by Blunch (2008), Brown and Moore (2012:6), Hu and Bentler (1999:1), and the Institute for Digital Research and Education (2021). Thus, based on the confirmatory factor analyses, it can be concluded that the two-factor structure of the Self-Perceived Employability Scale did not fit well to the data of the sample. The reliability statistics of internal and external employability are shown in table 4.12.

Table 4.12: Reliability statistics of the two-factor self-perceived employability model (16 items)

Reliability statistics			
Factor	Cronbach's alpha	Cronbach's alpha based on standardised Items	Number of items
Internal employability	0.741	0.738	6
External employability	0.856	0.858	10

Table 4.12 shows that Cronbach's alpha values for internal employability and external employability were 0.741 and 0.856, respectively. As Cronbach's alpha is greater than the recommended threshold of 0.70, this indicates good reliability and internal consistency of the factors (Eiselen & Uys, 2019:109; Field, 2009:675; Pallant, 2005:6; Taber, 2018:1277). Next, the two-factor model of self-perceived employability with ambition is discussed.

4.3.3.2.3 *Self-perceived employability: Two-factor model (22 items)*

To explore the internal–external dimensions of self-perceived employability further and because of the strong relationship suggested between internal employability and ambition, all the ambition scale items were now included in the internal employability subscale (Rothwell *et al.*, 2008:6). A confirmatory analysis was conducted on this two-factor model of self-perceived employability. The internal employability subscale comprises 12 items (B1, B2, B13, B14, B15, B16, C1, C2, C3, C4, C5 and C6), and the external employability subscale comprises 10 items (B3, B4, B5, B6, B7, B8, B9, B10, B11 and B12). Figure 4.3 shows the results of the confirmatory factor analysis for the two-factor model of self-perceived employability with ambition with standardised regression weights.

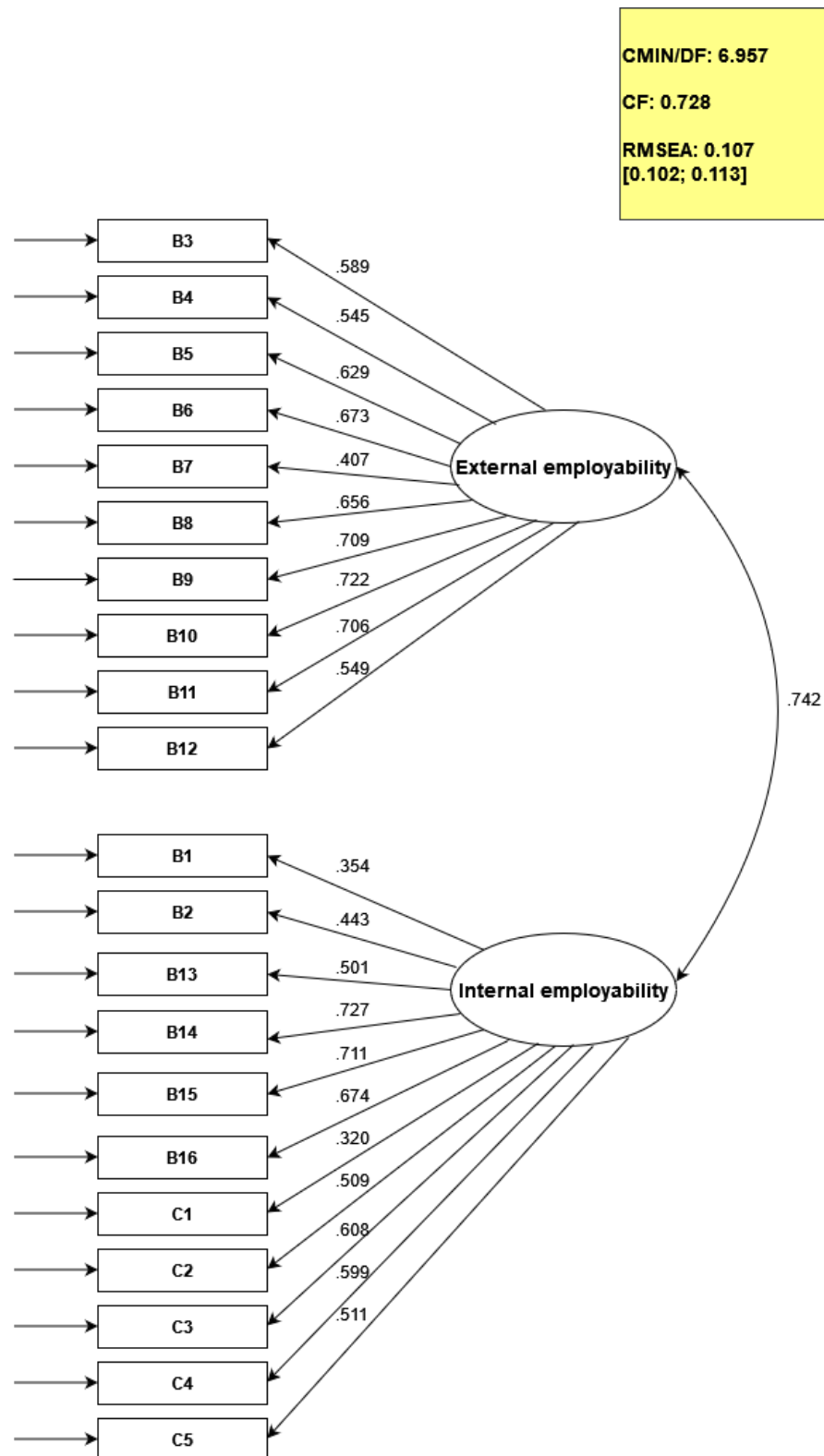


Figure 4.3: Confirmatory factor analysis results for the internal and external self-perceived employability model (22 items) with standardised regression weights and correlations

The results of the confirmatory factor analysis show that all factor loadings were statistically significant at the 0.05 level. Factor loadings for external employability ranged from 0.407 to 0.722 and for internal employability from 0.320 to 0.727. Table 4.13 presents the results of the goodness-of-model-fit indices, namely CMIN/DF, CFI and RMSEA with its 90% confidence intervals.

Table 4.13: Goodness-of-model-fit indices of the two-factor self-perceived employability model (22 items)

Index		Decision rule	Author	Model score	Outcome
CMIN/DF		Close to 1; 3–5 still satisfactory	Kline (1998, as cited in Cucos, 2022) Mueller (1996) Paswan (as cited in Shadfar & Malekmohammadi, 2013:585)	6.957	Not good fit
CFI		≥ 0.9 (good fit)	Hair <i>et al.</i> (2010) Mueller (1996)	0.728	Not good fit
RMSEA		0.01 (excellent) 0.05 (good) 0.08 (mediocre) < 0.10 (still satisfactory)	Institute for Digital Research and Education (2021) Brown and Moore (2012:6) Hu and Bentler (1999:1) Blunch (2008)	0.107 [0.102;0.113]	Not good fit

From table 4.13, it is evident that the CMIN/DF of the measurement model obtained a value of 6.957, indicating not a good fit, according to Kline (1998, as cited in Cucos, 2022), Mueller (1996) and Paswan (as cited in Shadfar & Malekmohammadi, 2013:585). The measurement model yielded a CFI value of 0.728, which is smaller than the cut-off value of 0.9 (Hair *et al.*, 2010; Mueller, 1996). Furthermore, the measurement model obtained an RMSEA value of 0.107 with a 90% confidence interval of 0.102 (low) and 0.113 (high), indicating not a good model data fit, as suggested by Blunch (2008), Brown and Moore (2012:6), Hu and Bentler (1999:1), and the Institute for Digital Research and Education (2021). Thus, based on the confirmatory factor analyses, it can be concluded that the two-factor structure of the Self-Perceived Employability Scale with ambition did not fit well to the data of the sample. The reliability statistics of internal and external employability are shown in table 4.14.

Table 4.14: Reliability statistics of the two-factor self-perceived employability model (22 items)

Reliability statistics			
Factor	Cronbach's alpha	Cronbach's alpha based on standardised Items	Number of items
Internal employability	0.819	0.823	11
External employability	0.856	0.858	10

Table 4.14 shows that Cronbach's alpha values for internal employability and external employability (with ambition) were 0.819 and 0.856, respectively. As Cronbach's alpha is greater than the recommended threshold of 0.70, this indicates good reliability and internal consistency of the factors (Eiselen & Uys, 2019:109; Field, 2009:675; Pallant, 2005:6; Taber, 2018:1277). As the measurement models analysed indicated "not a good fit" with the sample data, an exploratory factor analysis was conducted on the 16 Likert-type scale items measuring final-year undergraduate students' self-perceived employability.

4.3.3.3 Exploratory factor analysis of self-perceived employability (16 items)

An exploratory factor analysis was conducted on the 16 items of the Likert scale measuring students' self-perceived employability to test the scale's factor structure and examine its internal reliability. Principal component analysis and oblimin rotation were used. Table 4.15 presents the results of the Kaiser-Meyer-Olkin (KMO) measure for sampling adequacy and Bartlett's test of sphericity, which are used to check whether factor analysis based on the correlations is justified.

Table 4.15: KMO and Bartlett's test of sphericity

KMO and Bartlett's test		
KMO measure of sampling adequacy		0.890
Bartlett's test of sphericity	Approx. chi-square	3234.046
	df	120
	Sig.	0.000

From table 4.15, it is evident that the KMO test yielded a value of 0.890 and the Bartlett's test of sphericity a value smaller than 0.05, indicating that the correlation between items was sufficient for factor analysis (see Eiselen & Uys, 2019:102; Eiselen & Uys, 2021:66; Field, 2009:647).

Table 4.16 presents the total variance explained of the Self-Perceived Employability Scale and indicates how much of the variation (variance) each factor explains (see Eiselen & Uys, 2021:68).

Table 4.16: Total variance explained

Component	Initial eigenvalues			Extraction sums of squared loadings			Rotation sums of squared loadings
	Total	% of variance	Total	Total	% of variance	Cumulative %	Total
1	6.126	38.285	38.285	6.126	38.285	38.285	4.762
2	1.611	10.072	48.356	1.611	10.072	48.356	2.946
3	1.173	7.333	55.689	1.173	7.333	55.689	4.506

Table 4.16 shows that three factors were extracted according to Kaiser's criteria (Field, 2009:652), explaining 55.69% of the variance in self-perceived employability. Kaiser's rule recommends that factors with eigenvalues over 1 should be selected (Field, 2009:652). Factor 1 explained 38.29%, Factor 2 10.07%, and Factor 3 7.33% of the total variance. The results of the pattern matrix are reported in table 4.17.

Table 4.17: Pattern matrix^a

Self-perceived employability				
	Item	Factor 1	Factor 2	Factor 3
		External labour market	Self-belief	University reputation
B13	I can easily find out about job opportunities in my chosen field of study.	0.832		
B12	There are plenty of job vacancies in the geographical area where I am looking for work.	0.819		
B10	My degree is seen as leading to a specific career that is generally perceived as highly desirable.	0.694		

Self-perceived employability				
	Item	Factor 1	Factor 2	Factor 3
		External labour market	Self-belief	University reputation
B11	There is generally a strong demand for graduates in the labour market at the present time.	0.677		
B9	People in the career I am aiming for are in high demand in the external labour market.	0.662		
B14	The skills and abilities that I possess are what employers are looking for.	0.491	0.445	
B1	I achieve high grades in my studies.		0.694	
B2	I regard my academic work as top priority.		0.660	
B15	I am generally confident about success in job interviews and selection events.	0.318	0.646	
B16	I feel I could get any job as long as my skills and experience are reasonably relevant.		0.578	
B5	Employers specifically target this university in order to recruit individuals from my subject area(s).			-0.756
B4	The status of this university is a significant asset to me in job seeking.			-0.732
B3	Employers are eager to employ graduates from my university.			-0.707
B6	My university has an outstanding reputation in my field of study.			-0.659
B7	Many more people apply for my degree than there are places available.			-0.595
B8	My chosen subjects rank highly in terms of social status.	0.376		-0.451

From table 4.17, it is evident that five items (B9, B10, B11, B12, B13) loaded on Factor 1: External labour market, with scores ranging from 0.662 to 0.832; five items (B1, B2, B14, B15, B16) loaded on Factor 2: Self-belief, with scores ranging from 0.445 to 0.578; and six items (B3, B4, B5, B6, B7, B8) loaded on Factor 3: University reputation, with scores ranging from 0.451 to 0.756.

Table 4.18 presents the reliability statistics, which, according to Eiselen and Uys (2021:73) and Field (2009:681), can potentially range between 0 and 1. According to Eiselen and Uys (2021:73) and Field (2009:677), the closer Cronbach's alpha is to 1, the more reliable the factor is. If Cronbach's alpha is less than 0.7, the factor is considered unreliable.

Table 4.18: Reliability statistics of self-perceived employability

Reliability statistics			
Factor	Cronbach's alpha	Cronbach's alpha based on standardised Items	Number of items
External labour market	0.847	0.847	5
Self-belief	0.737	0.728	5
University reputation	0.793	0.796	6

The Cronbach alpha values for self-perceived employability were 0.847, 0.737 and 0.793 for External labour market, Self-belief and University reputation, respectively. Since Cronbach's alpha is greater than the recommended threshold of 0.70, this indicates good reliability and internal consistency of the factors (Eiselen & Uys, 2019:109; Field, 2009:675; Pallant, 2005:6; Taber, 2018:1277).

Table 4.19 presents the descriptive statistics of self-perceived employability (External labour market, Self-belief and University reputation). The response categories for the scale were: “strongly disagree” (1), “disagree” (2), “neutral” (3), “agree” (4) and “strongly agree” (5).

Table 4.19: Descriptive statistics of self-perceived employability

Descriptive statistics					
	N	Minimum	Maximum	Mean	Std. deviation
External labour market	511	1.00	5.00	3.3562	0.90328
Self-belief	512	1.00	5.00	3.8793	0.67084
University reputation	511	1.00	5.00	3.5695	0.69912

From table 4.19, it is evident that, on average, the responses of the respondents lean towards the positive side of the scale. The mean scores for all the items in the self-perceived scale were greater than 3.3, thus the responses on average ranged between neutral and agree. The highest mean score was obtained for the item “Self-belief” ($M = 3.88$), followed by “University reputation” ($M = 3.57$) and “External labour market” ($M = 3.36$). The following section presents the results of the exploratory factor analysis of self-perceived employability with ambition.

4.3.3.4 Exploratory factor analysis of self-perceived employability (16 items) with ambition (5 items)

An additional exploratory factor analysis was conducted on the 21 items included in the self-perceived employability (16 items) and ambition (5 items) scales to test the factor structure of the scale and to examine its internal reliability. Question C6 of the Ambition scale was deleted and was not included in the confirmatory factor analyses because the variable had little in common with the other variables based on its low communality, which was 0.079. Principal component analysis and oblimin rotation were used.

Table 4.20 presents the results of the KMO measure of sampling adequacy and Bartlett's test of sphericity, which are used to check whether the factor analysis is justified based on the correlations.

Table 4.20: KMO and Bartlett's test of sphericity

KMO and Bartlett's test		
KMO measure of sampling adequacy		0.895
Bartlett's test of sphericity	Approx. chi-square	4202.103
	df	210
	Sig.	0.000

From table 4.20, it is evident that the KMO test yielded a value of 0.895 and the Bartlett's test of sphericity a value smaller than 0.05, indicating that the correlation between items was sufficient for factor analysis (see Eiselen & Uys, 2019:102; Eiselen & Uys, 2021:66; Field, 2009:647). Table 4.21 presents the total variance explained.

Table 4.21: Total variance explained

Component	Initial eigenvalues			Extraction sums of squared loadings			Rotation sums of squared loadings ^a
	Total	% of variance	Total	Total	% of variance	Cumulative %	Total
1	6.996	33.314	33.314	6.996	33.314	33.314	6.216
2	2.281	10.861	44.175	2.281	10.861	44.175	4.744

From table 4.21, it is evident that three factors were extracted using Kaiser's criteria that explained 44.18% of the variance in the self-perceived employability with ambition scale. Factor 1 explained 33.31% and Factor 2 10.86% of the total variance. Only factors with an eigenvalue above 1 were retained. The results of the pattern matrix are reported in table 4.22.

Table 4.22: Pattern matrix^a

Self-perceived external and internal employability			
		Factor 1	Factor 2
		External employability	Internal employability
B1	I achieve high grades in my studies.		0.522
B2	I regard my academic work as top priority.		0.624
B3	Employers are eager to employ graduates from my university.	0.587	
B4	The status of this university is a significant asset to me in job seeking.	0.343	0.404
B5	Employers specifically target this university in order to recruit individuals from my subject area(s).	0.704	
B6	My university has an outstanding reputation in my field of study.	0.577	
B7	Many more people apply for my degree than there are places available.	0.311	
B8	My chosen subjects rank highly in terms of social status.	0.633	
B9	People in the career I am aiming for are in high demand in the external labour market.	0.735	
B10	My degree is seen as leading to a specific career that is generally perceived as highly desirable.	0.714	
B11	There is generally a strong demand for graduates in the labour market at the present time.	0.810	
B12	There are plenty of job vacancies in the geographical area where I am looking for work.	0.758	
B13	I can easily find out about job opportunities in my chosen field of study.	0.751	
B14	The skills and abilities that I possess are what employers are looking for.	0.548	0.321
B15	I am generally confident about success in job interviews and selection events.	0.422	0.389

Self-perceived external and internal employability			
		Factor 1	Factor 2
		External employability	Internal employability
B16	I feel I could get any job as long as my skills and experience are reasonably relevant.	0.403	0.381
C1	I want to be in a position to do mostly work that I really like.		0.469
C2	I am satisfied with the progress I have made in terms of meeting my goals for the development of new skills.		0.535
C3	I have clear goals for what I want to achieve in life.		0.716
C4	I regard myself as highly ambitious.		0.785
C5	I feel it is urgent that I get on with my career development.		0.724

From table 4.22, it is evident that eleven items (B3, B4, B5, B6, B7, B8, B9, B10, B11, B12, B13) loaded on Factor 1: External employability, with scores ranging from 0.311 to 0,810; and 10 items (B1, B2, B14, B15, B16, C1, C2, C3, C4, C5) loaded on Factor 2: Internal employability, with scores ranging from 0.321 to 0,785. Table 4.23 presents the reliability statistics of self-perceived external and internal employability.

Table 4.23: Reliability statistics of self-perceived external and internal employability

Reliability statistics			
Factor	Cronbach's alpha	Cronbach's alpha based on standardised Items	Number of items
External employability	0.869	0.870	11
Internal employability	0.823	0.823	10

The Cronbach alpha value obtained for external employability was 0.869 and for internal employability, it was 0.823. As the Cronbach alpha values were greater than the recommended threshold of 0.70, this indicated good reliability and internal consistency of the factors (Eiselen & Uys, 2019:109; Field, 2009:675; Pallant, 2005:6; Taber, 2018:1277).

Table 4.24 presents the descriptive statistics of external and internal self-perceived employability. The response categories used for the scales were “strongly disagree” (1), “disagree” (2), “neutral” (3), “agree” (4) and “strongly agree” (5).

Table 4.24: Descriptive statistics of self-perceived external and internal employability

Descriptive statistics					
	N	Minimum	Maximum	Mean	Std. deviation
External employability	511	1.00	5.00	3.4734	0.70744
Internal employability	512	1.00	5.00	4.0848	0.55619

From table 4.24, it is evident that, on average, the responses of the respondents leant towards the positive side of the scale (ranging between neutral and agree). The highest mean score was obtained for “Internal employability” (M = 4.08) and the lowest for “External employability” (M = 3.47).

The following section presents the results of the confirmatory factor analysis for ambition.

4.3.4 Ambition

Section C of the questionnaire measured students' perceptions of their ambition. The scale used a five-point Likert scale with the following response categories: “strongly disagree” (1), “disagree” (2), “neutral” (3), “agree” (4) and “strongly agree” (5). The descriptive statistics of the items in the scale and the results of the confirmatory factor analysis are presented and discussed below.

4.3.4.1 Descriptive statistics

The descriptive statistics of the items included in the Ambition scale is presented in table 4.25.

Table 4.25: Descriptive statistics of ambition

Descriptive statistics of ambition						
No.	Item	N	Minimum	Maximum	Mean	Standard deviation
1.	I want to be in a position to do mostly work that I really like.	506	1	5	4.48	0.737
2.	I am satisfied with the progress I have made in terms of meeting my goals for the development of new skills.	507	1	5	3.87	0.945
3.	I have clear goals for what I want to achieve in life.	506	1	5	4.30	0.873

Descriptive statistics of ambition						
No.	Item	N	Minimum	Maximum	Mean	Standard deviation
4.	I regard myself as highly ambitious.	507	1	5	4.37	0.791
5.	I feel it is urgent that I get on with my career development.	507	1	5	4.47	0.723
6.	What I do in the future is not really important.	508	1	5	1.92	1.306

Table 4.25 shows that, on average, respondents' answers tended to be on the positive side of the scale. The means for all items on the ambition scale were greater than 3.8. Only item 6 ($M = 1.92$) had a mean below 3; the item was a reversed statement. Thus, on average, the respondents disagreed with the statement, indicating that the majority regarded what they would do in future important. The highest mean score obtained was for the item "I want to be in a position to do mostly work that I really like" ($M = 4.48$) and the lowest for "What I do in the future is not really important" ($M = 1.92$). The following subsection presents the confirmatory factor analysis of the measurement model.

4.3.4.2 Reliability and confirmatory factor analysis of the measurement model

A confirmatory factor analysis was conducted on the five items measuring undergraduate students' perceptions of ambition to test the structure and relationships between the latent variables underlying the data. Question C6 of the Ambition scale was deleted and was not included in the confirmatory factor analyses because the variable had little in common with the other variables based on its low communality, which was 0.079.

