THE DETERMINANTS OF EMPLOYMENT STATUS OF YOUNG GRADUATES FROM A SOUTH AFRICAN UNIVERSITY

NOMBULELO PRECIOUS MNCAYI

Honours BCom (Economics)

Dissertation submitted in fulfilment of the requirements for the degree

MAGISTER COMMERCII (Economics)

in the

School of Economic Sciences

at the

NORTH-WEST UNIVERSITY (Vaal Triangle Campus)

Vanderbijlpark

Supervisor: Dr. S.H. Dunga

April 2016

DECLARATION

I hereby declare that the work contained in this dissertation is my own work and that all the resources used have been accordingly recognized by means of complete references and that the dissertation has never been submitted at any university for a degree.

Nombulelo Precious Mncayi

ACKNOWLEDGEMENTS

First and foremost I would like to extend my sincere gratitude to my Lord and Saviour, Jesus Christ for giving me the wisdom to complete this task. "I cried out, "I am slipping!" but your unfailing love, O Lord, supported me. When doubts filled my mind, your comfort gave me renewed hope and cheer." Psalm 94:18-19. Indeed you are faithful.

I wish to thank the following people for their support during the course of this study:

- My mentor and supervisor, Dr. S.H. Dunga, for his expertise, guidance and assistance. May God bless you abundantly!

- Aldine Oosthuyzen for assisting me with my questionnaire.

- Izette Schouwstra and her team.

- Linda Scott for the professional editing of this dissertation. Additional thanks to CTrans for assisting me with my abstract and survey cover letters.

- My parents, Vuyelwa and Ndoyisile, and my two beautiful sisters Vuyiswa and Thenjiwe for their love and support.

- Phindile Mdluli, Sanderson Kuyeli, my friends and colleagues for the caring words of encouragement. You have shown me that family is not only defined by blood.

- To all the graduates who participated in this study, you are my heroes!

Dedicated to my mother, **Vuyelwa Ruth Mncayi**, who has always reminded me to stay humble, work hard and be kind.

PROOF OF LANGUAGE EDITING

Ms Linda Scott

English language editing

SATI membership number: 1002595

Tel: 083 654 4156

E-mail: lindascott1984@gmail.com

4 November 2015

To whom it may concern

This is to confirm that I, the undersigned, have language edited the **dissertation** of

Nombulelo Precious Mncayi

for the degree

Magister Commercii (Economics)

entitled:

The determinants of employment status of young graduates from a South African university

The responsibility of implementing the recommended language changes rests with the author of the dissertation.

Yours truly,

Linda Scott

ABSTRACT

There has been a debate regarding the extent of graduate unemployment in South Africa and how it has affected the youth. The main focus of this study was therefore to identify the determinants of employment status among graduates, particularly the length of unemployment endured by young graduates in South Africa. The focus on graduates was necessary, given the understanding that once one has a university degree, the opportunities to get a job are assumed to be high. It was also on the premise of the substantial resources that are invested in higher education with the hope of a higher return. The objectives of the study were categorised into theoretical and empirical. The theoretical objectives were: to define unemployment and graduate unemployment, review literature on various types of unemployment, conduct a review on the problem of youth unemployment from a global, regional and South African perspective, review the trend of graduate unemployment in South Africa, and evaluate the factors that affect graduate unemployment.

The empirical objectives were: to determine the average time it takes a graduate to find employment measured in months, assess if the employed graduates are employed in their fields of study, determine if degree choice plays a significant role in the employment prospects of graduates and to establish the personal and social economic factors that determine the employment status of graduates in South Africa. In achieving these objectives, a quantitative research method was adopted. The study used 233 questionnaires collected via an online survey that was circulated to the alumni database of the university in question. The study employed descriptive, cross tabulation and a regression analysis to achieve the set empirical objectives.