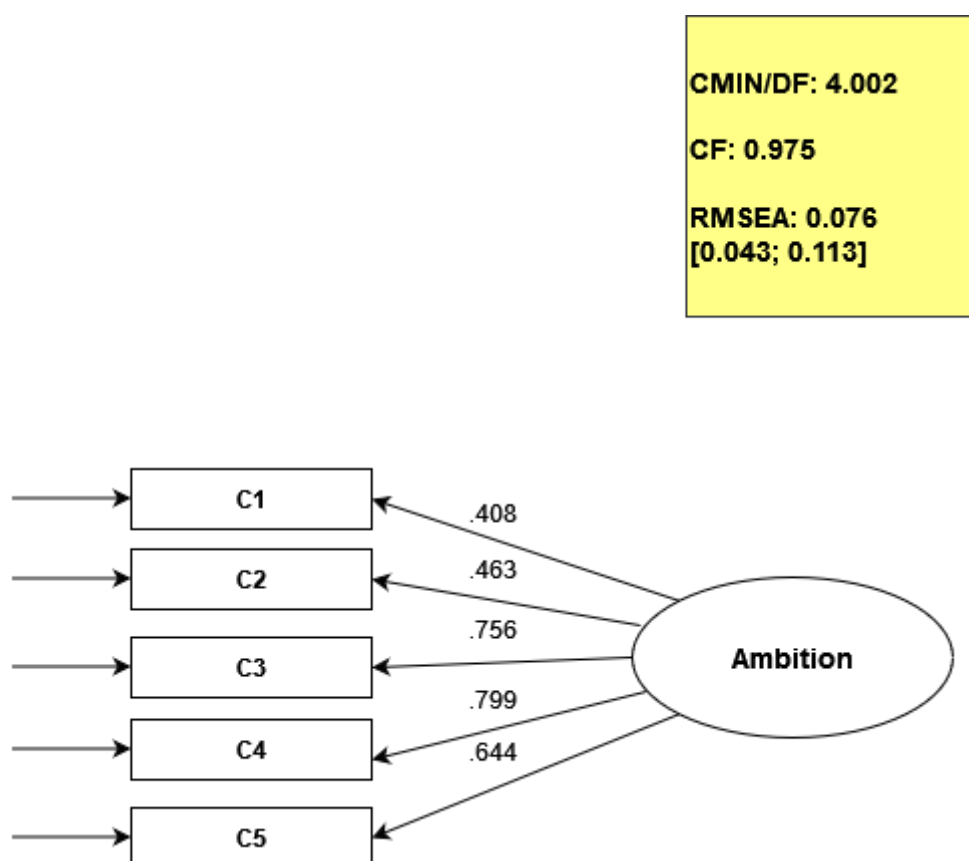


Figure 4.4: Confirmatory factor analysis results for the ambition model with standardised regression weights

The results of the confirmatory factor analysis show that all factor loadings were statistically significant at the 0.05 level. Factor loadings for ambition ranged from 0.408 to 0.799. Table 4.26 presents the results of the goodness-of-model-fit indices, namely CMIN/DF, CFI and RMSEA, with their 90% confidence intervals.

Table 4.26: Goodness-of-model-fit indices of ambition

Index	Decision rule	Author	Model score	Outcome
CMIN/DF	Close to 1; 3–5 still satisfactory	Mueller (1996) Paswan (as cited in Shadfar & Malekmohammadi, 2013:585)	4.002	Acceptable fit
CFI	≥ 0.9 (good fit)	Hair <i>et al.</i> (2010) Mueller (1996)	.975	Good fit
RMSEA	0.01 (excellent) 0.05 (good) 0.08 (mediocre) ≤ 0.10 (still satisfactory)	Hu and Bentler (1999:1) Brown and Cudeck (as cited in Nordlund & Garvill, 2002:251) Blunch (2008)	0.076 [0.043;0.113]	Acceptable fit

From table 4.26, it is evident that the CMIN/DF of the measurement model obtained a value of 4.002, indicating an acceptable fit, according to Kline (1998, as cited in Cucos, 2022), Mueller (1996) and Paswan (as cited in Shadfar & Malekmohammadi, 2013:585). The measurement model yielded a CFI value of 0.975, which is higher than the cut-off value of 0.9 (Hair *et al.*, 2010; Mueller, 1996), thus indicating a good fit between the model and the sampled data. Furthermore, the measurement model obtained an RMSEA value of 0.076 with a 90% confidence interval of 0.043 (low) and 0.113 (high), indicating an acceptable model fit, as suggested by Blunch (2008), Brown and Moore (2012:6), Hu and Bentler (1999:1), and the Institute for Digital Research and Education (2021). Thus, it can be concluded, based on the confirmatory factor analyses that the ambition scale fit well to the data of the sample. The reliability statistics of ambition are shown in Table 4.27.

Table 4.27: Reliability statistics of ambition

Reliability statistics			
Factor	Cronbach's alpha	Cronbach's alpha based on standardised Items	Number of items
Ambition	0.744	0.748	5

Table 4.27 shows that the Cronbach alpha value for ambition is 0.744, indicating good reliability and internal consistency (Eiselen & Uys, 2019:109; Field, 2009:675; Pallant, 2005:6; Taber, 2018:1277). Table 4.28 presents the descriptive statistics of ambition.

Table 4.28: Descriptive statistics of ambition

Descriptive statistics					
	N	Minimum	Maximum	Mean	Std. deviation
Ambition	507	1.00	5.00	4.2990	0.57506

Table 4.28 shows that, on average, respondents' answers tended to be on the positive side of the scale. The mean for ambition was greater than 4.2, indicating that, on average, the respondents agreed to strongly agreed with the statements in the scale. The following section presents the descriptive statistics and confirmatory analysis results of the University Commitment scale.

4.3.5 University commitment

Section D of the questionnaire measured students' perceptions of their commitment to the university. The scale used a five-point Likert scale with the following response categories: “strongly disagree” (1), “disagree” (2), “neutral” (3), “agree” (4) and “strongly agree” (5). The descriptive statistics of the items in the scale and the results of the confirmatory factor analysis are presented and discussed below.

4.3.5.1 Descriptive statistics

The descriptive statistics of the items included in the University Commitment scale is presented in Table 4.29.

Table 4.29: Descriptive statistics of university commitment

Descriptive statistics of university commitment						
No.	Item	N	Minimum	Maximum	Mean	Standard deviation
1.	I recommend this university to my friends as a great university to attend.	507	1	5	4.22	0.955
2.	I would have accepted almost any type of course in order to come to this university.	508	1	5	2.67	1.355
3.	I find that my values and this university's values are very similar.	507	1	5	3.63	1.016
4.	I am proud to tell others that I am studying at this university.	507	1	5	4.32	0.879
5.	Being at this university really inspires the best in me in the way of study performance.	507	1	5	4.04	1.035
6.	I am extremely glad I chose this university over others I was considering at the time I joined.	506	1	5	4.10	1.045
7.	I really care about this university and its future.	506	1	5	4.15	0.933
8.	For me this is the best of all universities at which to be a student.	505	1	5	3.83	1.161

Table 4.29 shows that, on average, respondents' answers tended to be on the positive side of the scale, except for item D2 (the response ranged between disagree and neutral). The highest mean score obtained was for the item “I am proud to tell others that I am studying at this university” ($M = 4.32$) and the lowest for “I would have accepted almost any type of course in order to come to

this university" (M = 2.67). The following section presents the reliability and confirmatory factor analysis of the measurement model.

4.3.5.2 Reliability and confirmatory factor analysis of the measurement model

A confirmatory factor analysis was conducted on the eight items measuring undergraduate students' perceptions of university commitment to test the structure and relationships between the latent variables underlying the data.

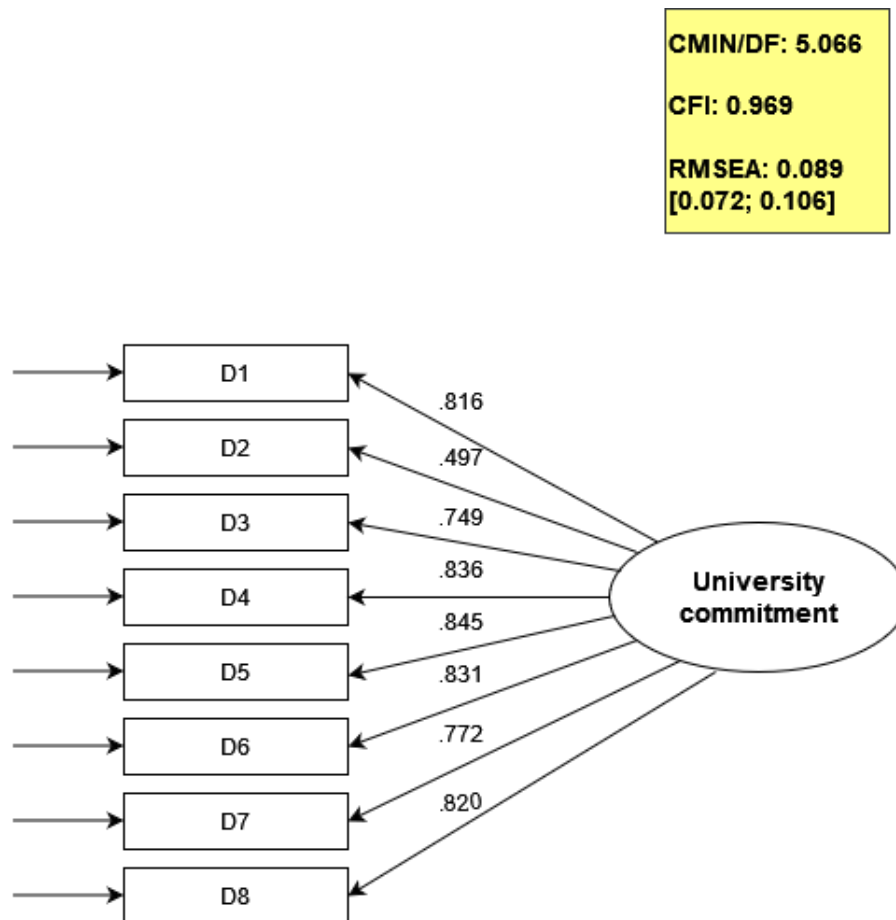


Figure 4.5: Confirmatory factor analysis results for the university commitment model with standardised regression weights

The results of the confirmatory factor analysis showed that all factor loadings were statistically significant at the 0.05 level. Factor loadings for university commitment ranged from 0.497 to 0.845. Table 4.30 presents the results of the goodness-of-model-fit indices, namely CMIN/DF, CFI and RMSEA, with their 90% confidence intervals.

Table 4.30: Goodness-of-model-fit indices of university commitment

Index	Decision rule	Author	Model score	Outcome
CMIN/DF	Close to 1; 3–5 still satisfactory	Mueller (1996) Paswan (as cited by Shadfar & Malekmohammadi, 2013:585)	5.066	Acceptable fit
CFI	≥ 0.9 (good fit)	Hair <i>et al.</i> (2010) Mueller (1996)	0.969	Good fit
RMSEA	0.01 (excellent) 0.05 (good) 0.08 (mediocre) ≤ 0.10 (still satisfactory)	Hu and Bentler (1999:1) Brown and Cudeck (as cited in Nordlund & Garvill, 2002:251) Blunch (2008)	0.089 [0.072;0.106]	Acceptable fit

From table 4.30, it is evident that the CMIN/DF of the measurement model obtained a value of 5.066, indicating an acceptable fit, according to Kline (1998, as cited in Cucos, 2022), Mueller (1996) and Paswan (as cited in Shadfar & Malekmohammadi, 2013:585). The measurement model yielded a CFI value of 0.969, which is higher than the cut-off value of 0.9 (Hair *et al.*, 2010; Mueller, 1996). Furthermore, the measurement model obtained an RMSEA value of 0.089 with a 90% confidence interval of 0.072 (low) and 0.106 (high), indicating an acceptable model-data fit, as suggested by Blunch (2008), Brown and Moore (2012:6), Hu and Bentler (1999:1), and the Institute for Digital Research and Education (2021). Thus, based on the confirmatory factor analyses, it can be concluded that the university commitment scale fit well to the data of the sample. The reliability statistics of the university commitment scale are shown in table 4.31.

Table 4.31: Reliability statistics of university commitment

Reliability statistics			
Factor	Cronbach's alpha	Cronbach's alpha based on standardised Items	Number of items
University commitment	0.913	0.921	8

Table 4.31 shows that the Cronbach alpha value for university commitment is 0.913, thus indicating good reliability and internal consistency (Eiselen & Uys, 2019:109; Field, 2009:675; Pallant, 2005:6; Taber, 2018:1277). Table 4.32 presents the descriptive statistics of the University Commitment scale.

Table 4.32: Descriptive statistics of university commitment

Descriptive statistics					
	N	Minimum	Maximum	Mean	Std. deviation
University commitment	508	1.00	5.00	3.8707	0.83254

Table 4.32 shows that, on average, respondents' answers tended to be on the positive side of the scale. The mean for the University Commitment scale was greater than 3.8, indicating that, on average, the respondents agreed with the statements.

4.4 CONCLUSION

The purpose of this chapter was to present and discuss Part 1 of the empirical results and analyses of the study. The chapter began with an explanation of the exposition of the research methodology. The research design was outlined, and the population and sample, data collection methods, measurement instruments and data analyses techniques (independent samples t-test, ANOVA test, effect sizes, and the Spearman rank correlation coefficients) used in the study were discussed.

The second section of the chapter presented and discussed the socio-demographic information of the respondents. A total of 514 respondents (final-year undergraduate students) participated in the survey.

The third section of the chapter focused on presenting and discussing the descriptive statistics of the scales (religiosity, self-perceived employability, ambition and university commitment) used in the study as well as the reliability and validity of the scales. An exploratory factor analysis was conducted on the Likert-type scale items measuring students' perceptions of their religious beliefs and practices. The scale obtained a Cronbach's alpha of 0.960, which indicates high reliability and internal consistency.

A confirmatory factor analysis was conducted on the 16 items measuring undergraduate students' self-perceived employability to test the structure and relationships between the latent variables underlying the data. Two measurement models were tested: a one-factor model (measuring the self-perceived employability construct) and a two-factor model (measuring internal and external dimensions of self-perceived employability). The study used three GFIs, namely CMIN/DF, CFI

and RMSEA. The confirmatory factor analyses showed that neither the one-factor structure nor the two-factor structure of the Self-Perceived Employability Scale indicated a good model-data fit.

An additional confirmatory analysis was conducted, which included all the items of the self-perceived employability and ambition scales, to explore the internal–external dimensions further. The confirmatory factor analyses revealed that this two-factor structure also did not indicate a good model-data fit.

Based on the above results, an exploratory factor analysis was conducted on the 16 items of the Likert scale measuring students' self-perceived employability to test the scale's factor structure and examine its internal reliability. Three factors were extracted: External labour market, Self-belief, and University reputation. The Cronbach alpha values for all the factors measured above 0.7, showing good reliability and internal consistency.

Confirmatory factor analyses were conducted on the items measuring undergraduate students' perceptions of ambition and university commitment to test the structure and relationships between the latent variables underlying the data. The results showed a good model-data fit for Ambition as well as University commitment.

The following chapter presents the results of the inferential statistical analysis and the discussion and interpretation of the results of the literature reviewed.

CHAPTER 5

EMPIRICAL RESULTS AND ANALYSES: INFERENTIAL STATISTICS, AND DISCUSSION AND INTERPRETATION OF THE RESULTS

5.1 INTRODUCTION

The previous chapter presented and discussed the socio-demographical information of the respondents, the descriptive statistics, and reliability and validity of the scales used in the study. This chapter elaborates on the empirical results and presents and discusses the results of the inferential statistical analyses. Independent samples t-tests, ANOVA tests, effect sizes and Spearman's rank-order correlation coefficient were used to determine the association between the socio-demographic variables, and self-perceived employability, ambition, and university commitment. The chapter is concluded with a discussion and interpretation of the results in terms of the literature reviewed.

5.2 THE ASSOCIATION BETWEEN SOCIO-DEMOGRAPHIC VARIABLES, AND SELF-PERCEIVED EMPLOYABILITY, AMBITION, AND UNIVERSITY COMMITMENT

The researcher used independent samples t-tests, ANOVA tests and effect sizes to measure the association between gender, race, field of study, religiosity, geographical location, socio-economic status, parental level of education, and previous work experience and students' self-perceived employability. Independent samples t-tests are used to compare the means of two independent groups on a continuous variable (Eiselen & Uys, 2021:97; Field, 2009:342). ANOVA tests are used to determine whether there are significant differences between the means of more than two groups on a continuous variable (Eiselen & Uys, 2021:116; Field, 2009:423). Effect size measures the strength of the relationship between two variables and indicates how meaningful the difference between groups is (Field, 2009:785). This study only reported the effect sizes of the results that were significant according to the independent samples t-tests and ANOVA tests.

5.2.1 *The association between gender, and self-perceived employability, ambition and university commitment*

Table 5.1 presents the results of the independent samples t-test for the association between gender, and self-perceived employability, ambition, and university commitment.

Table 5.1: Association between gender, and self-perceived employability, ambition, and university commitment

Group statistics					Independent sample t-test	Effect size
Gender		N	Mean	SD	P-value	
External labour market	Male	196	3.49	0.94	0.013	0.23
	Female	308	3.28	0.87		
Self-belief	Male	196	3.91	0.70	0.418	0.07
	Female	309	3.86	0.65		
University reputation	Male	196	3.59	0.75	0.716	0.03
	Female	308	3.57	0.67		
Ambition	Male	195	4.28	0.64	0.564	0.05
	Female	305	4.31	0.54		
University commitment	Male	195	3.88	0.85	0.913	0.01
	Female	306	3.87	0.82		
External employability	Male	196	3.55	0.75	0.095	0.15
	Female	308	3.44	0.68		
Internal employability	Male	196	4.09	0.61	0.821	0.02
	Female	309	4.08	0.52		

d = 0.2: small effect size; d = 0.5: medium effect size; d = 0.8: large effect size

The results of the independent samples t-test indicated statistically significant differences between the mean scores of male and female respondents for external labour market – the p-value was 0.013. The male respondents (M= 3.49) scored higher than female respondents (M= 3.28) on external labour market, indicating that male respondents were more optimistic about their perceptions of the external labour market than female respondents; the effect size (d = 0.23) showed a small effect, thus not important in practice. Furthermore, the effect sizes for the other six factors were less than 0.2, indicating that the difference in mean scores between male and female respondents was negligible (see Field, 2019:571).

5.2.2 *The association between work experience, and self-perceived employability, ambition, and university commitment*

Table 5.2 presents the results of the independent samples t-test for the association between work experience, and self-perceived employability, ambition, and university commitment.

Table 5.2: Association between work experience, and self-perceived employability, ambition, and university commitment

Group statistics					Independent sample t-test	
Work experience		N	Mean	SD	P-value	Effect size
External labour market	Yes	277	3.40	0.94	0.257	0.19
	No	234	3.31	0.86		
Self-belief	Yes	278	3.91	0.68	0.197	0.11
	No	234	3.84	0.66		
University reputation	Yes	277	3.59	0.74	0.445	0.07
	No	234	3.54	0.65		
Ambition	Yes	276	4.29	0.59	0.837	0.02
	No	231	4.30	0.55		
University commitment	Yes	276	3.81	0.90	0.092	0.15
	No	232	3.94	0.74		
External employability	Yes	277	3.50	0.74	0.279	0.10
	No	234	3.44	0.67		
Internal employability	Yes	278	4.10	0.57	0.457	0.07
	No	234	4.06	0.54		

d = 0.2: small effect size; d = 0.5: medium effect size; d = 0.8: large effect size

The independent samples t-test results showed that there were no statistically significant differences between the mean scores of the respondents with and without work experience for all the self-perceived employability factors, ambition, and university commitment – all the p-values were above 0.05. Furthermore, the effect sizes for the seven factors were smaller than 0.2, meaning that the difference between the mean scores of the two groups (with and without work experience) was negligible (see Field, 2019:571). This shows that work experience did not

influence the respondents' perceptions of their employability, ambition and commitment to the university.

5.2.3 *The association between campus, and self-perceived employability, ambition, and university commitment*

An ANOVA test was used to determine the association between campus, and self-perceived employability, ambition and university commitment. Table 5.3 presents the results of the ANOVA test.

Table 5.3: Association between campus, and self-perceived employability, ambition, and university commitment

Group statistics					ANOVA	Effect sizes	
Campus		N	Mean	SD	P-value	A with B and C	B with C
External labour market	A	255	3.33	0.92	0.331		
	B	103	3.47	0.88		0.16	
	C	152	3.32	0.89		0.01	0.17
	Total	510	3.36	0.90			
Self-belief	A	256	3.83	0.66	0.193		
	B	103	3.97	0.63		0.21	
	C	152	3.90	0.71		0.10	0.09
	Total	511	3.88	0.67			
University reputation	A	255	3.54	0.70	0.047		
	B	103	3.72	0.61		0.26	
	C	152	3.52	0.74		0.02	0.27
	Total	510	3.57	0.70			
Ambition	A	253	4.27	0.54	0.503		
	B	102	4.35	0.61		0.12	
	C	151	4.32	0.61		0.07	0.05
	Total	506	4.30	0.58			

Group statistics					ANOVA	Effect sizes	
Campus		N	Mean	SD	P-value	A with B and C	B with C
University commitment	A	254	3.75	0.85	0.006		
	B	102	4.00	0.82		0.29	
	C	151	3.98	0.79		0.27	0.03
	Total	507	3.87	0.83			
External employability	A	255	3.44	0.72	0.092		
	B	103	3.61	0.61		0.23	
	C	152	3.43	0.75		0.02	0.24
	Total	510	3.47	0.71			
Internal employability	A	256	4.05	0.54	0.233		
	B	103	4.15	0.56		0.19	
	C	152	4.10	0.59		0.10	0.08
	Total	511	4.08	0.56			

d = 0.2: small effect size; d = 0.5: medium effect size; d = 0.8: large effect size

The results of the ANOVA test revealed significant differences between the mean scores of the campus categories for university reputation (p-value = 0.047) and university commitment (p-value = 0.006). Campus B (M = 3.72) respondents had more positive perceptions of the university's reputation than Campuses A (M = 3.54; d = 0.26) and C (M = 3.52; d = 0.27) respondents. Furthermore, respondents from Campus A (M = 3.75) demonstrated less commitment to the university than respondents from Campuses B (M = 4; d = 0.29) and C (M = 3.98; d = 0.27). The effect sizes showed a small effect, thus not important in practice.