The study had a well-balanced gender distribution with females making up 58% of the sample and males 42%. The average time it took graduates in the sample to find employment after graduation was seven months. Further analysis revealed that out of the graduates that were employed, more than 70% were employed in their fields of study with about 27% in jobs that they did not study for. Additional analysis to determine the state of the graduate's current job showed that many of them were in jobs below their desired field, suggesting a problem of under-employment.

The results from the regression analysis indicated that age, race, field of study, major module and job searching skills were significant predictors of unemployment

length. Religion, gender, and marital status were not significant in this regard. The study indicated that 11.2% of the surveyed graduates were unemployed and the majority were between the age of 21 and 24, implying that young graduates are more likely to be unemployed than their older counterparts. Many of those who were unemployed had qualifications in Humanities with majors in the arts subjects. The average job waiting period was also found to be the highest for graduates with these arts majors.

An analysis was also done on the perceptions about graduate unemployment. The results showed that surveyed graduates perceived the lack of job market information, lack of job experience and not having political connections as some of the factors that influence graduate unemployment. In contrast, age, race, self-confidence and higher education institution attended were perceived as factors not having any influence on unemployment among graduates.

The study therefore concluded that the most important factors affecting graduate unemployment are qualifications and majors held by graduates, which seem not to be aligned with labour market requirements. This provides an opportunity for higher education institutions to collaborate with the government and private sector to bridge the gap that exists in academia and the world of work. Further analysis can be done on a broader scale by increasing the sample size and doing the same study at several universities in Gauteng.

Key words: Young people, graduates, higher education, qualification mismatches, unemployment, South African university

OPSOMMING

Die omvang van werkloosheid onder gegradueerdes in Suid-Afrika en hoe dit jong mense affekteer, het onlangs debat uitgelok. Die hooffokus van hierdie studie was derhalwe om die determinante van werkstatus onder gegradueerdes te identifiseer, in besonder die lengte van werkloosheid ervaar deur jong gegradueerdes in Suid-Afrika. Die fokus op gegradueerdes was nodig gegewe die veronderstelling dat sodra iemand 'n universiteitsgraad behaal het, die geleenthede om 'n werk te bekom hoog is. Dit was ook met die vooropstelling van die substansiële hulpbronne wat in hoër onderwys geïnvesteer word met die hoop op 'n hoër dividend. Die doelwitte van die studie is as teoreties en empiries gekategoriseer. Die teoretiese doelwitte was: die definiëring van werkloosheid en gegradueerde werkloosheid, 'n literatuuroorsig oor verskeie tipes werkloosheid, 'n oorsig oor die probleem van jeugwerkloosheid vanuit 'n globale, streeks- en Suid-Afrikaanse perspektief, 'n oorsig oor waarheen gegradueerde werkloosheid in Suid-Afrika neig en 'n evaluering van faktore wat gegradueerde werkloosheid affekteer.

Die empiriese doelwitte was om die gemiddelde tyd te bepaal wat dit 'n gegradueerde neem om werk te kry gemeet in maande, te assesseer of die werkende gegradueerdes diens verrig in hulle studievelde, te bepaal of graadkeuse 'n betekenisvolle rol in gegradueerdes se werkvooruitsigte speel en om die persoonlike en sosio-ekonomiese faktore vas te stel wat die werkstatus van gegradueerdes in Suid-Afrika bepaal. Om hierdie doelwitte te bereik is 'n kwantitatiewe navorsingsmetode gebruik. 233 vraelyste is via 'n aanlyn-oorsig versamel wat na die alumni databasis van die betrokke universiteit gesirkuleer is. Die studie het beskrywende, kruistabellering en 'n regressie-analise gebruik om die gestelde empiriese doelwitte te bereik.

Die studie het beskik oor 'n goed gebalanseerde geslagsverspreiding met vroue wat 58% en mans wat 42% van die steekproef uitgemaak het. Dit het die gegradueerdes in die steekproef ná graduering gemiddeld sewe maande geneem om werk te vind. Verdere analise het getoon dat van die gegradueerdes wat werk gevind het, meer as 70% in hulle studievelde werksaam was, met ongeveer 27% in poste waarvoor hulle nie studeer het nie. Bykomende analise om die status van die gegradueerdes se

huidige werk te bepaal het getoon dat baie van hulle werksaam was in werk onderkant hulle verkose veld, wat 'n probleem van onder-indiensneming suggereer.