Furthermore, the effect sizes revealed differences between the mean scores of Campuses A (M = 3.83) and B (M = 3.97; d = 0.21) for self-belief and between the mean scores of Campuses A (M = 3.44) and B (M = 3.61; d = 0.23), and B (M = 3.61) and C (M = 3.43; d = 0.24) for external employability. However, the effect sizes were small, thus not important in practice.

5.2.4 *The association between mode of study, and self-perceived employability, ambition, and university commitment*

An ANOVA test was used to determine the association between mode of study, and self-perceived employability, ambition and university commitment. Table 5.4 presents the results of the ANOVA test.

Table 5.4: Association between mode of study, and self-perceived employability, ambition, and university commitment

Group statistics						ANOVA	Effect sizes
Mode of study		N	Mean	SD	P-value	A with B and C	B with C
External labour market	(A) Full-time classroom-based	443	3.37	0.89	0.545		
	(B) Full-time distance-based (correspondence learning)	48	3.22	0.92		0.16	
	(C) Part-time classroom-based / Part-time distance-based (correspondence learning)	20	3.40	1.08		0.01	0.17
	Total	511	3.36	0.90			
Self-belief	(A) Full-time classroom-based	443	3.87	0.67	0.412		
	(B) Full-time distance-based (correspondence learning)	49	3.93	0.65		0.21	
	(C) Part-time classroom-based / Part-time distance-based (correspondence learning)	20	4.05	0.68		0.10	0.09
	Total	512	3.88	0.67			
University reputation	(A) Full-time classroom-based	443	3.57	0.69	0.196		
	(B) Full-time distance-based (correspondence learning)	48	3.47	0.74		0.26	
	(C) Part-time classroom-based / Part-time distance-based (correspondence learning)	20	3.81	0.73		0.02	0.27

Group statistics						ANOVA	Effect sizes
Mode of study		N	Mean	SD	P-value	A with B and C	B with C
	Total	511	3.57	0.70			
Ambition	(A) Full-time classroom-based	439	4.28	0.59	0,202		
	(B) Full-time distance-based (correspondence learning)	48	4.41	0.46		0.12	
	(C) Part-time classroom-based / Part-time distance-based (correspondence learning)	20	4.43	0,50		0.07	0.05
	Total	507	4.30	0.58			
University commitment	(A) Full-time classroom-based	440	3.88	0.83	0.728		
	(B) Full-time distance-based (correspondence learning)	48	3.79	0.84		0.29	
	(C) Part-time classroom-based / Part-time distance-based (correspondence learning)	20	3.81	0.92		0.27	0.03
	Total	508	3.87	0.83			
External employability	(A) Full-time classroom-based	443	3.48	0.70	0.316		
	(B) Full-time distance-based (correspondence learning)	48	3.36	0.75		0.23	
	(C) Part-time classroom-based / Part-time distance-based (correspondence learning)	20	3.63	0.83		0.02	0.24
	Total	511	3.47	0.71			

Group statistics						ANOVA	Effect sizes
Mode of study		N	Mean	SD	P-value	A with B and C	B with C
Internal employability	(A) Full-time classroom-based	443	4.07	0.56	0.245		
	(B) Full-time distance-based (correspondence learning)	49	4.16	0.49		0.19	
	(C) Part-time classroom-based / Part-time distance-based (correspondence learning)	20	4.24	0.52		0.10	0.08
	Total	512	4.08	0.56			

A = Full-time classroom-based; B = Full-time distance-based (correspondence learning); C = Part-time classroom-based / Part-time distance-based (correspondence learning)

d = 0.2: small effect size; d = 0.5: medium effect size; d = 0.8: large effect size

The results of the ANOVA test indicated no statistically significant differences between the mean scores obtained for the different categories of modes of study (full-time classroom-based [A], full-time distance-based [B] and part-time classroom and distance-based [C]) for all the factors – all the p-values were above 0.05. The results of the effect sizes are discussed below.

For self-belief, the effect size indicated that the mean scores of the categories full-time classroom-based (M = 3.87) and full-time distance-based (M = 3.93) differed; however, the effect was small (d = 0.21) and is therefore not important in practice.

Furthermore, the effect sizes showed that the respondents who studied full-time classroom-based (M = 3.88) scored higher on university commitment than the respondents who studied full-time distance-based (M = 3.79; d = 0.29) and part-time classroom or distance-based (M = 3.81; d = 0.27). The effect was small.

The effect sizes further revealed that respondents who studied full-time classroom-based scored higher on university reputation and external employability than the respondents who studied full-time distance-based (d = 0.26; d = 0.23). The effect sizes also indicated that the respondents who studied part-time classroom or distance-based scored higher on the two factors (university reputation and external employability) than the respondents who studied full-time distance-based (d = 0.27; d = 0.24). However, the effects were small.

5.2.5 *The association between race, and self-perceived employability, ambition, and university commitment*

An ANOVA test was used to determine the association between race, and self-perceived employability, ambition, and university commitment. Table 5.5 presents the results of the ANOVA test.

Table 5.5: Association between race, and self-perceived employability, ambition, and university commitment

Group statistics					ANOVA	Effect sizes	
	Race	N	Mean	SD	P-value	A with B and C	B with C
External labour market	(A) Black African	377	3.36	0.88	0.496		
	(B) White	97	3.32	1.00		0.03	
	(C) Indian/Asian/Coloured/ Other	30	3.55	0.94		0.20	0.22
	Total	504	3.36	0.90			
Self-belief	(A) Black African	377	3.91	0.67	0.379		
	(B) White	98	3.81	0.70		0.14	
	(C) Indian/Asian/Coloured/ Other	30	3.83	0.63		0.12	0.03
	Total	505	3.89	0.67			
University reputation	(A) Black African	377	3.61	0.69	0.051		
	(B) White	97	3.43	0.64		0.26	
	(C) Indian/Asian/Coloured/ Other	30	3.66	0.74		0.07	0.32
	Total	504	3.58	0.69			
Ambition	(A) Black African	374	4.31	0.58	0,740		
	(B) White	97	4.26	0.56		0.09	
	(C) Indian/Asian/Coloured/ Other	29	4.30	0.51		0.02	0.07
	Total	500	4.30	0.58			

Group statistics					ANOVA	Effect sizes	
	Race	N	Mean	SD	P-value	A with B and C	B with C
University commitment	(A) Black African	375	3.97	0.79	0.000		
	(B) White	97	3.57	0.87		0.46	
	(C) Indian/Asian/Coloured/Other	29	3.79	0.85		0.21	0.25
	Total	501	3.88	0.83			
External employability	(A) Black African	377	3.50	0.70	0.202		
	(B) White	97	3.38	0.71		0.17	
	(C) Indian/Asian/Coloured/Other	30	3.61	0.77		0.15	0.30
	Total	504	3.48	0.71			
Internal employability	(A) Black African	377	4.11	0.56	0.457		
	(B) White	98	4.03	0.57		0.13	
	(C) Indian/Asian/Coloured/Other	30	4.05	0.51		0.10	0.04
	Total	505	4.09	0.56			

A= Black African; B=White; C= Indian/Asian/Coloured/Other

d = 0.2: small effect size; d = 0.5: medium effect size; d = 0.8: large effect size

The results of the ANOVA test revealed statistically significant differences between the mean scores obtained for the different race groups (Black African, White, and Indian/-Asian/Coloured/Other) for university commitment, which yielded a p-value of 0.000. The effect sizes showed a small to medium effect between the mean scores of Black African (M = 3.97) and White (M = 3.55; d = 0.46) categories, and between the White (M = 3.57) and Indian/Asian/Coloured/Other (M = 3.79; d = 0.25) categories. This indicates that respondents who belonged to the Black African and Indian/Asian/Coloured/Other categories were more committed to their university than the respondents who belonged to the White category.

Furthermore, the effect sizes showed that there were differences between the mean scores of the racial categories (Black African, White, and Indian/Asian/Coloured/Other) for external labour market, university reputation, and external employability. In all instances, the respondents who

belonged to the Indian/Asian/Coloured/Other category obtained the highest mean scores, followed by the respondents who belonged to the Black African and White categories. However, the effects were small.

5.2.6 *The association between faculty of study, and self-perceived employability, ambition, and university commitment*

An ANOVA test was used to determine the association between faculty of study, and self-perceived employability, ambition and university commitment. Table 5.6 presents the results of the ANOVA test.

Table 5.6: Association between faculty of study, and self-perceived employability, ambition and university commitment

Group statistics					ANOVA	Effect sizes			
Faculty of study		N	Mean	SD	P-value	A with B -E	B with C-E	C with D and E	D with E
External labour market	(A) Humanities/Law/Theology	135	3.04	0.91	0.000				
	(B) Natural and Agricultural Sciences/Engineering	114	3.58	0.91		0.59			
	(C) Education	49	3.70	0.81		0.73	0.14		
	(D) Economic and Management Sciences	157	3.46	0.85		0.47	0.13	0.28	
	(E) Health Sciences	55	3.09	0.81		0.06	0.54	0.76	0.44
	Total	510	3.36	0.90					
Self-belief	(A) Humanities/Law/Theology	135	3.89	0.62	0.002				
	(B) Natural and Agricultural Sciences/Engineering	114	3.76	0.62		0.21			
	(C) Education	50	4.20	0.62		0.51	0.72		
	(D) Economic and Management Sciences	157	3.90	0.69		0.01	0.20	0.44	
	(E) Health Sciences	55	3.76	0.79		0.16	0.00	0.56	0.17
	Total	511	3.88	0.67					

Group statistics					ANOVA	Effect sizes			
Faculty of study		N	Mean	SD	P-value	A with B -E	B with C-E	C with D and E	D with E
University reputation	(A) Humanities/Law/Theology	135	3.56	0.64	0.000				
	(B) Natural and Agricultural Sciences/Engineering	114	3.44	0.68		0.18			
	(C) Education	49	4.02	0.72		0.64	0.81		
	(D) Economic and Management Sciences	157	3.56	0.71		0.01	0.17	0.64	
	(E) Health Sciences	55	3.48	0.70		0.12	0.06	0.75	0.11
	Total	510	3.57	0.70					
Ambition	(A) Humanities/Law/Theology	134	4.38	0.52	0.131				
	(B) Natural and Agricultural Sciences/Engineering	114	4.24	0.48		0.28			
	(C) Education	49	4.35	0.65		0.04	0.18		
	(D) Economic and Management Sciences	155	4.30	0.61		0.13	0.11	0.08	
	(E) Health Sciences	54	4.17	0.71		0.29	0.09	0.25	0.18
	Total	506	4.30	0.58					

Group statistics					ANOVA	Effect sizes			
Faculty of study		N	Mean	SD	P-value	A with B -E	B with C-E	C with D and E	D with E
University commitment	(A) Humanities/Law/Theology	135	4.06	0.83	0.000				
	(B) Natural and Agricultural Sciences/Engineering	114	3.65	0.77		0.49			
	(C) Education	49	4.15	0.84		0.11	0.60		
	(D) Economic and Management Sciences	155	3.82	0.81		0.29	0.21	0.39	
	(E) Health Sciences	54	3.75	0.89		0.35	0.12	0.45	0.08
	Total	507	3.87	0.83					
External employability	(A) Humanities/Law/Theology	135	3.33	0.68	0.000				
	(B) Natural and Agricultural Sciences/Engineering	114	3.50	0.69		0.26			
	(C) Education	49	3.88	0.71		0.77	0.52		
	(D) Economic and Management Sciences	157	3.52	0.71		0.27	0.02	0.51	
	(E) Health Sciences	55	3.30	0.67		0.03	0.29	0.80	0.30
	Total	510	3.47	0.71					

Group statistics					ANOVA	Effect sizes			
Faculty of study		N	Mean	SD	P-value	A with B -E	B with C-E	C with D and E	D with E
Internal employability	(A) Humanities/Law/Theology	135	4.13	0.49	0.018				
	(B) Natural and Agricultural Sciences/Engineering	114	4.00	0.47		0.28			
	(C) Education	50	4.27	0.57		0.24	0.48		
	(D) Economic and Management Sciences	157	4.09	0.60		0.06	0.16	0.29	
	(E) Health Sciences	55	3.96	0.70		0.24	0.05	0.44	0.19
	Total	511	4.08	0.56					

A = Humanities/Law/Theology; B= Natural and Agricultural Sciences/Engineering; C = Education; D = Economic and Management Sciences; E = Health Sciences

d = 0.2: small effect size; d = 0.5: medium effect size; d = 0.8: large effect size

The results of the ANOVA test showed statistically significant differences between the mean scores of the different faculty groups for external labour market, self-belief, university reputation, external employability and internal employability – the p-values were less than 0.05. The results of the effect sizes showed that the differences between the mean scores of the faculty groups ranged between small to large effects. The results are discussed below.

External labour market. The respondents who belonged to the Humanities/Law/Theology faculties ($M = 3.04$) were less positive about their opportunities in the external labour market than the respondents who belonged to the Natural Sciences/Agricultural Sciences/Engineering ($M = 3.58$; $d = 0.59$), Education ($M = 3.70$; $d = 0.73$) and Economic and Management Sciences ($M = 3.46$; $d = 0.47$) faculties. The effect sizes showed medium to large effects. Furthermore, the Health Sciences respondents were less positive about their opportunities in the external labour market than the respondents of the Natural Sciences/Agricultural Sciences/Engineering ($M = 3.58$; $d = 0.54$), Education ($M = 3.70$; $d = 0.76$) and Economic and Management Sciences ($M = 3.46$; $d = 0.44$) faculties. The effect sizes ranged from medium to large. The effect size also showed a small difference between the mean scores of the respondents who belonged to the Education ($M = 3.70$) and Economic and Management Sciences ($M = 3.46$; $d = 0.28$) faculties.

Self-belief. The respondents who belonged to the Humanities/Law/Theology faculties ($M = 3.89$) had more positive perceptions of their self-belief than the respondents who belonged to the Natural Sciences/Agricultural Sciences/Engineering faculties ($M = 3.76$; $d = 0.21$) and less positive perceptions of their self-belief than the respondents who belonged to the Education faculty ($M = 4.20$; $d = 0.51$). The effect sizes ranged from small to medium. The respondents of the Natural Sciences/Agricultural Sciences/Engineering faculties ($M = 3.76$) scored less on self-belief than the respondents of the Education ($M = 4.20$; $d = 0.72$) and Economic and Management Sciences ($M = 3.90$; $d = 0.20$) faculties. The effect sizes ranged from small to large. The Education respondents ($M = 4.20$) also scored higher on self-belief than the respondents of the Economic and Management Sciences ($M = 3.90$; $d = 0.44$) and Health Sciences ($M = 3.76$; $d = 0.56$) faculties. The effect was medium.

University reputation. The respondents of the Education faculty ($M = 4.02$) scored higher on university reputation than those of the Humanities/Law/Theology ($M = 3.56$; $d = 0.64$), Natural Sciences/Agricultural Sciences/Engineering ($M = 3.44$; $d = 0.81$), Economic and Management Sciences ($M = 3.56$; $d = 0.64$) and Health Sciences ($M = 3.48$; $d = 0.75$) faculties; the effects ranged from medium to large. Thus, the respondents of the Education faculty were more positive about the reputation of the university than respondents of all the other faculties.

Ambition. The Humanities/Law/Theology respondents ($M = 4.38$) scored higher on ambition than the respondents of the Natural Sciences/Agricultural Sciences/Engineering ($M = 4.24$; $d = 0.28$) and Health Sciences ($M = 4.17$; $d = 0.29$) faculties. There was also a difference between the mean scores of the respondents who belonged to the Economic and Management Sciences ($M = 4.30$) and those that belonged to the Health Sciences ($M = 4.17$; $d = 0.25$) faculties. In all instances, the effect sizes indicated that the differences between the mean scores were small, thus not important in practice.

University commitment. The respondents of the Humanities/Law/Theology ($M = 4.06$) faculties demonstrated more commitment to the university than the respondents of the faculties of Natural Sciences/Agricultural Sciences/Engineering ($M = 3.65$; $d = 0.49$), Economic and Management Sciences ($M = 3.82$; $d = 0.29$) and Health Sciences ($M = 3.75$; $d = 0.35$). The effect sizes ranged from small to medium. Furthermore, the effect sizes showed that the respondents of the Education ($M = 4.15$) faculty were more committed to the university than the respondents of the faculties of the Natural Sciences/Agricultural Sciences/Engineering ($M = 3.65$; $d = 0.60$), Economic and Management Sciences ($M = 3.82$; $d = 0.39$) and Health Sciences ($M = 3.75$; $d = 0.45$). The effect sizes ranged from small to medium.

External employability. The effect sizes showed that the respondents of the Humanities/Law/Theology faculties ($M = 3.33$) scored less on external employability than the respondents of the faculties of Natural Sciences/Agricultural Sciences/Engineering ($M = 3.50$; $d = 0.26$), Education ($M = 3.88$; $d = 0.77$) and Economic and Management Sciences ($M = 3.52$; $d = 0.27$). The effect sizes ranged from small to large. Furthermore, the respondents of the Education faculty ($M = 3.88$) scored higher on external employability than the respondents of the Natural Sciences/Agricultural Sciences/Engineering ($M = 3.50$; $d = 0.52$), Economic and Management Sciences ($M = 3.52$; $d = 0.51$) and Health Sciences ($M = 3.30$; $d = 0.80$) faculties. The effect sizes ranged from medium to large. It was also evident that the respondents of the Health Sciences ($M = 3.30$) faculty scored less on external employability than the respondents of the Natural Sciences/Agricultural Sciences/Engineering ($M = 3.50$; $d = 0.29$), Education ($M = 3.88$; $d = 0.80$) and Economic and Management Sciences ($M = 3.52$; $d = 0.30$) faculties. The effect sizes ranged from small to large.

Internal employability. From the effect sizes, it can be deduced that the respondents of the Humanities/Law/Theology faculties ($M = 4.13$) scored higher on internal employability than the respondents of the Natural Sciences/Agricultural Sciences/Engineering ($M = 4.00$; $d = 0.28$) and Health Sciences ($M = 3.96$; $d = 0.24$) faculties. Furthermore, the respondents of the Faculty of Education scored higher on internal employability than the respondents of all other faculties:

Humanities/Law/Theology ($M = 4.13$; $d = 0.24$), Natural Sciences/Agricultural Sciences/Engineering ($M = 4.00$; $d = 0.48$), Economic and Management Sciences ($M = 4.09$; $d = 0.29$) and Health Sciences ($M = 3.96$; $d = 0.44$). In all instances, the effect sizes were below 0.5, indicating a small effect.

5.2.7 *The association between geographical location, and self-perceived employability, ambition, and university commitment*

An ANOVA test was used to determine the association between geographical location, and self-perceived employability, ambition, and university commitment. Table 5.7 presents the results of the ANOVA test.

Table 5.7: Association between geographical location, and self-perceived employability, ambition, and university commitment

Group statistics					ANOVA	Effect sizes		
Geographical location		N	Mean	SD	P-value	A with B-D	B with C and D	C with D
External labour market	(A) Big city	129	3.38	0.89	0.031			
	(B) Small city	182	3.48	0.86		0.11		
	(C) Town	110	3.18	0.94		0.22	0.32	
	(D) Village/Farm	82	3.26	0.92		0.13	0.23	0.09
	Total	503	3.35	0.90				
Self-belief	(A) Big city	129	3.78	0.65	0.318			
	(B) Small city	183	3.91	0.67		0.20		
	(C) Town	110	3.90	0.70		0.17	0.02	
	(D) Village/Farm	82	3.91	0.68		0.19	0.00	0.02
	Total	504	3.88	0.67				
University reputation	(A) Big city	129	3.49	0.69	0.235			
	(B) Small city	182	3.64	0.68		0.23		
	(C) Town	110	3.53	0.65		0.06	0.16	
	(D) Village/Farm	82	3.60	0.78		0.14	0.06	0.08
	Total	503	3.57	0.70				

Group statistics					ANOVA	Effect sizes		
Geographical location		N	Mean	SD	P-value	A with B-D	B with C and D	C with D
Ambition	(A) Big city	127	4.27	0.56	0.361			
	(B) Small city	181	4.34	0.51		0.14		
	(C) Town	110	4.24	0.63		0.03	0.16	
	(D) Village/Farm	81	4.35	0.59		0.14	0.01	0.16
	Total	499	4.30	0.56				
University commitment	(A) Big city	128	3.67	0.93	0.012			
	(B) Small city	181	3.95	0.78		0.30		
	(C) Town	110	3.90	0.73		0.25	0.06	
	(D) Village/Farm	81	3.99	0.85		0.35	0.05	0.10
	Total	500	3.87	0.83				
External employability	(A) Big city	129	3.44	0.69	0.104			
	(B) Small city	182	3.57	0.67		0.19		
	(C) Town	110	3.37	0.70		0.10	0.29	
	(D) Village/Farm	82	3.45	0.78		0.01	0.16	0.10
	Total	503	3.47	0.70				
Internal employability	(A) Big city	129	4.02	0.55	0.362			
	(B) Small city	183	4.12	0.51		0.19		
	(C) Town	110	4.07	0.61		0.09	0.08	
	(D) Village/Farm	82	4.12	0.56		0.18	0.00	0.08
	Total	504	4.09	0.55				

A=Big city; B=Small city; C=Town; D=Village/Farm

d = 0.2: small effect size; d = 0.5: medium effect size; d = 0.8: large effect size

The results of the ANOVA test revealed statistically significant differences between the mean scores obtained for the different groups of geographical location (town, village/farm, big city, and small city) for external labour market and university commitment, which yielded p-values of 0.031 and 0.012, respectively. The results of the effect sizes are discussed below.

External labour market. The effect sizes revealed that respondents who grew up in big cities ($M = 3.38$) were more confident about their skills and abilities to succeed in job interviews and secure a job in the labour market than respondents who grew up in towns ($M = 3.18$; $d = 0.22$). Furthermore, those respondents who grew up in small cities ($M = 3.48$) were more positive about their opportunities in the external labour market than respondents who grew up in towns ($M = 3.18$; $d = 0.32$) and villages/farms ($M = 3.26$; $d = 0.23$). The effect sizes were small in all instances.

University commitment. The effect sizes showed that respondents who grew up in big cities ($M = 3.67$) demonstrated less commitment to the university than respondents who grew up in small cities ($M = 3.95$; $d = 0.30$), towns ($M = 3.90$; $d = 0.25$) and in villages/farms ($M = 3.99$; $d = 0.35$). In all instances, the effect sizes were small.

Self-belief and University reputation. The effect sizes revealed that respondents who grew up in big cities scored less on self-belief ($M = 3.78$) and university reputation ($M = 3.49$) than respondents who grew up in small cities (self-belief: $M = 3.91$, $d = 0.20$; university reputation: $M = 3.64$, $d = 0.23$). However, the effects were small.

External employability. The respondents who grew up in small cities ($M = 3.57$) scored higher on external employability than the respondents who grew up in towns ($M = 3.37$; $d = 0.29$). However, the effect was small.

5.2.8 *The association between mother's / female guardian's occupation, and self-perceived employability, ambition and university commitment*

An ANOVA test was used to determine the association between mother's/female guardian's occupation, and self-perceived employability, ambition and university commitment. Table 5.8 presents the results of the ANOVA test

Table 5.8: Association between mother's/female guardian's occupation, and self-perceived employability, ambition and university commitment

Group statistics					ANOVA	Effect sizes				
Mother's/female guardian's occupation		N	Mean	SD	P-value	A with B -F	B with C-F	C with D-F	D with E and F	E with F
External labour market	(A) Have no living mother or female guardian	46	3.27	0.92	0.780					
	(B) Higher managerial, administrative or professional/ Intermediate managerial, administrative or professional	125	3.40	0.95		0.14				
	(C) Supervisory, clerical, junior administrative or professional	48	3.31	0.79		0.04	0.09			
	(D) Skilled/Semi- and Unskilled manual worker	66	3.30	0.95		0.03	0.10	0.01		
	(E) Self-employed or business owner	77	3.27	0.86		0.00	0.13	0.04	0.03	
	(F) State pensioner or unemployed	133	3.42	0.90		0.17	0.02	0.13	0.13	0.17
	Total	495	3.35	0.90						
Self-belief	(A) Have no living mother or female guardian	46	3.89	0.67	0.055					
	(B) Higher managerial, administrative or professional/ Intermediate managerial, administrative or professional	126	3.77	0.70		0.18				
	(C) Supervisory, clerical, junior administrative or professional	48	3.76	0.73		0.18	0.00			

Group statistics					ANOVA	Effect sizes				
Mother's/female guardian's occupation		N	Mean	SD	P-value	A with B -F	B with C-F	C with D-F	D with E and F	E with F
	(D) Skilled/Semi- and Unskilled manual worker	66	3.94	0.60		0.07	0.25	0.24		
	(E) Self-employed or business owner	77	3.84	0.69		0.08	0.10	0.10	0.15	
	(F) State pensioner or unemployed	133	4.01	0.63		0.18	0.35	0.34	0.11	0.25
	Total	496	3.88	0.67						
University reputation	(A) Have no living mother or female guardian	46	3.52	0.68	0.363					
	(B) Higher managerial, administrative or professional/ Intermediate managerial, administrative or professional	125	3.49	0.68		0.05				
	(C) Supervisory, clerical, junior administrative or professional	48	3.50	0.75		0.03	0.01			
	(D) Skilled/Semi- and Unskilled manual worker	66	3.65	0.74		0.18	0.22	0.21		
	(E) Self-employed or business owner	77	3.52	0.72		0.01	0.04	0.03	0.19	
	(F) State pensioner or unemployed	133	3.65	0.68		0.19	0.23	0.20	0.01	0.19
	Total	495	3.56	0.70						

Group statistics					ANOVA	Effect sizes				
Mother's/female guardian's occupation		N	Mean	SD	P-value	A with B -F	B with C-F	C with D-F	D with E and F	E with F
Ambition	(A) Have no living mother or female guardian	46	4.17	0.71	0.132					
	(B) Higher managerial, administrative or professional/ Intermediate managerial, administrative or professional	126	4.25	0.51		0.12				
	(C) Supervisory, clerical, junior administrative or professional	47	4.19	0.64		0.03	0.11			
	(D) Skilled/Semi- and Unskilled manual worker	66	4.39	0.46		0.31	0.26	0.31		
	(E) Self-employed or business owner	75	4.30	0.50		0.19	0.09	0.18	0.17	
	(F) State pensioner or unemployed	131	4.37	0.65		0.29	0.18	0.29	0.03	0.11
	Total	491	4.29	0.58						
University commitment	(A) Have no living mother or female guardian	46	3.72	0.85	0.000					
	(B) Higher managerial, administrative or professional/ Intermediate managerial, administrative or professional	126	3.59	0.83		0.15				
	(C) Supervisory, clerical, junior administrative or professional	48	3.85	0.81		0.15	0.31			
	(D) Skilled/Semi- and Unskilled manual worker	66	4.12	0.66		0.47	0.64	0.34		
	(E) Self-employed or business owner	75	3.83	0.75		0.13	0.29	0.02	0.39	

Group statistics					ANOVA	Effect sizes				
Mother's/female guardian's occupation		N	Mean	SD	P-value	A with B -F	B with C-F	C with D-F	D with E and F	E with F
	(F) State pensioner or unemployed	131	4.06	0.89		0.39	0.53	0.24	0.07	0.26
	Total	492	3.86	0.83						
External employability	(A) Have no living mother or female guardian	46	3.41	0,70	0.692					
	(B) Higher managerial, administrative or professional/ Intermediate managerial, administrative or professional	125	3.45	0,73		0.06				
	(C) Supervisory, clerical, junior administrative or professional	48	3.41	0.68		0.01	0.05			
	(D) Skilled/Semi- and Unskilled manual worker	66	3.49	0.77		0.11	0.06	0.11		
	(E) Self-employed or business owner	77	3.41	0.70		0.00	0.06	0.01	0.11	
	(F) State pensioner or unemployed	133	3.55	0.68		0.20	0.14	0.20	0.07	0.20
	Total	495	3.47	0.71						
Internal employability	(A) Have no living mother or female guardian	46	4.03	0.61	0.069					
	(B) Higher managerial, administrative or professional/ Intermediate managerial, administrative or professional	126	4.01	0.53		0.03				
	(C) Supervisory, clerical, junior administrative or professional	48	3.97	0.63		0.10	0.07			

Group statistics					ANOVA	Effect sizes				
Mother's/female guardian's occupation		N	Mean	SD	P-value	A with B -F	B with C-F	C with D-F	D with E and F	E with F
	(D) Skilled/Semi- and Unskilled manual worker	66	4.16	0.46		0.22	0.29	0.31		
	(E) Self-employed or business owner	77	4.06	0.53		0.05	0.10	0.15	0.19	
	(F) State pensioner or unemployed	133	4.18	0.59		0.25	0.29	0.34	0.03	0.20
	Total	496	4.08	0.56						

A= Have no living mother or female guardian; B=Higher managerial, administrative or professional/Intermediate managerial, administrative or professional; C= Supervisory, clerical, junior administrative or professional; D= Skilled / Semi- and unskilled manual worker; E=Self-employed or business owner; F=State pensioner or unemployed

d = 0.2: small effect size; d = 0.5: medium effect size; d = 0.8: large effect size

The results of the ANOVA test revealed statistically significant differences between the mean scores obtained for the different groups of mother's/female guardian's occupation for university commitment which yielded a p-value of 0.000. The results of the effect sizes are discussed below.

University commitment. The respondents who had no living mother or female guardian ($M = 3.72$) scored less on university commitment than respondents whose mother or female guardian were manual workers ($M = 4.12$; $d = 0.47$) or were state pensioners or unemployed ($M = 4.06$; $d = 0.39$). The effects were small to medium. Furthermore, those respondents whose mother or female guardian had a higher or intermediate managerial, administrative or professional position ($M = 3.59$) scored less on university commitment than respondents whose mother or female guardian fulfilled a supervisory, clerical, junior administrative or professional position ($M = 3.85$; $d = 0.31$), were manual workers ($M = 4.12$; $d = 0.64$), were self-employed ($M = 3.83$; $d = 0.29$) or were state pensioners or unemployed ($M = 4.06$; $d = 0.53$). The effect sizes ranged from small to medium. The effect sizes also showed small differences between the mean scores of respondents whose mother or female guardian were in supervisory, clerical, junior administrative or professional positions ($M = 3.85$) and those who were manual workers ($M = 4.12$; $d = 0.34$) and were state pensioners or unemployed ($M = 4.06$; $d = 0.24$). Small differences were also evident between the mean scores of respondents whose mother or female guardian were manual workers ($M = 4.12$) and those who were self-employed ($M = 3.83$; $d = 0.39$).

Self-belief. The effect sizes showed that respondents whose mother or female guardian were in higher or intermediate managerial, administrative or professional positions ($M = 3.77$) and in supervisory or junior positions ($M = 3.76$) scored less on self-belief than those respondents whose mother or female guardian were manual workers ($M = 3.94$) and state pensioners or unemployed ($M = 4.01$). In all instances, the d-values indicated a small effect.

University reputation. It was also evident from the effect sizes that respondents whose mother or female guardian were in higher or intermediate managerial, administrative or professional positions ($M = 3.49$; $d = 0.23$) and in supervisory or junior positions ($M = 3.50$; $d = 0.20$) were less committed to the university than those respondents whose mother or female guardian were state pensioners or unemployed ($M = 3.65$). The d-values indicated a small effect.

Ambition. The effect sizes showed that those respondents who had no living mother or female guardian ($M = 4.17$) scored less on ambition than those respondents whose mother or female guardian were manual workers ($M = 4.39$; $d = 0.31$) and state pensioners or unemployed ($M = 4.37$; $d = 0.29$). The effect was small. Furthermore, those in higher or intermediate managerial, administrative or professional positions ($M = 4.25$; $d = 0.26$) and in supervisory or junior positions

($M = 4.19$; $d = 0.31$) scored less on ambition than respondents whose mother or female guardian were manual workers ($M = 4.39$). The effect was small. There was also a small difference between the mean scores of respondents whose mother or female guardian fulfilled higher or intermediate managerial, administrative or professional positions ($M = 4.25$) and those respondents whose mother or female guardian were manual workers ($M = 4.39$; $d = 0.26$).

External employability. Respondents whose mother or female guardian were state pensioners or unemployed ($M = 3.55$) scored higher on external employability than those respondents who had no living mother or female guardian (3.41 ; $d = 0.20$) and those whose mother or female guardian fulfilled supervisory or junior positions ($M = 3.41$; $d = 0.20$). The effect was small.

Internal employability. Respondents whose mother or female guardian were manual workers ($M = 4.16$) and state pensioners or unemployed ($M = 4.18$) scored higher on internal employability than those respondents who had no living mother or female guardian (4.03) and those whose mother or female guardian fulfilled higher or intermediate managerial, administrative or professional ($M = 4.01$) and supervisory or junior positions ($M = 3.97$). The effect was small.

5.2.9 *The association between father's/male guardian's occupation, and self-perceived employability, ambition, and university commitment*

An ANOVA test was used to determine the association between father's/male guardian's occupation, and self-perceived employability, ambition and university commitment. Table 5.9 presents the results of the ANOVA test.

Table 5.9: Association between father's/male guardian's occupation, and self-perceived employability, ambition, and university commitment

Group statistics					ANOVA	Effect sizes						
Father's/male guardian's occupation		N	Mean	SD	P-value	A with B -H	B with C-H	C with D-H	D with E-H	E with F-H	F with G, H	G with H
External labour market	(A) Have no living father or male guardian	1	3.41	0.88	0.154							
	(B) Higher managerial, administrative or professional	32	3.38	0.75		0.04						
	(C) Intermediate managerial, administrative or professional	62	3.51	0.91		0.11	0.15					
	(D) Supervisory, clerical, junior administrative or professional	35	3.45	0.89		0.05	0.08	0.06				
	(E) Skilled manual worker	48	3.08	0.85		0.37	0.34	0.47	0.41			
	(F) Semi- and unskilled manual worker	29	3.06	0.93		0.38	0.34	0.49	0.43	0.03		
	(G) Self-employed or business owner	63	3.34	1.01		0.06	0.03	0.16	0.11	0.26	0.28	
	(H) State pensioner or unemployed	80	3.43	0.92		0.02	0.06	0.09	0.02	0.37	0.40	0.08
	Total	492	3.36	0.90								

Group statistics					ANOVA	Effect sizes						
Father's/male guardian's occupation		N	Mean	SD	P-value	A with B -H	B with C-H	C with D-H	D with E-H	E with F-H	F with G, H	G with H
Self-belief	(A) Have no living father or male guardian	144	3.93	0.66	0.190							
	(B) Higher managerial, administrative or professional	32	3.69	0.78		0.31						
	(C) Intermediate managerial, administrative or professional	62	3.94	0.67		0.01	0.32					
	(D) Supervisory, clerical, junior administrative or professional	35	3.82	0.52		0.16	0.17	0.17				
	(E) Skilled manual worker	48	3.94	0.58		0.02	0.33	0.01	0.21			
	(F) Semi- and unskilled manual worker	29	3.80	0.88		0.14	0.13	0.15	0.02	0.16		
	(G) Self-employed or business owner	63	3.71	0.67		0.31	0.03	0.33	0.16	0.34	0.10	
	(H) State pensioner or unemployed	80	3.97	0.65		0.06	0.36	0.04	0.22	0.04	0.19	0.37
	Total	493	3.88	0.67								

Group statistics					ANOVA	Effect sizes						
Father's/male guardian's occupation		N	Mean	SD	P-value	A with B -H	B with C-H	C with D-H	D with E-H	E with F-H	F with G, H	G with H
University reputation	(A) Have no living father or male guardian	143	3.64	0.66	0.200							
	(B) Higher managerial, administrative or professional	32	3.35	0.66		0.44						
	(C) Intermediate managerial, administrative or professional	62	3.59	0.66		0.08	0.36					
	(D) Supervisory, clerical, junior administrative or professional	35	3.65	0.64		0.01	0.46	0.10				
	(E) Skilled manual worker	48	3.47	0.66		0.27	0.17	0.18	0.28			
	(F) Semi- and unskilled manual worker	29	3.47	0.83		0.21	0.14	0.15	0.22	0.00		
	(G) Self-employed or business owner	63	3.48	0.79		0.20	0.17	0.13	0.21	0.02	0.02	
	(H) State pensioner or unemployed	80	3.68	0.68		0.05	0.48	0.13	0.04	0.31	0.25	0.24
	Total	492	3.57	0.69								
Ambition	(A) Have no living father or male guardian	144	4.29	0.63	0.665							
	(B) Higher managerial, administrative or professional	32	4.29	0.52		0.01						
	(C) Intermediate managerial, administrative or professional	62	4.28	0.50		0.02	0.03					
	(D) Supervisory, clerical, junior administrative or professional	35	4.35	0.49		0.11	0.12	0.16				

Group statistics					ANOVA	Effect sizes						
Father's/male guardian's occupation		N	Mean	SD	P-value	A with B -H	B with C-H	C with D-H	D with E-H	E with F-H	F with G, H	G withH
	(E) Skilled manual worker	46	4.30	0.48		0.03	0.02	0.06	0.10			
	(F) Semi- and unskilled manual worker	29	4.15	0.80		0.17	0.18	0.16	0.25	0.19		
	(G) Self-employed or business owner	62	4.30	0.54		0.02	0.01	0.04	0.11	0.01	0.18	
	(H) State pensioner or unemployed	79	4.41	0.60		0.19	0.18	0.21	0.08	0.17	0.32	0.18
	Total	489	4.30	0.58								
University commitment	(A) Have no living father or male guardian	144	3.90	0.87	0.152							
	(B) Higher managerial, administrative or professional	32	3.68	0.67		0.25						
	(C) Intermediate managerial, administrative or professional	62	3.81	0.74		0.11	0.17					
	(D) Supervisory, clerical, junior administrative or professional	35	4.00	0.65		0.11	0.48	0.26				
	(E) Skilled manual worker	47	4.01	0.58		0.13	0.49	0.28	0.02			
	(F) Semi- and unskilled manual worker	29	3.97	0.81		0.08	0.36	0.20	0.04	0.05		
	(G) Self-employed or business owner	62	3.65	0.92		0.27	0.03	0.17	0.38	0.40	0.35	
	(H) State pensioner or unemployed	79	3.98	0.95		0.08	0.31	0.18	0.02	0.04	0.01	0.35
	Total	490	3.88	0.83								

Group statistics					ANOVA	Effect sizes						
Father's/male guardian's occupation		N	Mean	SD	P-value	A with B -H	B with C-H	C with D-H	D with E-H	E with F-H	F with G, H	G with H
External employability	(A) Have no living father or male guardian	143	3.54	0.67	0.167							
	(B) Higher managerial, administrative or professional	32	3.36	0.64		0.26						
	(C) Intermediate managerial, administrative or professional	62	3.55	0.68		0.02	0.28					
	(D) Supervisory, clerical, junior administrative or professional	35	3.56	0.65		0.04	0.31	0.02				
	(E) Skilled manual worker	48	3.29	0.69		0.35	0.10	0.38	0.40			
	(F) Semi- and unskilled manual worker	29	3.28	0.80		0.32	0.10	0.34	0.36	0.02		
	(G) Self-employed or business owner	63	3.42	0.79		0.15	0.08	0.17	0.18	0.16	0.18	
	(H) State pensioner or unemployed	80	3.56	0.69		0.04	0.29	0.02	0.00	0.39	0.35	0.18
	Total	492	3.48	0.70								
Internal employability	(A) Have no living father or male guardian	144	4.11	0.58	0.526							
	(B) Higher managerial, administrative or professional	32	3.99	0.53		0.20						
	(C) Intermediate managerial, administrative or professional	62	4.10	0.53		0.00	0.22					
	(D) Supervisory, clerical, junior administrative or professional	35	4.09	0.46		0.03	0.19	0.03				

Group statistics					ANOVA	Effect sizes						
Father's/male guardian's occupation		N	Mean	SD	P-value	A with B -H	B with C-H	C with D-H	D with E-H	E with F-H	F with G, H	G withH
	(E) Skilled manual worker	48	4.11	0.46		0.00	0.22	0.01	0.04			
	(F) Semi- and unskilled manual worker	29	3.98	0.79		0.16	0.01	0.16	0.14	0.16		
	(G) Self-employed or business owner	63	4.00	0.54		0.18	0.02	0.20	0.17	0.20	0.03	
	(H) State pensioner or unemployed	80	4.18	0.55		0.13	0.34	0.14	0.17	0.13	0.25	0.33
	Total	493	4.09	0.56								

A = Have no living father or male guardian; B = Higher managerial, administrative or professional; C = Intermediate managerial, administrative or professional; D = Supervisory, clerical, junior administrative or professional; E = Skilled manual worker; F = Semi- and unskilled manual worker; G = Self-employed or business owner; H = State pensioner or unemployed

d = 0.2: small effect size; d = 0.5: medium effect size; d = 0.8: large effect size

The results of the ANOVA test indicated no statistically significant differences between the mean scores obtained for the different categories of father's/male guardian's occupation for all the factors. All the p-values were above 0.05.

The results of the effect sizes are discussed below.

External labour market. The effect sizes showed that respondents whose father or male guardian were manual workers were less positive about their employment opportunities in the external labour market than respondents of all the other categories. The effect sizes showed small to medium effects (d ranged from 0.26 to 0.49).

Self-belief. From the effect sizes, it was evident that respondents who had no living father or male guardian ($M = 3.93$) scored higher on self-belief than respondents whose father or male guardian were in higher managerial, administrative or professional positions ($M = 3.69$; $d = 0.31$). It was also evident that the respondents whose father or male guardian were state pensioners or unemployed ($M = 3.97$) scored higher on self-belief than those respondents whose father or male guardian were in higher managerial positions ($M = 3.69$; $d = 0.36$), in supervisory positions ($M = 3.82$; $d = 0.22$) and who were self-employed or business owners ($M = 3.71$; $d = 0.37$). Furthermore, the effect sizes showed that respondents whose father or male guardian were in higher managerial administrative or professional positions ($M = 3.69$) and who were self-employed or business owners ($M = 3.71$) scored less on self-belief than those respondents whose father or male guardian were in intermediate managerial, administrative or professional positions ($M = 3.94$; $d = 0.32$; $d = 0.33$) and were skilled manual workers ($M = 3.94$; $d = 0.33$; $d = 0.34$).

University reputation. The effect sizes indicated that respondents whose father or male guardian were manual workers (skilled: $M = 3.47$; semi-/unskilled: $M = 3.47$) and were self-employed ($M = 3.48$) scored less on university reputation than the respondents who had no living father or male guardian ($M = 3.64$) and whose father or male guardian were in supervisory positions ($M = 3.65$). The d -values ranged from 0.20 to 0.28, indicating a small effect. Furthermore, the effect sizes showed that those respondents whose father or male guardian were state pensioners or unemployed (3.68) were more positive about the university's reputation than those respondents whose father or male guardian were in higher managerial, administrative or professional positions ($M = 3.35$), are skilled ($M = 3.47$) and semi/unskilled ($M = 3.47$) manual workers and were self-employed ($M = 3.48$). The d -values ranged from 0.24 to 0.48, indicating a small to medium effect. It was also evident that those respondents whose father or male guardian were in higher managerial, administrative or professional positions ($M = 3.35$) were less positive about the university's reputation than those respondents whose father or male guardian were in

intermediate managerial, administrative or professional ($M = 3.59$; $d = 0.36$) and supervisory ($M = 3.65$; $d = 0.46$) positions. The effect was small to medium.