Die resultate van die regressie-analise het aangedui dat ouderdom, ras, studieveld, hoofmodule en werksoekvaardighede betekenisvolle voorspellers van die lengte van werkloosheid was. Godsdiens, geslag en huwelikstaat was nie betekenisvol in hierdie opsig nie. Die studie het getoon dat 11.2% van die gegradueerdes wat aan die oorsig deelgeneem het werkloos was en die meerderheid tussen die ouderdomme van 21 en 24, wat suggereer dat meer jong gegradueerdes waarskynlik werkloos is as hulle ouer eweknieë. Baie van diegene wat werkloos was, het kwalifikasies in die lettere en wysbegeerte met hoofvakke in die kunste. Daar is ook gevind dat die gemiddelde wagtyd vir werk die hoogste was vir hierdie gegradueerdes.

'n Analise is ook gedoen van die persepsies oor gegradueerde werkloosheid. Die resultate het aangedui dat gegradueerdes wat aan die oorsig deelgeneem het, die gebrek aan inligting oor die arbeidsmark, gebrek aan ondervinding en geen politieke verbintenis as faktore beskou het wat gegradueerde werkloosheid beïnvloed het. Daarteenoor is ouderdom, ras, selfvertroue en studie aan 'n hoër onderwysinstelling as faktore beskou wat geen invloed uitgeoefen het nie.

Die studie het derhalwe tot die gevolgtrekking gekom dat die belangrikste faktore wat werkloosheid onder gegradueerdes affekteer, kwalifikasies en hoofvakke is wat blyk nie in voeling met die behoeftes van die arbeidsmark te wees nie. Dit verskaf aan hoër onderwysinstellings die geleentheid om met die regering en die privaat sektor saam te werk om die gaping wat tussen akademie en die wêreld van werk bestaan, te oorbrug. Verdere analise kan op 'n breër skaal gedoen word deur die steekproefgrootte te vermeerder en dieselfde studie by verskeie universiteite in Gauteng te onderneem.

Sleutelwoorde: Jong mense, gegradueerdes, hoër onderwys, kwalifikasie wanparings (mismatches), werkloosheid, Suid-Afrikaanse universiteit.

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

LIST OF ABBREVIATIONS

ADB – African Development Bank

AEO – African Economic Outlook

AERC – African Economic Research Consortium

AFM – Accounting and Financial Management

ANOVA – Analysis of variance

ASGISA – Accelerated and Shared Growth Initiative for South Africa

BEE – Black economic empowerment

BRICS – Brazil, Russia, India, China, South Africa

CHEC – Cape Higher Education Consortium

DBSA – Development Bank of Southern Africa

FET – Further Education and Training (Now Technical Vocational Education and Training – TVET)