Ambition. The effect sizes showed that respondents whose father or male guardian were state pensioners or unemployed (4.41) scored higher on ambition than the respondents whose father or male guardian were in intermediate managerial, administrative or professional positions ($M = 4.28$; $d = 0.21$) and who were semi- and unskilled manual workers ($M = 4.15$; $d = 0.32$). Furthermore, respondents whose father or male guardian were in supervisory, clerical, junior administrative or professional positions ($M = 4.35$) scored higher on ambition than respondents whose father or male guardian were semi- and unskilled manual workers ($M = 4.15$; $d = 0.25$). In all instances the effects were small.

University commitment. The effect sizes revealed that those respondents whose father or male guardian were self-employed or business owners ($M = 3.65$) were less committed to the university than those respondents who had no living father or male guardian ($M = 3.90$; $d = 0.27$), those whose father or male guardian were in supervisory, clerical, junior administrative or professional positions ($M = 4.0$; $d = 0.38$) and who were skilled ($M = 4.01$; $d = 0.40$) and semi-/unskilled ($M = 3.97$; $d = 0.35$) manual workers. Furthermore, the respondents whose father or male guardian were state pensioners or unemployed ($M = 3.98$) were more committed to the university than respondents who were in higher managerial, administrative or professional positions ($M = 3.68$; $d = 0.31$) or who were self-employed or business owners ($M = 3.65$; $d = 0.35$). The effects were small. The effect sizes also showed that those respondents whose father or male guardian were in higher ($M = 3.68$) or intermediate ($M = 3.81$) managerial, administrative or professional positions scored less on university commitment than those respondents whose father or male guardian were in supervisory, clerical, junior administrative or professional positions ($M = 4.0$) or were skilled ($M = 4.01$) and semi-/unskilled ($M = 3.97$) manual workers. The effect sizes indicated small to medium effects.

External employability. The effect sizes showed that respondents whose father or male guardian were manual workers (skilled: $M = 3.29$; semi-/unskilled: $M = 3.28$) scored lower on external employability than respondents who had no living father or male guardian ($M = 3.54$) and those whose father or male guardian were in intermediate managerial, administrative or professional positions ($M = 3.55$) and in supervisory, clerical, junior administrative or professional positions ($M = 3.56$). Furthermore, those respondents whose father or male guardian were state pensioners or unemployed ($M = 3.56$) scored higher on external employability than those respondents whose father or male guardian were in higher managerial, administrative or professional positions ($M = 3.36$; $d = 0.29$), are skilled ($M = 3.29$; $d = 0.39$) and semi-/unskilled manual workers ($M = 3.28$; d

= 0.35). In all instances, the effect sizes indicated small to medium effects. It was also evident that the respondents whose father or male guardian were in higher managerial, administrative or professional positions ($M = 3.36$) scored lower on external employability than those respondents who had no living father or male guardian ($M = 3.54$; $d = 0.26$) and whose father or male guardian were in intermediate managerial, administrative or professional positions ($M = 3.55$; $d = 0.28$) and in supervisory, clerical, junior administrative or professional positions ($M = 3.56$; $d = 0.31$). In all instances, the d-values indicated small to medium effects.

Internal employability. From the effect sizes, it was evident that respondents who had no living father or male guardian ($M = 4.11$) scored higher on internal employability than those respondents whose father or male guardian were in higher managerial, administrative or professional positions ($M = 3.99$; $d = 0.20$). However, the effect was small. Furthermore, those respondents whose father or male guardian were state pensioners or unemployed ($M = 4.18$) scored higher on internal employability than those respondents whose father or male guardian were in higher managerial, administrative or professional positions ($M = 3.99$; $d = 0.34$), were semi-/unskilled manual workers ($M = 3.98$; $d = 0.25$) and were self-employed or business owners ($M = 4.00$; $d = 0.33$). The effect sizes indicated small to medium effects. Those respondents whose father or male guardian were self-employed or business owners ($M = 4.00$) also scored less on internal employability than those respondents whose father or male guardian were in intermediate managerial, administrative or professional positions ($M = 4.10$; $d = 0.20$) and who were skilled manual workers ($M = 4.11$; $d = 0.20$). The effects were small. It was also evident that those respondents whose father or male guardian were in higher managerial, administrative or professional positions ($M = 3.99$) scored less on internal employability than those respondents whose father or male guardian were in intermediate managerial, administrative or professional positions ($M = 4.10$; $d = 0.22$) and were skilled manual workers ($M = 4.11$; $d = 0.22$). However, the effects were small.

5.2.10 *The association between financial support, and self-perceived employability, ambition and university commitment*

An ANOVA test was used to determine the association between father's/male guardian's occupation, and self-perceived employability, ambition and university commitment. Table 5.10 presents the results of the ANOVA test.

Table 5.10: Association between financial support, and self-perceived employability, ambition and university commitment

Group statistics					ANOVA	Effect sizes	
Financial support		N	Mean	SD	P-value	A with B and C	B with C
External labour market	(A) Earned/Business income	50	3.41	1.08	0.838		
	(B) Family support	117	3.32	0.93		0.08	
	(C) Bursary/Scholarship/Grant	336	3.36	0.87		0.04	0.04
	Total	503	3.35	0.91			
Self-belief	(A) Earned/Business income	51	4.02	0.81	0.001		
	(B) Family support	117	3.68	0.63		0.42	
	(C) Bursary/Scholarship/Grant	336	3.92	0.65		0.13	0.36
	Total	504	3.87	0.67			
University reputation	(A) Earned/Business income	50	3.69	0.93	0.021		
	(B) Family support	117	3.42	0.63		0.29	
	(C) Bursary/Scholarship/Grant	336	3.60	0.68		0.09	0.27
	Total	503	3.57	0.70			
Ambition	(A) Earned/Business income	51	4.37	0.72	0.354		
	(B) Family support	115	4.24	0.51		0.18	
	(C) Bursary/Scholarship/Grant	333	4.31	0.57		0.08	0.12
	Total	499	4.30	0.58			

Group statistics					ANOVA	Effect sizes	
Financial support		N	Mean	SD	P-value	A with B and C	B with C
University commitment	(A) Earned/Business income	51	3.66	1.08	0.001		
	(B) Family support	116	3.67	0.78		0.01	
	(C) Bursary/Scholarship/Grant	333	3.97	0.80		0.29	0.38
	Total	500	3.87	0.84			
External employability	(A) Earned/Business income	50	3.56	0.89	0.182		
	(B) Family support	117	3.37	0.68		0.21	
	(C) Bursary/Scholarship/Grant	336	3.49	0.69		0.08	0.18
	Total	503	3.47	0.71			
Internal employability	(A) Earned/Business income	51	4.19	0.70	0.011		
	(B) Family support	117	3.95	0.49		0.34	
	(C) Bursary/Scholarship/Grant	336	4.11	0.55		0.12	0.28
	Total	504	4.08	0.56			

A = Earned/Business income Black African; B = Family support; C = Bursary/Scholarship/Grant

d = 0.2: small effect size; d = 0.5: medium effect size; d = 0.8: large effect size

The results of the ANOVA test showed statistically significant differences between the mean scores of the different financial support groups for self-belief (p-value = 0.001), university reputation (p-value = 0.021), university commitment (p-value = 0.001) and internal employability (p-value = 0.011).

The results of the effect sizes are discussed below:

Self-belief. The effect sizes showed that respondents who received financial support from the family (M = 3.68) scored less on self-belief than respondents who received financial support from a bursary, scholarship or grant (M = 3.92; d = 0.36) and those that earned their own income (M = 4.02; d = 0.42). The effect sizes indicated a small to medium effect.

University reputation. The effect sizes revealed that respondents who received financial support from the family ($M = 3.42$) were less positive about the university's reputation than respondents who received financial support from a bursary, scholarship or grant ($M = 3.60$; $d = 0.27$) and those that earned their own income ($M = 3.69$; $d = 0.29$). The effects were small.

University commitment. The effect sizes indicated that those respondents who received financial support from a bursary, scholarship or grant ($M = 3.97$) were more committed to the university than those respondents who received financial support from own income ($M = 3.66$; $d = 0.29$) and the family ($M = 3.67$; $d = 0.38$). The effects were small to medium.

External employability. The effect sizes revealed that those respondents who received financial support from own income ($M = 3.56$) scored higher on external employability than those respondents who received financial support from the family ($M = 3.37$; $d = 0.21$); the effect was small.

Internal employability. The effect sizes showed that respondents who received financial support from the family ($M = 3.95$) scored less on internal employability than respondents who received financial support from a bursary, scholarship or grant ($M = 4.11$; $d = 0.28$) and those that earned their own income ($M = 4.19$; $d = 0.34$). The effect sizes indicated a small to medium effect.

5.2.11 *The correlation of age, level of education, ability to provide for household needs and religiosity with self-perceived employability, ambition, and university commitment*

Spearman's rank-order correlation coefficient was used to determine the correlation of the biographical variables age, level of education, ability to provide for household needs and religiosity with self-perceived employability, ambition and university commitment. The results are presented in table 5.11.

Table 5.11: Correlation of age, parent's or guardian's level of education, ability to provide for household needs and religiosity with self-perceived employability, ambition, and university commitment

		Age	Mother's/ Female guardian's level of education	Father's/Male guardian's level of education	Ability to provide for household needs	Religiosity
External labour market	Correlation Coefficient	0.069	-0.016	0.003	.100*	.165**
	Sig. (2-tailed)	0.135	0.723	0.956	0.03	0.000
	N	468	473	390	488.00	470
Self-belief	Correlation Coefficient	0.018	-.131**	-0.083	-0.05	.222**
	Sig. (2-tailed)	0.700	0.004	0.100	0.28	0.000
	N	469	474	391	489.00	471
University reputation	Correlation Coefficient	.145**	-.125**	-.125*	-0.04	.318**
	Sig. (2-tailed)	0.002	0.007	0.014	0.39	0.000
	N	468	473	390	488.00	470
Ambition	Correlation Coefficient	0.032	-0.068	-0.054	-0.08	.246**
	Sig. (2-tailed)	0.489	0.144	0.293	0.09	0.000
	N	464	469	386	484.00	466
University commitment	Correlation Coefficient	0.027	-.306**	-.210**	-.212**	.301**
	Sig. (2-tailed)	0.557	0.000	0.000	0.00	0.000
	N	465	470	387	485.00	467
External employability	Correlation Coefficient	.106*	-0.067	-0.065	0.04	.259**
	Sig. (2-tailed)	0.022	0.144	0.203	0.38	0.000
	N	468	473	390	488.00	470
Internal employability	Correlation Coefficient	0.024	-.117*	-0.076	-0.06	.248**
	Sig. (2-tailed)	0.607	0.011	0.132	0.16	0.000
	N	469	474	391	489.00	471

** Correlation is significant at the 0.01 level (2-tailed)

* Correlation is significant at the 0.05 level (2-tailed)

(a) small effect: $r = 0.1$, (b) medium effect: $r = 0.3$ and (c) large effect: $r > 0.5$

The results of the Spearman's rank-order correlation test (table 5.11) are discussed below.

A small positive correlation was found between age, and university reputation (p-value = 0.002; $r = 0.145$) and external employability (p-value = 0.022; $r = 0.106$). This indicates that the older the respondents, the more positive they were about the reputation of their university and the more confident they were about their skills and abilities to succeed in interviews and secure jobs in the labour market.

Small to medium negative correlations were found between mother's/female guardian's level of education, and self-belief (p-value = 0.004; $r = -0.131$), university reputation (p-value = 0.007; $r = -0.125$), university commitment (p-value = 0.000; $r = -0.306$) and internal employability (p-value = 0.011; $r = -0.117$). The results suggest that the higher the educational level of the respondents' mother/female guardian, the less positive the respondents were about their self-belief, the reputation of the university, their commitment to the university and their internal employability.

Small negative correlations were found between father's/male guardian's level of education, and university reputation (p-value = 0.014; $r = -0.125$) and university commitment (p-value = 0.000; $r = -0.210$). This suggests that the higher the educational level of respondents' father or male guardian, the more negative they were about the reputation of their university as well as their commitment to the university.

A small positive correlation was found between ability to provide for household needs and external labour market (p-value = 0.03; $r = 0.100$) and a small negative correlation between ability to provide for household needs and university commitment (p-value = 0.00; $r = -0.212$). This means that the more the respondents were able to meet their household needs, the more they were confident about their skills and abilities to succeed in interviews and secure jobs in the labour market. In addition, the more respondents lacked to provide household necessities, the more they demonstrated commitment to the university.

Small to medium positive correlations (ranging between 0.165 to 0.318) were found between religiosity, and external labour market (p-value = 0.000; $r = 0.165$), self-belief (p-value = 0.000; $r = 0.222$), university reputation (p-value = 0.000; $r = 0.318$), ambition (p-value = 0.000; $r = 0.246$), university commitment (p-value = 0.000; $r = 0.301$), external employability (p-value = 0.000; $r = 0.259$) and internal employability (p-value = 0.000; $r = 0.248$). The results indicate that the more religiously engaged the respondents were, the more positive their opinions about their self-perceived employability, the more ambitious they were and the more they demonstrated commitment to the university.

5.3 CORRELATIONS BETWEEN SELF-PERCEIVED EMPLOYABILITY, AMBITION AND UNIVERSITY COMMITMENT

Spearman's rank-order correlation coefficient was used to determine the correlation between self-perceived employability, ambition and university commitment. The results are presented in table 5.12.

Table 5.12: Correlations between self-perceived employability, ambition, and university commitment

		External labour market	Self-belief	University reputation	Ambition	University commitment	External employability	Internal employability
External labour market	Correlation Coefficient	1.000	.467**	.565**	.283**	.241**	.894**	.437**
	Sig. (2-tailed)		0.000	0.000	0.000	0.000	0.000	0.000
	N	472	472	472	467	468	472	472
Self-belief	Correlation Coefficient	.467**	1.000	.527**	.561**	.458**	.557**	.915**
	Sig. (2-tailed)	0.000		0.000	0.000	0.000	0.000	0.000
	N	472	473	472	468	469	472	473
University reputation	Correlation Coefficient	.565**	.527**	1.000	.371**	.482**	.861**	.516**
	Sig. (2-tailed)	0.000	0.000		0.000	0.000	0.000	0.000
	N	472	472	472	467	468	472	472
Ambition	Correlation Coefficient	.283**	.561**	.371**	1.000	.440**	.359**	.837**
	Sig. (2-tailed)	0.000	0.000	0.000		0.000	0.000	0.000
	N	467	468	467	468	468	467	468
University commitment	Correlation Coefficient	.241**	.458**	.482**	.440**	1.000	.392**	.498**
	Sig. (2-tailed)	0.000	0.000	0.000	0.000		0.000	0.000
	N	468	469	468	468	469	468	469

		External labour market	Self-belief	University reputation	Ambition	University commitment	External employability	Internal employability
External employability	Correlation Coefficient	.894**	.557**	.861**	.359**	.392**	1,000	.530**
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	0.000		0.000
	N	472	472	472	467	468	472	472
Internal employability	Correlation Coefficient	.437**	.915**	.516**	.837**	.498**	.530**	1,000
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	0.000	0.000	
	N	472	473	472	468	469	472	473

** Correlation is significant at the 0.01 level (2-tailed)

* Correlation is significant at the 0.05 level (2-tailed)

(a) small effect: $r = 0.1$, (b) medium effect: $r = 0.3$ and (c) large effect: $r > 0.5$

Medium to large positive correlations were found between self-perceived employability (external labour market, self-belief, university reputation, external employability, internal employability), ambition and university commitment (r ranged between 0.241 to 0.915). This indicates that the higher the respondents' ambition and their commitment to the university, the more positive their perceptions about their employability (perceptions of the external labour market, their self-belief, their university's reputation, their internal and external employability), and vice versa.

In the next section, the results of the study are interpreted in relation to the literature (chapters 2 and 3).

5.4 DISCUSSION AND INTERPRETATION OF THE RESULTS OF THE STUDY

The literature review and empirical study showed that various factors influence the self-perceived employability of individuals. The purpose of this section is to interpret the empirical results of the study in general, and with specific reference to the findings of the literature review.

5.4.1 *Self-perceived employability, ambition and university commitment of final-year undergraduate students*

The study applied an individual perspective on employability and used Rothwell *et al.*'s (2008) model and instrument to measure final-year undergraduate students' self-perceptions of employability. The study used confirmatory factor analysis to validate the factor structure of self-perceived employability, ambition, and university commitment. The confirmatory analyses yielded the following results:

Self-perceived employability: Three measurement models were tested: a one-factor model (measuring the self-perceived employability construct); a two-factor model (measuring internal and external dimensions of self-perceived employability); and another two-factor model, which included the ambition items (measuring internal and external dimensions of self-perceived employability). The results showed that all three factor structures did not fit the sample data well. Three goodness-of-model-fit indices (CMIN/DF, CFI and RMSEA) were used; none of the indices indicated an acceptable fit between the measurement models and the sample data (see section 4.3.3.2).

Given the above, an exploratory factor analysis was conducted on the 16 Likert-scale items measuring final-year undergraduate students' self-perceived employability. The results yielded three factors: external labour market; self-belief; and university reputation (see section 4.3.3.3). All three factors yielded Cronbach's alpha values above 0.7, indicating acceptable reliability and

internal consistency. The mean scores for the three factors ranged between neutral (3) and agree (4) on a five-point Likert scale. The highest mean score was obtained for the item “self-belief”, followed by “university reputation” and “external labour market”. Thus, although the students had positive perceptions of their skills, abilities, academic performance and their performance in interviews, they were not that positive about the demand of their subject areas, their university’s reputation, and their employment opportunities in the external labour market.

Rothwell *et al.*’s (2008:3) self-perceived employability model is based on four components: self-belief; my university; my field of study; and the state of the external labour market. The three factors identified in this study are aligned with Rothwell *et al.*’s (2008:2) self-perceived employability model (see section 2.5.2), although the “field of study” dimension is integrated into the “external labour market” factor (in this study). According to Rothwell *et al.* (2008:2, 6), self-belief is an internal employability factor that reflects individual perceptions of the attributes, skills, abilities, engagement with study and ambition and allows an individual to achieve their goals. Self-perceived employability is affected by external factors such as perceptions of the state of the external labour market and university’s reputational capital (Qenani *et al.*, 2014:7). According to Rothwell *et al.* (2009:155) and Rothwell *et al.* (2008:2), a university’s reputation is regarded as an asset on a resume because it lends credibility to individuals’ job-seeking potential in a crowded labour market. It is assumed that graduates from reputable universities possess higher social and cultural capital than graduates from less reputable universities (Qenani *et al.*, 2014:210). Furthermore, one’s chosen field of study also influences one’s employment opportunities in the labour market (Rothwell *et al.*, 2009:154).

In addition, an exploratory factor analysis was conducted including the 16 Likert-scale items of the self-perceived employability questionnaire and the five-point Likert-scale items of the Ambition questionnaire to explore the internal and external dimensions of employability. The results revealed two factors, namely internal and external employability. Both factors yielded Cronbach’s alpha values above 0.8, indicating excellent reliability and internal consistency.

The results of this study thus confirmed the internal (one’s perception of their own capacities and skills for finding a job, for example, self-motivation, verbal communication, problem-solving, and being proactive) and external (an individual’s perception of the impact of the external employment market and the importance of their qualifications and/or professions when trying to find a job) dimensions of employability, as identified in the literature (McGunagle & Zizka, 2020:1; Vargas *et al.*, 2018:4) (see section 2.2.2).

The results further showed that respondents scored higher on the internal dimensions than on the external dimensions of self-perceived employability. The results suggest that while respondents were confident about their skills and abilities, they were not as confident about finding work in the external labour market. This could be an indication that respondents were aware of the conditions in the South African labour market, which are characterised by high unemployment and limited employment opportunities, especially among young people. As mentioned in chapter 1, South Africa has an exceptionally high unemployment rate, especially among the youth, who are considered the most vulnerable group in the South African labour market (Botha, 2021:1). The current unemployment rate is estimated at 46.5% (Statistics South Africa, 2022). These unemployment statistics are affecting the country's higher education sector, with rising dropout rates and students taking longer to complete their degrees (Chetty, 2013; Bezuidenhout, 20219; Dyomfana, 2022). Archer and Chetty (2013:161) and Bezuidenhout (2019:2) argue that this may be due to many graduates in South Africa experiencing difficulty finding a suitable place in the labour market, eventually causing them to lose ambition and confidence in their skills and abilities. Such a trend can result in high mental and physical health problems and adverse changes that discourage and weaken confidence in employment prospects after graduation, as it becomes virtually impossible to find employment (Archer & Chetty, 2013:161; Belle & Bullock, 2022).

Ambition: The results of the confirmatory factor analyses showed that the factor structure of the Ambition scale fitted well to the sample data (see section 4.3.4). All three of the goodness-of-model-fit indices (CMIN/DF, CFI and RMSEA) showed an acceptable model–data fit. Cronbach's alpha value was greater than 0.7, indicating high reliability and internal consistency. The mean score was 4.3 on a five-point Likert scale, indicating that, on average, the respondents demonstrated confidence in their abilities and regarded themselves highly ambitious.

University commitment: The results of the confirmatory factor analysis revealed that the factor structure of the University Commitment Scale fitted well to the sample data (see section 4.3.5). The three goodness-of-model-fit indices (CMIN/DF, CFI and RMSEA) showed an acceptable fit between the measurement model and sample data. The value obtained for Cronbach alpha was above 0.9, indicating excellent reliability and internal consistency. The mean score was 3.87 on a five-point Likert scale, thus it can be deduced that respondents, on average, were relatively committed to the university.

Correlations between self-perceived employability, ambition and university commitment:

Spearman's rank-order correlation coefficient was used to determine the correlation between self-perceived employability (external labour market, self-belief, university reputation, external employability, internal employability), ambition, and university commitment. The results revealed medium to large positive correlations between the factors. The results suggest that the higher the respondents' ambition and their commitment to the university, the more positive their perceptions about their employability (perceptions of the external labour market, their self-belief, their university's reputation, their internal and external employability), and vice versa.

This underlines Bourdieu's theory of cultural capital, which, in this case, considers family, ethnic/cultural and socio-historical background, as well as the level of education and qualifications of respondents. Respondents' cultural capital is known to be initially obtained through their primary social group (family) and is incorporated into their habitus (Edgerton & Roberts, 2014:195; Sontange, 2018:82). Thus, from the results obtained, it appears that respondents had positive attitudes towards their embodied/incorporated (mental and physical dispositions, such as competencies and skills) and institutionalised (academic titles and degrees) cultural capital (see section 2.4.2). This is because respondents "may" be aware of the importance of education for success in the South African labour market defined by high unemployment rates. As a result of this awareness, respondents placed a high value on education to improve their chances of employment in the labour market, as well as to better their social position and habitus in society.

Moreover, as cultural capital determines the field and positions to which respondents are exposed and to which they ultimately have access because of their initial/primary social group (family), respondents' perceptions and interpretations of self-perceived employability were likely to be influenced by their primary habitus. Therefore, it could be emphasised that an increase in cultural capital leads to a corresponding increase in investment in cognitive, habitual and behavioural practices to achieve academically and enhance employability (Wang & Huang, 2021:4). That is, high cultural capital allows for more cultural resources, a rich learning environment and expectations for respondents to perform academically, thereby enhancing respondents' goals and aspirations.

The following section provides a discussion on the association between the socio-demographic variables examined in the study and final-year undergraduate students' self-perceived employability.

5.4.2 *The association between socio-demographic variables and final-year undergraduate students' self-perceived employability, ambition and university commitment*

To determine the association between the socio-demographic variables used in the study and final-year undergraduate students' self-perceived employability, ambition and university commitment, independent samples t-tests, ANOVAS, effect sizes and Spearman's rank-order correlation coefficient were used. The results of the study are interpreted and discussed below.

Gender: The results of the independent samples t-test showed a statistically significant difference in the mean scores of male and female respondents for the external labour market. The effect size indicated a small effect. The t-test results revealed that male respondents had higher employability perceptions than female respondents in respect of the external labour market. Thus, the male respondents believed that they had more job opportunities in the labour market than the female respondents. This result supports employability studies conducted by Qenani *et al.* (2014:205), Rätty *et al.* (2020:9) and Vargas *et al.* (2018:233), who found significant differences between the mean scores of male and female respondents concerning their employability perceptions. However, the results contradict the findings of Botha (2021), Bezuidenhout *et al.* (2013), Rothwell and Arnold (2007) and Rothwell *et al.* (2009), who did not find a significant difference between male and female participants or respondents for any of the employability factors. This result could be an indication that male respondents were aware of the employment rate in South Africa, where national and global female employment rates have always been lower compared to males (Statistics South Africa, 2022). According to Stats SA (2022), the labour market continues to favour men and shows no signs of real progress in improving the prospects for women. In the period from 2012 to 2022, the unemployment rate for women remained above the national average. This may be a possible explanation for why the female respondents' perceptions of their opportunities in the external labour market were less positive than the male respondents' perceptions.

Work experience: The results of the independent-samples t-test show that there were no statistically significant differences between the mean scores of respondents with and without work experience for all the self-perceived employability factors, ambition and university commitment. The effect sizes were less than 0.2 for all the factors, indicating that the difference between the mean scores for the categories ("Yes" and "No") was negligible. This result is inconsistent with the studies of Karli (2016), Qenani *et al.* (2014), Rätty *et al.* (2020) and Vargas *et al.* (2018), who found a significant association between work experience and employability perceptions. However, this study supports the results of Botha (2021) and Gilbert *et al.*'s (2022) studies, which found no

significant association between work experience and employability perceptions. This provides a clear indication of contradictory findings in the literature reporting on the association between work experience and individuals' perceptions of employability. According to Qenani *et al.* (2014), work experience is an important employability factor that gives students and graduates the opportunity to reflect on, and put into practice, what they have learned in formal education, as well as to develop transferable employability skills in a real work environment. The results obtained in this study may be an indication that, firstly, respondents were aware of the scarcity of jobs in the South African labour market, specifically those that accommodate the youth. Secondly, the effects of the COVID-19 pandemic had probably led to respondents feeling inadequately prepared for the labour market. Thirdly, respondents were probably not aware of the clear link between their studies and the use of their knowledge and skills in the labour market. Lastly, respondents were probably prioritising improving their cultural capital (by obtaining a degree), which implies that they were more focused on the accumulation of knowledge and skills to increase their chances of success in life.

Campus: The results of the ANOVA test showed that there were statistically significant differences between the mean scores of the different campuses of the university (A, B and C) for university reputation and university commitment. The effect sizes revealed that the respondents from Campus B were more positive about the university's reputation than respondents from Campuses A and C. Furthermore, the respondents from Campuses B and C were more committed to the university than the respondents from Campus A. The effect sizes showed a small effect in all instances. It was, however, evident that Campus B obtained the highest mean score for both university reputation and university commitment.

Employability studies conducted by Chowdhury (2022), Pitan and Muller (2019), Qenani *et al.* (2014), Schettino *et al.* (2022) and Yasmeen and Bano (2020) noted that the university's reputation may influence students' employability. According to Pitan and Muller (2019) as well as Qenani *et al.* (2014), a university's reputation influences employers' perceptions of student quality, influence and trustworthiness, which are critical to promoting graduate employability with employers and also provides graduates with better employment opportunities. The results of the study could mean that respondents from Campus B placed a higher value on their university's reputation because they had access to valuable resources, credibility and connections that enhanced their social, cultural and economic capital, which, in turn, led to respondents feeling more connected and committed to their university than the respondents from the other two campuses.

Mode of study: The results of the ANOVA test showed no statistically significant differences between the mean scores obtained for the different categories of modes of study (full-time classroom-based, full-time distance-based, and part-time classroom and distance-based) for all the factors. The effect sizes revealed small differences between the mean scores of the mode of study categories for self-belief, university reputation, university commitment and external employability.

The effect sizes showed that the respondents who undertook full-time distance-based learning scored higher on self-belief than the respondents who undertook full-time classroom-based learning. This means that respondents who undertook full-time distance learning had a more positive view of their skills, abilities, academic performance and performance in job interviews than respondents who undertook full-time classroom-based learning. The results of the study could be explained by the fact that respondents who completed a full-time distance learning programme learned to manage their time effectively, which improved the quality of their work, they learned to manage multiple tasks, and they learned to prioritise while they may be working. Such skills and abilities are known to boost a person's self-confidence (Kojic, 2022).

The effect sizes further showed that the respondents who studied full-time classroom-based demonstrated more commitment to the university than the respondents who studied full-time distance-based and part-time classroom or distance-based. It was also evident from the effect sizes that those respondents who studied full-time classroom-based scored higher on university reputation and external employability than respondents who studied full-time distance-based. It can be expected that respondents who studied full-time classroom-based had access to more information and a better understanding of their academic work and work opportunities in their field of study. In addition, the traditional experience of structured learning promotes collaborative learning and engagement, which might result in high levels of commitment to the university, more positive perceptions of opportunities in the external labour market, and positive attitudes towards the university's reputation.

On the other hand, those respondents who studied part-time (classroom or distance-based) scored higher on university reputation and external employability than the respondents who studied full-time distance-based. It can be assumed that part-time students have experience of both worlds, studying and working, and as a result, they value their university more than full-time distance-based students and might have more positive perceptions of opportunities in the external labour market based on their work experience.

Race: The results of the ANOVA test revealed a statistically significant difference between the mean scores of the different race categories for university commitment. The results of the effect sizes showed that respondents of the Black African and Indian/Asian/Coloured/Other categories were more committed to their universities than the respondents who belonged to the White category. Bezuidenhout *et al.* (2019) and Ottino *et al.* (2010) in their studies found significant differences between the self-perceived employability of Black, White, and Indian ethnic groups. The results of this study can partly be explained by economic activity by race, as respondents are probably aware of unemployment statistics in South Africa by race. According to Galal (2022), employment statistics in South Africa show that 38.6% of Black Africans are unemployed, followed by 25.9% of Coloureds, 17.1% of Indians, and 10% of Whites. The respondents are probably aware of these statistics and the social reality of unemployment faced by most Black, Coloured, and Indian South Africans. Therefore, their commitment to the university was probably focused on providing themselves with a better life in a poverty-stricken, job-limited country like South Africa, where there are few employment opportunities for Black, Coloured, and Indian people.

Furthermore, the effect sizes showed small differences between the mean scores of the racial categories (Black African, White, and Indian/Asian/Coloured/Other) for external labour market, university reputation, and external employability. In all instances, the respondents who belonged to the Indian/Asian/Coloured/Other category were more optimistic about employment opportunities in the external labour market, their external employability and the reputation of their university than the respondents who belonged to the Black African and/or the White categories. In their study, Ottino *et al.* (2010:116) also found that Indian employees perceived themselves as more employable compared to Black and White employees. This result could be influenced by the fact that Indian/Asian/Coloured/Other respondents in the country have a relatively higher employment rate than Black Africans in the country, and consequently, their employment prospects tend to be more positive compared to Black Africans. Furthermore, unlike White respondents, Indian/Asian/Coloured/Other respondents were “possibly” aware of the economic advantages that Indians and Coloureds had as a result of the Black Economic Empowerment policy, which is designed to improve the economic situation of the Black African and Indian/Asian/Coloured/Other respondents. This may not be the definitive reason for the results obtained, but future research can look into the influence of race on students self-perceived employability to draw more accurate and valid conclusions of the obtained results.

Faculty of study: The results of the ANOVA test revealed a statistically significant difference between the mean scores of the different fields of study for external labour market, self-belief, university reputation, external employability, and internal employability. Respondents of the

Faculty of Education scored high on employability factors compared to respondents of other faculties. Respondents of the Faculty of Education were more positive about their opportunities in the external labour market, their self-belief, their internal and external employability, demonstrated more commitment to the university, and were more positive about the university's reputation. Pitan and Muller (2019:364), in their study, also found that education students had higher levels of self-perceived employability than all other fields of study. This result is probably due to the high demand for educators in South Africa, and the respondents were aware of this need. According to Writer (2022b), there is a shortage of qualified educators in South Africa due to high retirement rates in the country's educational institutions. Siebritz (2022) reports that the Department of Basic Education (DBE) is facing major concerns and looming challenges in filling vacant teaching positions in South Africa. Respondents, therefore, indicated positive attitudes towards internal employability and external employability factors due to the high demand and supply of teaching opportunities. Interestingly, respondents of the Faculty of Humanities/Law/Theology were more optimistic about their self-belief, ambition, and internal employability and demonstrated more commitment towards the university than those of some of the other faculties. However, they were less optimistic about their opportunities in the external labour market and their external employability. These results were expected and are probably due to the low demand for students in the respective fields of study in the South African labour market. According to Writer (2022b), the most sought-after degrees in South Africa are financial advisors (accountants), sales professionals, and information technology (IT) specialists. In the Critical Skills Technical Report published by Dr Blade Nzimande (Minister of Higher Education, Science and Technology), the following specialised skills are required in the current labour market: digital economy; energy; infrastructure development; manufacturing; tourism and agriculture; data scientists; web developer; computer network; technician; electrical engineer; concentrated solar power process controller; mechatronic technician; toolmaker; gaming worker; crop produce analyst; and agricultural scientist (Nkanjeni, 2022). Humanities/Law/Theology respondents probably lacked confidence in their external employability due to these labour market demands. Botha (2021:10) and Fulgence (2015:117) also reported that students in the Humanities faculty had lower levels of self-perceived employability compared to students of other disciplines.

Geographical location: The results of the ANOVA test revealed statistically significant differences between the mean scores obtained for the different categories of geographical location (town, village/farm, big city, and small city) for external labour market and university commitment. Although the effects were small, the effect sizes indicated that respondents who grew up in cities (big and small) were more confident about their skills and abilities to succeed in

job interviews and secure a job in the labour market than respondents who grew up in towns. Furthermore, those respondents who grew up in small cities were also more positive about their opportunities in the external labour market than respondents who grew up in villages. The effect sizes also showed that the respondents who grew up in big cities were less committed to the university than respondents who grew up in small cities, towns and in villages/farms.

Botha (2021) and Sadak *et al.* (2017), in their respective studies, also indicated an association between geographical location and employability perceptions. Botha (2021:9) found that respondents who mainly grew up in towns and big cities held more positive opinions regarding their academic engagement and performance than those who mainly grew up in small cities and rural areas, and Sadak *et al.* (2017) found that the marketability and employability of respondents from the city was higher than that of respondents from town. One possible explanation for this outcome is that students from urban areas have access to different resources, administrative structures and learning environments that give them better life opportunities. Bourdieu's "cultural capital" concept suggests that parents who possess more cultural capital would more likely be able to help their child achieve their goals. This is because cultural capital is associated with greater social and economic mobility, as it can be used to get a job, make friends in high places and avoid discrimination (Drew, 2022). Therefore, the respondents' cultural capital (derived from their primary group) might have influenced their perceptions, interpretations and practices, as well as negotiations, struggles and competition – placing certain respondents (from middle and higher socio-economic classes) in advantageous positions, depending on the type of fields, practices and positions available to them. Therefore, as urban areas are highly developed and have non-agricultural jobs available, respondents from urban areas are less likely to be affected by unemployment and low-wage jobs.

Mother's/female guardian's occupation. The ANOVA test revealed statistically significant differences between the mean scores obtained for the different groups of mother's/female guardian's occupation for university commitment. The effect sizes indicated small to medium effects between the mean scores of the mother/female guardians occupation categories (have no living mother or female guardian; mother or female guardian has a higher or intermediate managerial, administrative or professional position; mother or female guardian are a manual worker; and mother is a state pensioner or unemployed) for university commitment. The effect sizes indicate that respondents who had no living mother or female guardian and respondents whose mother or female guardian had a higher or intermediate managerial, administrative or professional position scored less on university commitment than respondents whose mother or female guardian were manual workers or were state pensioners or unemployed.

Father's/male guardian's occupation: The ANOVA test showed no statistically significant differences between the mean scores obtained for the different categories of father/male guardian occupation. The results support the findings of Gowsalya and Kumar (2016), who found no significant relationship between university students' perceptions of employability and their parents' level of education. However, the effect sizes showed small to medium effects for all employability factors among respondents whose father or male guardian were no longer living and whose father or male guardian were state pensioners or unemployed. The results indicate that respondents who did not have a living father or male guardian scored higher on the factors of self-confidence, commitment to university, reputation of the university, and external employability. In addition, the results of the study show that respondents whose father or male guardian were state pensioners or unemployed scored higher on internal employability, ambition, and external labour market.

As noted above, mixed results were found for the influence of parent's/guardian's occupation on students' perceptions of employability. This is because parents can either encourage or inhibit their children's life preferences (Watson, 2012:235). According to Watson (2012:234), structural variables such as parents' social class, employment level and education play a more important role in their children's life chances, choices and aspirations. This underlines Bourdieu's concepts of cultural reproduction and habitus, which suggest that the primary traits and characteristics that are (re)produced in the child's habitus are influenced by their parents, that is, the family as a primary social group. Parents introduce their children to an initial social field and social position understanding and embodiment, which is either encouraging or discouraging for their children, because the parents' own habitus and social status (class and educational background) determine the kind of resources, as well as the access to these resources, their children have in life. Thus, when we interpret the results of the variable, we can assume that respondents whose mother or female guardian and father or male guardian were either a manual worker, received a state pension, or were unemployed were more likely to have high expectations of improving their social position in society so that their circumstances changed for the better. In addition, respondents were likely to be aware of the disadvantages of manual labour or being on a state pension or unemployed and did not want to live in such difficult circumstances themselves. Therefore, they committed to their university and used the resources and opportunities available to them to improve their lives.

Financial support: The results of the ANOVA test showed statistically significant differences between the mean scores of the different categories of financial support for self-belief, university reputation, university commitment, and internal employability. The effect sizes show that

respondents who received financial support through a bursary, scholarship or grant rated their self-belief, university reputation, university commitment and internal employability more positively than other respondents. In addition, the effect sizes also show that respondents who earned their own income rated their self-belief and internal employability more positively than the other respondents. The findings support those of Borjas *et al.* (2020), Harrison and Hatt (2012) and Wildschut *et al.* (2020), who found a positive association between student financial support (specifically bursaries and family financial support) and academic success. Borjas *et al.* (2020:6), Harrison and Hatt (2012) and Wildschut *et al.* (2020:41) found statistically significant differences between academic success and student financial support (scholarship, family support and self-funding). The authors found that respondents who were self-funded and received scholarships consistently had better academic performance on average, regardless of their field of study. The results of the study could thus imply that respondents were aware of the list of conditions associated with receiving a bursary, grant or scholarship and were, therefore, more inclined to excel in their academic careers. In addition, respondents (both income earners and bursary, grant and scholarship recipients) were likely to be aware of the cultural, social and economic benefits associated with acquiring qualifications to improve their social position and habitus in society.

Age: The results of Spearman's rank-order correlation coefficient revealed a small positive correlation between age, and university reputation, and external employability. The results obtained suggest that the older the respondents were, the more positive they were about the reputation of their university, and the more confident they were about their skills and abilities to succeed in interviews and secure jobs in the labour market. This might suggest that older respondents had more personal commitments in life that required them to focus primarily on performing well to apply for and get a job after graduation. Furthermore, older respondents were more likely to have part-time employment during their studies compared to younger respondents – thus, their confidence in succeeding to find a job might be positively influenced.

Parent's/guardian's level of education: The Spearman rank-order correlation coefficient results revealed small to medium negative correlations between the mother's/female guardian's level of education and self-belief, university reputation, university commitment and internal employability. Similarly, small negative correlations were found between the father's/male guardian's level of education and the university's reputation and commitment to the university. These results are contrary to most studies by Khan *et al.* (2015) and Majid *et al.* (2020), which show that parents' educational level has a positive impact on their children's academic performance and success. The results of the Spearman rank-order correlation suggest that the educational level of the parents/guardians had a less positive influence on the respondents' self-perceptions of their

employability. The results suggest that the higher the educational level of the respondents' parents/guardians, the less confident they were in their abilities and skills and the less committed they were to the university. In a Bourdieusian sense, it could be argued that, though through primary socialisation, people inherit certain volumes of capital(s), social position(s) and essentially their habitus from their family group, people (in this case, the respondents) are able to transgress and improve their own, as well as their family's, habitus and social position through their practices in the fields they enter and particularly their success in those fields, such as (for example) obtaining their own educational attainments.

Ability to provide for household needs: The results of Spearman's rank-order correlation coefficient revealed a small positive correlation between the ability to provide for household needs and the external labour market, and a small negative correlation between the ability to provide for household needs and university commitment. This means that the more the respondents were able to meet their household needs, the more confidence they showed in their skills and abilities to succeed in interviews and secure jobs in the labour market. In addition, the more respondents lacked to provide for household necessities, the more they demonstrated commitment to the university. The ability to provide for household needs is related to the socio-economic status of an individual. Aloui and Eldin (2020), Ebuonyi *et al.* (2019:1) and Harry *et al.* (2018), in their respective studies, also found an association between socio-economic status and employability perceptions of individuals. Applying Bourdieu's theory, these results are not shocking and may be explained as follows. Bourdieu (1996:235) suggests that the habitus inherited from the family group provides individual actors with a structured space of possibilities, consisting of an ordered system and an identifiable network of relationships that impact upon the habitus of individuals. The home is the first institution where a child finds meaningful relationships and understandings of social norms. Factors such as the educational status of parents (cultural capital), as well as the financial status of the household (economic capital) are, in Bourdieu's view, significant in shaping and determining an individual's foundational habitus and social position. Since the results indicate that when respondents were unable to support their households, they were more committed to their university, this can be an indication that they were much more concerned about gaining their academic qualifications and changing their circumstances for the better. The social value and association of education with the improvement of one's social status and position include improvements of the habitus and also the capitals.

Religiosity: The results of Spearman's rank-order correlation coefficient indicated small to medium positive correlations with self-perceived employability (external labour market, self-belief and university reputation), ambition and university commitment. The results touch on the classic

contribution of Max Weber's idea of Protestant ethics, which, according to Steenkamp (2013), implies that people's duty and responsibility in hard work, thrift and self-discipline is related to their religious and moral beliefs, as hard work is viewed as a meaningful moral value aligned with one's faith. Though argumentative questions may query the relevance of the Protestant ethic in an analysis of contemporary South Africa, especially given the diversity of belief systems in South Africa, it should be stated – as Steenkamp (2013) would also emphasise – that applying this viewpoint in contemporary contexts should not, and thus is not, limited to only Protestants, but encompasses religiousness and religiosity holistically. Through this standpoint, and in light of this study, it can be seen that the respondents who were religiously affiliated were more positive about their employability and ambitions and were more committed to their university. This form of hard work and self-discipline would possibly allow respondents to improve their habitus, capital and social position in society, as they would have a moral (faith-based) drive towards their success. The results obtained support the research findings of De Soto *et al.* (2018) and Mahazan *et al.* (2015), who also found a strong positive correlation between religion and students' academic performance and attitude towards employment. Park and Sharma (2016:173) provide insight into the positive impact of religion on students' employability and academic performance. According to Park and Sharma (2016:173), religious organisations are known to foster cohesive, intergenerational networks that provide young adults with the financial, emotional and intellectual resources they need. Therefore, religion builds relational ties and networks (social capital) that promote social norms, provide support and can be leveraged for gain in individuals' lives so that they can achieve stability and comfort in their social environment.

From the above, it can be deduced that Rothwell *et al.*'s (2008) self-perceived employability model for university students was appropriate to measure final-year undergraduate students' self-perceived employability. Furthermore, the socio-demographic variables selected for this study showed meaningful associations with final-year undergraduate students' self-perceptions of their employability, ambition and university commitment. Bourdieu's theory of practice was useful for understanding, interpreting and explaining the association between the socio-demographic variables used in the study and final-year undergraduate students' self-perceived employability.

5.5 CONCLUSION

This chapter was divided into two sections. The first section reported on the results of the inferential statistics, namely the results of the independent samples t-tests, ANOVAS, effect sizes, and Spearman's rank-order correlation tests. The second section interpreted the results of the

study presented in chapters 4 and 5, in general, and with specific reference to the findings of the literature review.

The results of the study showed that socio-demographical variables such as gender, race, faculty of study, geographical location, parent's / guardian's occupation and level of education, financial support, age, ability to provide for household needs and religiosity play a significant role in the self-perceived employability of final-year undergraduate students. Although the ANOVA test revealed no significant differences between the mean scores of the mode of study categories, the effect sizes showed small differences between the mean scores obtained for some of the categories. This study, however, found no significant association between work experience and self-perceived employability, ambition and university commitment.

The results of the study have been, to a large extent, substantiated by findings from the literature review pertaining to quantitative and qualitative research conducted on students' employability and self-perceived employability (see figure 3.4). This study also identified additional variables that influence the self-perceived employability of final-year undergraduate students, namely: parent's/guardian's occupation, financial support, ability to provide for household needs, and religiosity.

It is evident from the interpretation and discussion of the empirical results that Rothwell *et al.*'s (2008) self-perceived employability model and Bourdieu's theory of practice provided meaningful explanations for the results of the study. The researcher, in his interpretation of the results of the study, also took into account the context, diversity, and social realities caused by the COVID-19 pandemic that exacerbated unemployment, reduced employment opportunities, and left many people discouraged from finding a place in the South African job market. The next chapter concludes the study and presents the conclusions and recommendations of the study.

CHAPTER 6

CONCLUSIONS, RECOMMENDATIONS AND SUMMARY OF THE STUDY

6.1 INTRODUCTION

Chapter 1 provided the introduction and background to the study, stated the problem, posed the research questions and objectives, and outlined the research methodology followed in the study. Chapters 2 and 3 provided the theoretical background to the study as well as a review of the relevant literature on employability and self-perceived employability. Chapters 4 and 5 presented and discussed the empirical results of the study. This chapter concludes the study and comprises the following three main sections. The first section presents and discusses the findings and conclusions on the research objectives of the study. The second section presents the recommendations culminating from the research based on the findings of the literature review and the results of the empirical study. Suggestions are also made for future research to further the understanding of self-perceived employability among undergraduate students. The third and final section of this chapter concludes the study by providing a summary of the study.

6.2 CONCLUSIONS ON THE RESEARCH OBJECTIVES OF THE STUDY

The key research question this study aimed to address was as follows: *What is the self-perceived employability among final-year undergraduate students at a higher education institution in South Africa?* Consequently, this study aimed to explore the self-perceived employability among final-year undergraduate students at a South African university. In addressing this objective, the following specific research objectives were posed:

- to analyse the theoretical approaches to and perspectives on employability and self-perceived employability;
- to review and document literature pertaining to global and national trends and perspectives relating to students' employability and self-perceived employability;
- to describe the research methodology that was used to investigate the self-perceived employability among final-year undergraduate students at a higher education institution in South Africa;

- to document and analyse the results of the empirical study on the self-perceived employability among final-year undergraduate students at the higher education institution under investigation;
- to determine the association between selected socio-demographic variables and the self-perceived employability among final-year undergraduate students at the higher education institution under investigation;
- to present the conclusions and recommendations emanating from the literature review and empirical findings regarding the self-perceived employability of final-year undergraduate students at the higher education institution under investigation.

The next section presents and discusses the findings and conclusions on the research objectives.

6.2.1 *Research objective 1*

The first specific research objective was to analyse the theoretical approaches and perspectives of employability and self-perceived employability. Chapter 2 of the study addressed this objective by examining the theoretical approaches and perspectives of employability and self-perceived employability. The following conclusions are presented on specific research objective 1.

Conclusion 1

From Chapter 2, it is evident that the concepts of employability and self-perceived employability are linked. The study adopted the definition of employability suggested by Hillage and Pollard (1998:2), as it provides a comprehensive framework for understanding employability and encapsulates the different elements considered important for employability. These are: employability assets (skills, knowledge and attitudes), deployment (career management skills), presentation (curriculum vitae and job-related skills) and lastly, the context of personal circumstances and the labour market. According to Hillage and Pollard (1998:2), employability is about the ability to gain initial employment, to maintain employment, and to obtain new employment. Self-perceived employability, on the other hand, focuses on the perception of one's own skills, abilities, knowledge, experience and aspirations (internal dimensions) and one's perception of the conditions of the external labour market to attain sustainable employment that is appropriate to one's qualification level. Both concepts focus on a person's skills, knowledge and ability to find, function in and stay in a job.

Conclusion 2

Owing to the complexity of employability and self-perceived employability, more than one theoretical lens was needed to understand the phenomenon. This study examined the following four perspectives: the political perspective; the education perspective; the human resource management perspective; and the individual perspective.

The political perspective focused on policy initiatives that aim to improve the employability of individuals. The education perspective focused on improving the skills, knowledge and employability attributes of students to adequately prepare them for the workplace. The human resource management perspective focused on proactive employment strategies taken by employers to enhance employees' skills to fit into changing work assignments, to assist workers in finding alternative employment opportunities in the labour market, and to enable employers to hire multiskilled workers in the face of changing labour market conditions. The individual perspective is an agency-centred perspective of employability focused on individual perceptions of employability and how individuals perceive their current and future relationship with employment. This study employed the individual perspective on employability to investigate final-year undergraduate students' self-perceived employability at a higher education institution in South Africa because of the agentic position it takes when examining employability.

Conclusion 3

Rothwell *et al.*'s (2008) Self-Perceived Employability Model for university students was identified as an appropriate model for examining final-year undergraduate students' self-perceived employability. The model comprises four components of self-perceived employability: self-belief (i.e., individual abilities and behaviours that enable one to achieve their objectives); university reputation (i.e., a university's brand image that serves as an asset on a resume and lends credibility to job seekers in a competitive labour market); status and credibility of chosen field of study (i.e., the academic standards or quality of a chosen field of study that will increase employment opportunities); and the state of the external labour market (i.e., the ability to identify and pursue career opportunities in one's chosen field of study in the external labour market). These components are reflected in figure 6.1.

Conclusion 4

Pierre Bourdieu's theory of practice and the associated concepts of field, capital and habitus were considered the most relevant theoretical anchor for investigating and analysing the dynamics of the self-perceived employability among final-year undergraduate students. The theory of practice

focuses on the activities and practises of actors in the fields they enter. Within these fields, actors occupy positions and compete for better positions and more capital. The theory of practice introduces the classical notion of the dichotomy of agency and structure and enables the analysis of the relationships within a field. The relationship between agency and structure is characterised by the dynamic interplay of field, capital and habitus. The theory of practice formed the basis for examining, analysing and interpreting the association between the socio-demographic variables used in the study and the self-perceived employability of final-year undergraduate students. The dimensions important for the study are depicted in figure 6.1.

6.2.2 *Research objective 2*

The second specific research objective of the study was to review and document literature pertaining to global and national trends and perspectives relating to students' employability and self-perceived employability. Chapter 3 of the study addressed this objective by examining the global and national trends of employability and self-perceived employability by exploring the skills required in the 21st century and the role of higher education in developing students' employability skills. The following conclusions are presented on specific research objective 2.

Conclusion 1

The first section of chapter 3 provided the results and findings on the employability and self-perceived employability of students in five regions: Australia, the United Kingdom, Turkey, Poland, and Africa. These respective regions/countries were included in the discussion because they had conducted extensive research on students' employability and self-perceived employability. In addition, the chapter investigated employability and self-perceived employability among students in South Africa. The studies reviewed in this section identified several internal and external dimensions that influence the employability and self-perceived employability of tertiary students; these are reflected in figure 6.1.

Conclusion 2

Chapter 3 also examined the association between selected socio-demographic variables and self-perceived employability. The literature review showed that the following socio-demographic variables might influence one's self-perceived employability: gender, race, field of study, religiosity, geographic origin/location, socio-economic status, parents' level of education, and previous work experience. Some of these variables have been overlooked in studies investigating the employability and self-perceived employability of students in tertiary institutions.

Conclusion 3

Assuming that employability focuses on the skills that individuals must possess in order to be employable, this chapter documented several employability skills that are regarded as important in 21st-century labour markets. These include complex problem-solving, critical thinking, creativity, collaboration, emotional intelligence, cognitive flexibility, work readiness and entrepreneurial skills. These skills are the most sought-after skills by employers in the 21st century, as identified in the literature review.

Conclusion 4

The role of higher education in developing students' employability was also explored in chapter 3 of the study. It is clear from the literature that higher education is important in enhancing students' employability, as it contributes to economic growth and production. However, it is clear from the literature that higher education institutions need to develop methods aimed at enhancing students' employability and that various measures need to be taken to increase and strengthen students' employability in order to improve career opportunities and promote economic stability in a country.

Conclusion 5

Based on the above, it is concluded that a thorough literature review is essential for an in-depth understanding of employability and self-perceived employability and the variables influencing one's employability and self-perceived employability, in general, and in higher education institutions, in particular.

6.2.3 *Research objective 3*

The third specific research objective aimed to describe the research methodology that was used to investigate the self-perceived employability among final-year undergraduate students at a higher education institution in South Africa.

The research methodology followed in this study was outlined and elaborated on in chapters 1 and 4. Chapter 1 introduced the research methodology used in the study to investigate the self-perceived employability among final-year undergraduate students at the university under investigation. Chapter 4 focused on a deeper exposition of the methodology – in other words, how the methodology was employed and how the data were analysed.

The research methodology followed in this study included a literature review and an empirical study. The empirical study used a quantitative approach, employing quantitative methods and

techniques for sampling, data collection and data analyses. The research setting was limited to one South African university; convenient sampling was used to select the institution. The target population of this study comprised of all final-year undergraduate students at the different sites of delivery (campuses) of the University. A complete survey of the target population was undertaken. The data of the study were collected using a standardised Web-based, self-administered coded questionnaire. For section B, the measuring instrument developed by Rothwell *et al.* (2008) to determine university students' self-perceived employability was used. The questionnaire included the six-item Ambition Scale developed by Rothwell *et al.* (2008), adapted from Nabi (2001:464) and Greenhaus *et al.* (1990:86) and the eight-item University Commitment Scale developed by Rothwell *et al.* (2008), adapted from Tsui *et al.* (1997). The responses were recorded using a five-point Likert scale ranging from strongly disagree (1) to strongly agree (5). The data were processed using SPSS 27.0. The data were analysed using confirmatory factor analyses, exploratory factor analysis, Cronbach's alpha, descriptive statistics, independent-samples t-tests, ANOVA tests, effect sizes (Cohen's d-values), and Spearman's rank-order correlation coefficients. The research methodology used in the study was appropriate, as supported by the following conclusions.

Conclusion 1

The literature review provided this study with a sound theoretical framework to understand employability and self-perceived employability. Chapter 2 outlined the four theoretical perspectives generally used to understand the phenomenon under investigation and also explored Bourdieu's theory of practice and associated concepts of field, capital and habitus and their implications for employability. Chapter 3 focused on providing a global and national overview of employability and self-perceived employability and discussed the socio-demographic variables that may influence the phenomena. Chapter 3 also elaborated on the skills required in the 21st-century labour markets and the role of higher education in developing students' employability skills. The literature review contributed to an in-depth understanding of the variables that may influence one's employability and self-perceived employability, generally, and specifically with reference to the final-year undergraduate students at the higher education institution under investigation.

Conclusion 2

The literature review was critical in selecting the measurement instruments (i.e., the Self-Perceived Employability, Ambition and University Commitment questionnaires) and the socio-demographic variables used in the study.

Conclusion 3

The exploratory factor analyses conducted in the study confirmed that the Self-Perceived Employability, Ambition and University Commitment scales are reliable and can be used to measure the self-perceived employability of (undergraduate) students in higher education.

Conclusion 4

The study showed that gender, age, campus, mode of study, race, faculty of study, geographical location of origin, parents/guardian's occupation and educational level and financial support, ability to provide in household needs and religiosity influences students' self-perceived employability, ambition and university commitment. The study further showed that Bourdieu's theory of practice and associated concepts of field, capital and habitus are useful for understanding and explaining the association between the socio-demographic variables used in the study and final-year undergraduate students' self-perceived employability.

6.2.4 *Research objectives 4 and 5*

The fourth specific research objective aimed to document and analyse the results of the empirical study on the self-perceived employability among final-year undergraduate students at the higher education institution under investigation. The fifth research objective focused on determining the association between selected socio-demographic variables and the self-perceived employability among final-year undergraduate students at the higher education institution under investigation. Research objectives 4 and 5 was addressed in chapters 4 and 5. Chapter 4 presented and discussed empirical results descriptive statistics, and the reliability and validity of the scales (self-perceived employability, ambition and university commitment) and chapter 5 the results of the inferential statistical analyses (the independent samples t-tests, ANOVA tests, effect sizes, and the Spearman rank-order correlation tests). In addition, chapter 5 interpreted the empirical results of the study in relation to the literature review. The following conclusions are presented on research objective 4.

Conclusion 1

Although the confirmatory factor analyses revealed not a good fit between the one-factor measurement model (measuring the self-perceived employability construct) and the two-factor measurement models (measuring internal and external dimensions of self-perceived employability) and the sample data, the exploratory factor analyses indicated that the scales are reliable. The exploratory factor analysis conducted on the 16-item Self-perceived Employability

Scale revealed three factors that showed high reliability and internal consistency: external labour market, self-belief, and university reputation. Furthermore, the exploratory factor analysis conducted on the 22-item scale (Self-perceived Employability plus Ambition) confirmed the internal and external dimensions of self-perceived employability; Cronbach's alpha values indicated high reliability and internal consistency. Thus, this study confirms the validity and reliability of the scales, and the scales can be used to measure students' self-perceived employability at tertiary institutions.

Conclusion 2

Based on the mean scores obtained for "self-belief", "university reputation" and "external labour market", it can be deduced that, although the students had positive perceptions of their skills, abilities, academic performance and their performance in interviews (self-belief), they were not that positive about the university's reputation and about job opportunities in the external labour market. The results further showed that respondents scored higher on the internal dimensions than on the external dimensions of self-perceived employability.

Conclusion 3

The results of t-tests, ANOVA's, effect sizes and Spearman's rank-order correlation coefficients revealed an association between selected socio-demographic variables (gender, age, campus, mode of study, race, faculty of study, geographical location of origin, parents/ guardian's occupation and educational level, and financial support, ability to provide for household needs and religiosity, and self-perceived employability, ambition and university commitment. This study showed that the above variables warrant further investigation in future employability studies.

Conclusion 4

The results of Spearman's rank-order correlation coefficients also showed medium to large positive correlations between self-perceived employability, ambition and university commitment. Thus, the higher the respondents' ambition and commitment to their university, the more positive their perception of their employability (perception of the external labour market, their self-belief, their university's reputation, their internal and external employability), and vice versa. It is important that the university takes note of this finding, as universities can play a meaningful role in improving students' employability.

6.2.5 *Research objective 6*

The sixth specific research objective aimed to provide the conclusions and recommendations that emerged from the literature review and empirical results on the study on the self-perceived employability of final-year undergraduate students. Research objective 6 is addressed in this chapter. The specific conclusions of the study were presented and elaborated on in the sections above, and the recommendations (practical and areas for future research) are presented in section 6.4.

6.3 LIMITATIONS OF THE STUDY

Researching the self-perceived employability of students at a higher education institution, generally and specifically, during the COVID-19 pandemic presented a number of challenges. The following limitations were encountered in this study:

The study was conducted at only one higher education institution in South Africa; thus, the results cannot be generalised to final-year undergraduate students across all higher education institutions in South Africa.

There was a possibility that the survey would not reach all final-year undergraduate students at the higher education institution under investigation, as participation in the survey required access to a computer, laptop or mobile device, sufficient data, and reliable internet. Furthermore, it was likely that not all final-year undergraduate students were willing to participate in the survey.

The methodological approach (quantitative approach) that was employed limited the study to quantitative responses, thus the respondents' subjective experiences were not explored. In addition, because the instrument used was a self-report measure, respondents' responses could have been influenced by response bias because the survey may have suggested answers that do not cover all possible answers and options to survey questions, or the respondents might have interpreted the questions wrongly and responded inaccurately to the questions.

Another limitation is based on the model applied and instrument used to measure the self-perceived employability of undergraduate students. The model as well as the instrument used did not consider a multicultural context that provides for other dimensions or items, such as culture, which may influence employability perceptions.

Time constraints and funding also posed challenges to the study. If more time and funding had been available and the COVID-19 pandemic had not been experienced during the study, the

researcher would have been able to conduct a more comprehensive study which might have included a qualitative component (such as semi-structured interviews) and/or other South African universities in the sample. The recommendations for future research are provided in section 6.4.

6.4 PRACTICAL RECOMMENDATIONS AND AREAS FOR FURTHER RESEARCH

Based on the conclusions of the study and the limitations experienced, the following practical recommendations are made and areas for future research are suggested:

Recommendation 1

Higher education institutions need to ensure that the courses and curricula they offer to their students are relevant to the local and global labour markets. Education and training should be more closely aligned with the needs of the labour market. Aligning educational outcomes with in-demand skills (e.g., complex problem-solving, critical thinking, creativity, collaboration, emotional intelligence, cognitive flexibility, work readiness and entrepreneurial skills) would increase employment opportunities, would decrease unemployment and would, consequently, promote economic and social development.

Recommendation 2

Higher education institutions should include entrepreneurship education in all curricula offered. The development of entrepreneurial skills and the motivation to start a business should be taught to all students in higher education institutions, not just those specifically enrolled in entrepreneurship courses. This would enable students to think more innovatively and constructively when it comes to starting a business related to their course of study or interests and would increase their employability.

Recommendation 3

In order to improve students' employability, higher education institutions in South Africa should strive to implement academic placements and internships as part of their curricula in different subject areas.

Recommendation 4

Higher education institutions should work closely with government and the private sector to improve social and economic activity. The government and private sector also need to support

mentoring and training programmes, academic placements and internships for students and graduates in the labour market.

Recommendation 5

The exploration of employability requires more examination in higher education institutions, specifically in South Africa. Ongoing research should be conducted in higher education institutions to determine the employability of undergraduate and postgraduate students. The results should be used to inform curricula and teaching methods to improve the employability of students.

Recommendation 6

Based on the research methodology followed in the study, it is recommended that the study be extended to other higher education institutions in South Africa to include a larger population and sample to make the generalisation of results possible. Furthermore, this would allow for comparison between samples and could provide valuable information for the higher education sector in South Africa.

Recommendation 7

This study investigated the influence of a number of socio-demographic variables on the self-perceived employability of undergraduate students; however, it is recommended that the influence of additional socio-demographic variables on self-perceived employability be explored.

Recommendation 8

An Afrocentric model of employability and self-perceived employability should be explored, particularly in Southern Africa, to develop a model that is context specific and takes into account multicultural, multilingual and multiracial factors (variables), among other factors. This would significantly broaden the scope of employability and, as a result, lead to a holistic framework and model of employability and self-perceived employability that include both Afrocentric and Eurocentric models to measure the (self-perceived) employability of workers and students.

6.5 SUMMARY OF THE STUDY

The literature that was consulted throughout the study showed that there are limited research and literature available on the self-perceived employability of students in higher education institutions of South Africa. The study's main objective was to explore the self-perceived employability among

final-year undergraduate students at a South African university. In order to achieve and support the primary objective, five chapters were presented.

The first chapter provided the introduction and background to the study. In addition, the chapter stated the research problem, questions and objectives, and outlined the methodology that was followed to achieve the specific research objectives. The chapter also discussed the ethical considerations and the limitations and significance of the study.

The second chapter provided the theoretical background to the self-perceived employability phenomenon. The chapter defined and conceptualised self-perceived employability and related key concepts. Furthermore, the chapter discussed four theoretical approaches to provide a comprehensive understanding of the self-perceived employability phenomenon from a theoretical viewpoint. In addition, the chapter focused on the agency-structure dichotomy as well as the theory of practice by Bourdieu and the associated concepts of field, habitus and capital which assisted in explaining the association between the socio-demographic variables and the self-perceived employability of final-year undergraduate students.

The third chapter provided a global and national perspective on employability and self-perceived employability. The chapter also discussed several socio-demographic variables that may influence the employability and self-perceived employability of students. Furthermore, the chapter outlined the skills required for the 21st-century world of work and discussed the role of higher education institutions in promoting employability.

The first part of the fourth chapter focused on the exposition of the research methodology to investigate the respondents' self-perceived employability. The second part of the chapter presented and discussed the first part of the empirical results of the study, namely the socio-demographical information of the respondents, the descriptive statistics, and reliability and validity of the scales (Self-Perceived Employability, Ambition, and University Commitment) used in the study.

The fifth chapter presented and discussed the second part of the empirical results of the study, namely the results of the inferential statistics (the independent samples t-tests, the ANOVAS, the effect sizes and Spearman's rank-order correlation coefficients). The chapter also interpreted and discussed the empirical results of the study against the literature reviewed in chapters 2 and 3.

This chapter (chapter 6) concluded the study and presented and discussed the conclusions of the study against the research objectives stated in chapter 1. Practical recommendations to be

implemented by higher education institutions as well as recommendations for future research were also made.

Based on the findings of the literature review and the empirical results and analyses of the study, figure 6.1 depicts the variables that may influence students' employability and self-perceived employability.

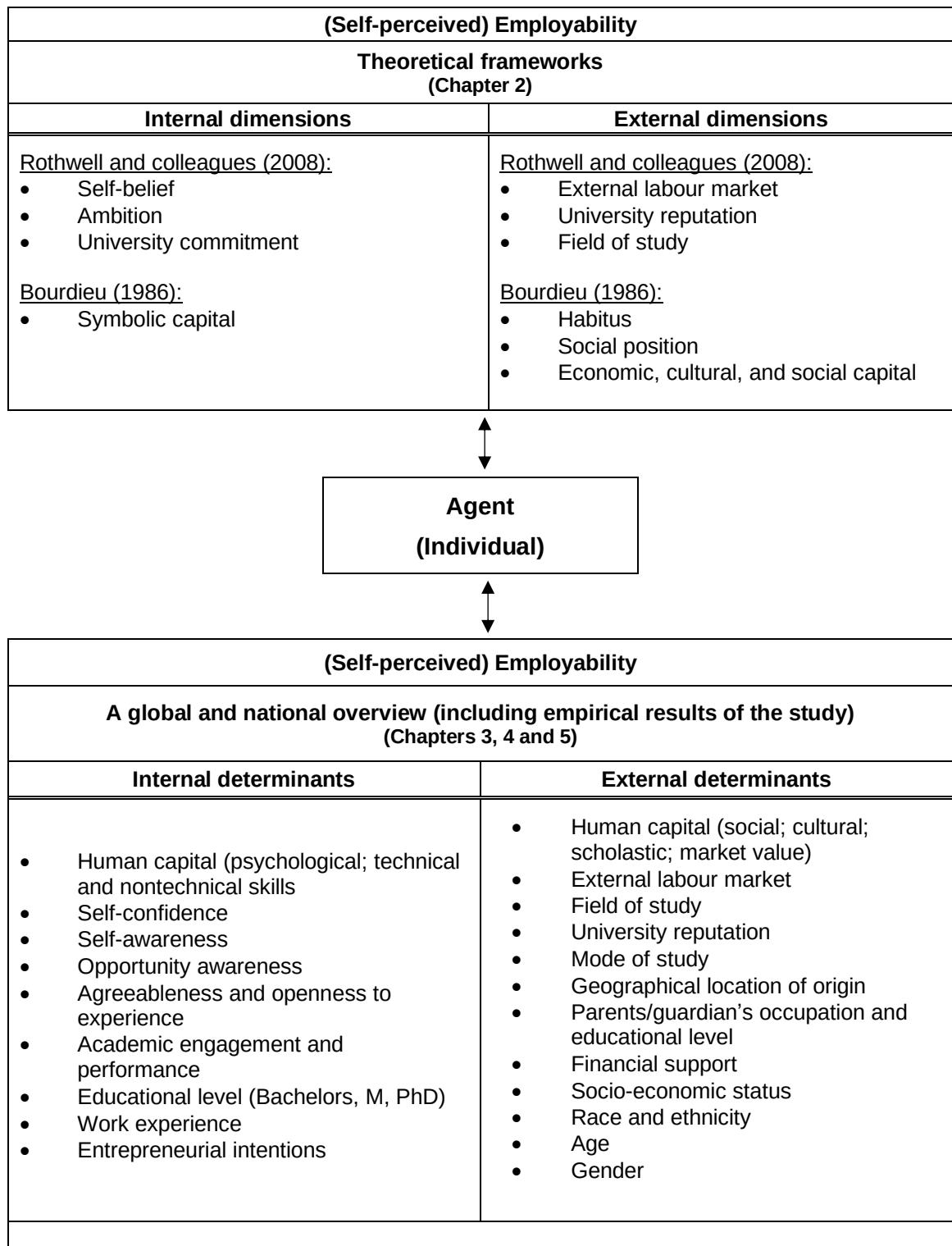


Figure 6.1: Determinants of students' employability and self-perceived employability

Source: Authors' own compilation (2022)

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ANNEXURE A:

PERMISSION FROM DR ANDREW ROTHWELL OF LOUGHBOROUGH UNIVERSITY TO USE THE SELF-PERCEIVED EMPLOYABILITY QUESTIONNAIRE

Dear Sello,

Thank you for your email and for your interest in my work. Of course I am happy to give you permission, you really don't need to ask so long as you cite it properly, but I do appreciate your polite request.

I attach numerous items on employability including the original questionnaires I used in the various studies. This is a modified/standard email I send to people who write to me, I hope you don't mind and I apologise if it's slightly impersonal.

Please could you confirm when you have received this email? There are a lot of attachments, so I want to make sure you have received it ok.

The most recent work attached is the paper I did with some researchers in Osuna and Sevilla, Spain and my work with researchers in Lublin, Poland. The Polish scholars are exploring employability and its relationships with a range of other variables including hope, procrastination, efficacy; of course in a Polish language context.

There is quite a lot of employability research in South Africa already, it's easy to find

I also attach:

1. Some journal articles of mine - the 2007 Personnel Review one was the original paper I did based on my PhD. It's had a lot of citations and is the one most people get to first for some reason. It's become a 'go to' paper which I am quite pleased about. The scales I designed have been translated into numerous languages. My PhD is available online.
2. Questionnaires - you will be able to match these with the papers - the 'Nottingham' one goes with the personnel review paper which was about professional people, and then there is one about undergrads (Bachelor degree students) and one about postgrads (MBA's and similar). Yes these were administered on paper as online surveys were less common back in 2001-2007. Structural Equation Modelling analysis is still relatively uncommon in employability research.

You will see my professional profile on LinkedIn if you google 'Dr Andrew Rothwell'. I'm happy to connect with you and to hear from you again.

Kind Regards

Dr Andrew Rothwell

Loughborough University

ANNEXURE B:
CONFIRMATION OF STATISTICAL CONSULTATION DURING THE
RESEARCH

	Private Bag X6001, Potchefstroom South Africa 2520 Tel: 018 299-1111/2222 Web: http://www.nwu.ac.za Statistical Consultation Services Tel: +27 18 285 2016 Fax: +27 0 87 231 5294 Email: suria.ellis@nwu.ac.za

24 October 2022

Re: Dissertation, Mr S Maarohanye, student number 27968642

We hereby confirm that the Statistical Consultation Services of the North-West University analysed the data of the above-mentioned student and assisted with the interpretation of the results. However, any opinion, findings or recommendations contained in this document are those of the author, and the Statistical Consultation Services of the NWU (Potchefstroom Campus) do not accept responsibility for the statistical correctness of the data reported.

Kind regards



Prof SM Ellis

Associate Professor: Statistical Consultation Services

ANNEXURE C:

PARTICIPANT INFORMATION LEAFLET, CONSENT FORM AND QUESTIONNAIRE

Dear prospective participant

You are invited to participate in a research study titled **Exploring the self-perceived employability among final-year undergraduate students at a South African university**. This study will be conducted by Sello Maarohanye, an enrolled master's student at North-West University (NWU).

Please take some time to read the information presented here, which explains the details of this study. Please ask the researcher any questions about any part of this study that you do not fully understand. It is very important that you are fully satisfied that you clearly understand what this research is about and how you could be involved.

This study has been approved by the Basic Social Sciences Research Ethics Committee of the Faculty of Humanities of North-West University (NWU-01053-20-A7) and will be conducted according to the ethical guidelines and principles of the international Singapore Statement on Research Integrity (2010) and the ethical guidelines of the National Health Research Ethics Council. It might be necessary for the Research Ethics Committee members or relevant authorities to inspect the research records to make sure that I (the researcher) am conducting the research in an ethical manner.

What is this research study all about?

The aim of this research is to explore the self-perceived employability among final-year undergraduate students at North-West University.

Who will be taking part in the study?

You are eligible to participate in the study if you are a **final-year undergraduate student** (full-time, part-time or distant) enrolled at NWU. A final-year undergraduate student is a student who is currently enrolled in the final or last year of a three- or four-year degree course at the University. This may also include students who take more than the normal number of years to complete their studies. No one will be excluded based on age, gender or ethnicity. To be able to complete the questionnaire, participants should have access to a computer and an Internet connection.

Do I have to participate?

Your participation is entirely voluntary, and you are free to decline to participate. If you say no, this will not affect you negatively in any way whatsoever. You are also free to withdraw from the study at any point,

even if you initially agreed to take part. Prior to publication of the study's results (or the point where publication is in process), you may also withdraw the data you generated.

How will the data be collected?

A short electronic survey will be used to obtain information. There is a total of 30 questions, excluding demographic information, and it will take approximately 15 to 20 minutes of your time to complete online.

Are there risks involved in your taking part in this research and how will these be managed?

This study has been classified as minimum risk and you are only asked to provide about 15 to 20 minutes of your time to complete the electronic survey. If you experience any discomfort, you can skip a question you do not want to answer, or do not feel comfortable to answer. You can withdraw from the study at any time. Furthermore, the information provided by you in this questionnaire will not be used in any manner that would allow identification of your individual responses. The findings will be reported anonymously as group findings and not as individual findings. The data gathered will be captured in a database, will be statistically analysed and will be used for research purposes.

What will happen to the data?

The data will be analysed and will be reported in the master's dissertation of the student researcher. The results will also be shared with the academic community through accredited academic journal publications. At least two articles, based on the results and findings of the research, will be submitted to accredited academic journals. These publications will be available on the University's repository in the library catalogue and online on the respective publishers' sites.

Who can I contact for more information or to ask questions?

Should you require any further information about any aspect of this study and/or want feedback on the study, please contact Sello Maarohanye at sellomaarohanye7@gmail.com or 081 741 2674.

INFORMED CONSENT

- I understand the purpose and nature of this study and I am participating voluntarily.
- I understand that I can withdraw from the study at any time, without any penalty or consequences.
- I agree that the information that I provided may be used for research purposes.

I agree	
I do not agree	

SECTION A: DEMOGRAPHIC AND PROFILE INFORMATION

1. At which campus are you studying?

Potchefstroom	1
Vanderbijlpark	2
Mahikeng	3

2. In what mode are you studying?

Full-time classroom-based	1
Part-time classroom-based	2
Full-time distance-based (correspondence learning)	3
Part-time distance-based (correspondence learning)	4

3. With which gender do you identify yourself?

Male	1
Female	2
Transgender male	3
Transgender female	4
Gender variant / non-conforming	5
Prefer not to answer	6
Other	7

3.1 If other, please specify

4. With which racial group do you classify yourself?

Black African	1
White	2
Indian/Asian	3
Coloured	4
Other	5
Prefer not to answer	6

5. What is your age in years?

20	1
21	2

22	3
23	4
24	5
25 years and older	6

6. In what faculty are you currently registered?

Humanities	1
Natural and Agricultural Sciences	2
Theology	3
Education	4
Economic and Management Sciences	5
Law	6
Engineering	7
Health Sciences	8

7. In which type of geographical location did you mainly grow up?

Big city: e.g. Johannesburg/Pretoria/Cape Town/Bloemfontein/Port Elizabeth/Durban	1
Small city: e.g. Polokwane/Vaal Triangle/Vereeniging/Rustenburg/Mafikeng/Potchefstroom/Klerksdorp/Mbombela/George/Richards Bay/Kimberley/Upington	2
Town: e.g. Bethlehem/Wolmaransstad/Coligny/Kroonstad/Viljoenskroon/Vryburg/Standerton/Thabazimbi/Lichtenburg/Zeerust/Bela-Bela/Bultfontein	3
Village/Traditional settlement/Farm in a rural area	4
Other	5

7.1 If other, please specify

**8. What is your mother's/female guardian's highest level of education?
(Only choose ONE option.)**

Have no living mother or female guardian	1
None/No formal education	2
Primary education (complete or partial)	3
Secondary education, but no matric/Grade 12	4
Matric/Grade 12	5
A college diploma/certificate	6

An undergraduate degree	7
A postgraduate degree	8

**9. What is your father's/male guardian's highest level of education?
(Only choose ONE option.)**

Have no living father or male guardian	1
None/No formal education	2
Primary education (complete or partial)	3
Secondary education, but no matric/Grade 12	4
Matric/Grade 12	5
A college diploma/certificate	6
An undergraduate degree	7
A postgraduate degree	8

**10. How would you describe your mother's/female guardian's occupation?
(Only choose ONE option.)**

Have no living mother or female guardian	1
Higher managerial, administrative or professional (e.g. chief executive officer or surgeon)	2
Intermediate managerial, administrative or professional (e.g. bank manager, teacher or lecturer)	3
Supervisory, clerical, junior administrative or professional (e.g. shop floor supervisor, bank clerk or sales person)	4
Skilled manual worker (e.g. electrician or plumber)	5
Semi- and unskilled manual worker (e.g. farm labourer, refuse collector)	6
Self-employed (working for oneself) or business owner	7
State pensioner or unemployed (e.g. pensioner without private pension or person living on basic benefits)	8
Other	9

10.1 If other, please specify

**11. How would you describe your father's/male guardian's occupation?
(Only choose ONE option.)**

Have no living father or male guardian	1
Higher managerial, administrative or professional (e.g. chief executive officer or surgeon)	2
Intermediate managerial, administrative or professional (e.g. bank manager, teacher or lecturer)	3

Supervisory, clerical, junior administrative or professional (e.g. shop floor supervisor, bank clerk or sales person)	4
Skilled manual worker (e.g. electrician or plumber)	5
Semi- and unskilled manual worker (e.g. farm labourer, refuse collector)	6
Self-employed (working for oneself) or business owner	7
State pensioner or unemployed (e.g. pensioner without private pension or person living on basic benefits)	8
Other	9

11.1 If other, please specify

12. What is your primary source of financial support?

Earned income	1
Business income (I own a business)	2
Family support (including alimony)	3
Bursary/Scholarship	4
Grant	5
Other	6

12.1 If other, please specify

13. What is the ability of your family's household to provide in their needs? (Only choose ONE option.)

Statement	
Don't know how to classify my family's household	0
Cannot or rarely provide the basics – have help from other sources	1
Struggling to make ends meet (don't always manage to cover our basic needs)	2
Just manage to make ends meet (cover our basic needs)	3
Living an adequate life (generally have what we need in terms of food, clothing, living costs, transport, etc.)	4
Well off (live a comfortable, privileged life, but not excessively)	5
Affluent (more than just comfortable, but not extremely rich)	6
Extremely rich (may for example have multiple cars, homes, travel – including overseas travel – the very best in clothing, technology, cars, etc.)	7

- 14. Listed below are descriptive statements on religious beliefs and practices. Express your personal opinion by reading each statement carefully and responding to each statement by selecting one of the options. Please respond to all the statements provided.**

Statement	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
My religious beliefs are important to me.	1	2	3	4	5
Attending religious/spiritual services is important to me.	1	2	3	4	5
Praying is important to me.	1	2	3	4	5
Reading religious/spiritual material (such as books, magazines, pamphlets) is important to me.	1	2	3	4	5
It is important to me to participate in religious activities with others, e.g. worshipping, cell groups, etc.	1	2	3	4	5
Religious values guide me in making important decisions.	1	2	3	4	5
I actively obey (adhere to) the specific practices my religion prescribes.	1	2	3	4	5
It is important to me to practise religious activities in private.	1	2	3	4	5
Religious beliefs and values guide me in making daily decisions and how I act.	1	2	3	4	5
My religious beliefs and values guide me in how I respond to difficult challenges or life changes.	1	2	3	4	5

- 15. Do you have any previous/current work experience, e.g. working as a waiter, cashier, clerk, voluntary worker, etc.?**

Yes	1
No	2

SECTION B: SELF-PERCEIVED EMPLOYABILITY

1. Please indicate the extent to which you agree or disagree with the following statements relating to your **employability**.

No.	Statement	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1	I achieve high grades in my studies.	1	2	3	4	5
2	I regard my academic work as top priority.	1	2	3	4	5
3	Employers are eager to employ graduates from my university.	1	2	3	4	5
4	The status of this university is a significant asset to me in job seeking.	1	2	3	4	5
5	Employers specifically target this university in order to recruit individuals from my subject area(s).	1	2	3	4	5
6	My university has an outstanding reputation in my field of study.	1	2	3	4	5
7	Many more people apply for my degree than there are places available.	1	2	3	4	5
8	My chosen subjects rank highly in terms of social status.	1	2	3	4	5
9	People in the career I am aiming for are in high demand in the external labour market.	1	2	3	4	5
10	My degree is seen as leading to a specific career that is generally perceived as highly desirable.	1	2	3	4	5
11	There is generally a strong demand for graduates in the labour market at the present time.	1	2	3	4	5
12	There are plenty of job vacancies in the geographical area where I am looking for work.	1	2	3	4	5
13	I can easily find out about job opportunities in my chosen field of study.	1	2	3	4	5
14	The skills and abilities that I possess are what employers are looking for.	1	2	3	4	5
15	I am generally confident about success in job interviews and selection events.	1	2	3	4	5
16	I feel I could get any job as long as my skills and experience are reasonably relevant.	1	2	3	4	5

SECTION C: AMBITION

1. Please indicate the extent to which you agree or disagree with the following statements relating to your **ambition**.

No.	Statement	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1	I want to be in a position to do mostly work that I really like.	1	2	3	4	5
2	I am satisfied with the progress I have made in terms of meeting my goals for the development of new skills.	1	2	3	4	5
3	I have clear goals for what I want to achieve in life.	1	2	3	4	5
4	I regard myself as highly ambitious.	1	2	3	4	5
5	I feel it is urgent that I get on with my career development.	1	2	3	4	5
*6	What I do in the future is not really important.	1	2	3	4	5

* Reverse-scored

SECTION D: UNIVERSITY COMMITMENT

1. Please indicate the extent to which you agree or disagree with the following statements relating to **your commitment to NWU**.

No.	Statement	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1	I recommend this university to my friends as a great university to attend.	1	2	3	4	5
2	I would have accepted almost any type of course in order to come to this university.					
3	I find that my values and this university's values are very similar.	1	2	3	4	5
4	I am proud to tell others that I am studying at this university.	1	2	3	4	5
5	Being at this university really inspires the best in me in the way of study performance.	1	2	3	4	5
6	I am extremely glad I chose this university over others I was considering at the time I joined.	1	2	3	4	5
7	I really care about this university and its future.	1	2	3	4	5
8	For me this is the best of all universities at which to be a student.	1	2	3	4	5

ANNEXURE D:

PROOF OF EDITING

Dr. JACKIE DE VOS

Academic copy editor / Akademiese teksredakteur

BA (Psychology & Communication studies), BAHons (Psychology) (NWU)
MEd, PhD (Educational Psychology) (NWU)
BAHons (Translation) (UNISA)
MA (Linguistics) (UNISA)
BA (Sielkunde & Kommunikasiestudies), BAHons (Sielkunde) (NWU)
MEd, PhD (Opvoedkundige Sielkunde) (NWU)
BAHons (Vertaalkunde) (UNISA)
MA (Linguistiek) (UNISA)

072 435 8024
Jackie de Vos
acadwritingconsult@icloud.com

EDITING

Select the snip mode using the Mode button or click the New button.

18 November 2022

To whom it may concern

This letter serves to confirm that the following dissertation was edited:

Exploring the self-perceived employability among final-year undergraduate students at a South African university

The onus is on the client(s) to work through the proposed track changes and to accept or reject proposed changes. Clients might amend/re-work or add to the content during and after the editing process. Clients should make certain that all sources/references have been cited and that they are satisfied with the final copy before submitting.

ANNEXURE E:

ETHICS APPROVAL LETTER OF STUDY



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South Africa 2520

Tel: 018 299-1111/2222
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Senate Committee for Research Ethics
Tel: 018 299-4849
Email: nkosinathi.machine@nwu.ac.za

6 May 2021

ETHICS APPROVAL LETTER OF STUDY

Based on approval by the **Basic and Social Sciences Research Ethics Committee (BaSSREC)** on 06/05/2021, the Basic and Social Sciences Research Ethics Committee hereby **approves** your study as indicated below. This implies that the North-West University Senate Committee for Research Ethics (NWUSERC) grants its permission that, provided the special conditions specified below are met and pending any other authorisation that may be necessary, the study may be initiated, using the ethics number below.

Study title: Exploring the self-perceived employability among final-year undergraduate students at a South African university.

Study Leader/Supervisor (Principal Investigator)/Researcher: Dr Doret Botha. Student/Research Team: S. Maarohanye

Ethics number:

N	W	U	-	0	1	0	5	3	-	2	0	-	A	7

Institution Study Number Year Status
Status: S = Submission; R = Re-Submission; P = Provisional Authorisation; A = Authorisation

Application Type: Monitoring

Commencement date: 06/05/2021

Risk:

Low

Expiry date: 06/05/2022

Approval of the study is initially provided for a year, after which continuation of the study is dependent on receipt and review of the annual (or as otherwise stipulated) monitoring report and the concomitant issuing of a letter of continuation.

Special in process conditions of the research for approval (if applicable):

General conditions:

While this ethics approval is subject to all declarations, undertakings and agreements incorporated and signed in the application form, the following general terms and conditions will apply:

- *The study leader/supervisor (principle investigator)/researcher must report in the prescribed format to the BaSSREC:*
 - *annually (or as otherwise requested) on the monitoring of the study, whereby a letter of continuation will be provided, and upon completion of the study; and*
 - *without any delay in case of any adverse event or incident (or any matter that interrupts sound ethical principles) during the course of the study.*
- *The approval applies strictly to the proposal as stipulated in the application form. Should any amendments to the proposal be deemed necessary during the course of the study, the study leader/researcher must apply for approval of these amendments at the BaSSREC, prior to implementation. Should there be any deviations from the study proposal without the necessary approval of such amendments, the ethics approval is immediately and automatically forfeited.*
- *Annually a number of studies may be randomly selected for an external audit.*
- *The date of approval indicates the first date that the study may be started.*
- *In the interest of ethical responsibility, the NWU-SCRE and BaSSREC reserves the right to:*

- *request access to any information or data at any time during the course or after completion of the study;*
- *to ask further questions, seek additional information, require further modification or monitor the conduct of your research or the informed consent process; – withdraw or postpone approval if:*
 - *any unethical principles or practices of the study are revealed or suspected;*
 - *it becomes apparent that any relevant information was withheld from the BaSSREC or that information has been false or misrepresented;*
 - *submission of the annual (or otherwise stipulated) monitoring report, the required amendments, or reporting of adverse events or incidents was not done in a timely manner and accurately; and / or*
 - *new institutional rules, national legislation or international conventions deem it necessary.*

□ *BaSSREC can be contacted for further information or any report templates via 21081719@nwu.ac.za / 13128388@nwu.ac.za.*

The BaSSREC would like to remain at your service as scientist and researcher, and wishes you well with your study. Please do not hesitate to contact the BaSSREC or the NWU-SCRE for any further enquiries or requests for assistance.

Yours sincerely



Prof Jacques Rothmann

Chairperson NWU Basic and Social Sciences Research Ethics Committee

Original details: (22351930) C:\Users\22351930\Desktop\ETHICS APPROVAL LETTER OF STUDY.docm 8 November 2018

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