GDP – Gross Domestic Product

GEAR – Growth employment and redistribution

GCE – Global campaign for education

HBUs – Historically Black universities

HRLS – Human Resources and Labour Relations Studies

HWUs – Historically White universities

IDC – Industrial Development Corporation

ILO – International Labour Organisation

IMF – International Monetary Fund

LFS – Labour Force Survey

MENA – Middle East and North Africa

NDP – National Development Plan

NGP – New Growth Path

NPC – National Planning Commission

OECD – Organisation for Economic Co-operation and Development

QLFS – Quarterly Labour Force Survey

RDP – Reconstruction development programme

Stats SA – Statistics South Africa

UN – United Nations

UNESCO – United Nations Educational, Scientific and Cultural Organisation

UNIDO – United Nations Development Organisation

UNISA – University of South Africa

WEF – World Economic Forum

CHAPTER 1: THE PROBLEM AND ITS SETTING

1.1   INTRODUCTION

Unemployment is one of the most persistent and contentious economic challenges in South Africa. The situation is even more critical among young people, threatening both social stability and the country's long-term economic growth prospects. Since 1997, the country's unemployment rate has averaged at 20 percent, with the number of discouraged workers for many years always being higher (Arora & Ricci, 2005; Banerjee *et al.*, 2008:718; Kingdon & Knight, 2007). Young people make up a significant percentage of the unemployed individuals (Stats SA, 2015c). For instance, between 2008 and 2014, the unemployment rate amongst 15 to 24 year olds averaged at more than 50 percent, while that amongst the 25-34 year olds averaged at more than 29 percent (Stats SA, 2014a). Published studies also suggest that there is graduate unemployment, which tends to be more prevalent amongst younger graduates (Altbeker & Storme, 2013:13; National Treasury, 2011). Although many young South Africans have been granted greater access to higher education over the years and, therefore, an increased graduate labour force, finding employment for many of these graduates remains a challenge (Moleke, 2009:1). Evidence also indicates longer unemployment duration for a high proportion of young South Africans (Kingdon & Knight, 2007; Pauw *et al.*, 2006; Stats SA, 2014a).

Unemployment is defined often as a situation where a person is willing and has the ability to work, yet cannot find work (ILO, 2005; Kingdon & Knight, 2001; Swanepoel & Van Zyl, 1999). There are different kinds of unemployment. Structural unemployment is caused by structural changes in the economy, such as changes to capital methods of production, skills mismatches, among other things (Swanepoel & Van Zyl, 1999:263). Frictional unemployment occurs while people are in the process of looking for jobs or moving between jobs (Gronau, 1971; Keynes, 1973). It is an ever-present movement of people into and out of jobs (Levine, 2013:2). This type of unemployment is not a cause for serious concern because while there may be jobs in the economy, not all of them will be occupied at the same time (Diamond, 1981). An individual is cyclically unemployed when they cannot find a job during recessionary economic periods. It takes time for workers to get the right job, therefore, some form of unemployment will always exist in the economy (Keynes,

1973; Lilien, 1982:777). The seasonality of unemployment is explained by the fact that some jobs are in high demand during certain seasons only. For instance, the agricultural sector would employ workers during harvest time (Dornbusch *et al.*, 2011:157).

Unemployment remains one of the most important measures of how well an economy is performing. According to Du Toit (2003), in order for unemployment to decline, there should be growth and, in most cases, employment creation suggests economic growth. Hence, low economic growth will bring about meagre growth in employment (Bhorat, 2004:948) or unemployment will significantly lower output growth (Mauro & Carmeci, 2003:123). There are instances where growth is not necessarily accompanied by job creation. Consequences of unemployment are numerous and pervasive, ranging from a loss of skills and experience, poverty, crime, emotional frustrations and shock, which not only has an effect on the victims but also on society at large (Forstater, 2004; Gul *et al.*, 2012:703; Mohr *et al.,* 2009; Swanepoel & Van Zyl, 1999).

Unemployment is not a simple concept since it has ambiguities in some aspects. The problem with unemployment does not just lie with its definition but in its measurements. The difficulty is with deciding whom to classify as unemployed (Fourie & Burger, 2010). Over the years, the adoption by several countries to exclude discouraged job-seekers in defining unemployment has attracted a lot of criticism. It is argued that such a measure has undermined the true costs of unemployment.

Education has been used as one of the methods for dealing with unemployment. The role of education in employment success is well documented (GCE, 2010; Harvey, 2000; Riddell & Song, 2011; Stats SA, 2014b; World Bank, 2006). Education is proven to contribute positively to society by producing citizens that contribute to sustainable economic growth and development (Global Campaign for Education, 2010:2). A lack of education greatly affects a person's ability in many aspects of life including the prospects of getting an income through employment (Du Toit, 2003:5). Education has a substantial effect on unemployment once people have progressed along the education continuum (Fourie, 2012:2). However, in South Africa, the

quality and relevance of the education received is more important in the labour market (Stats SA, 2002:25); education alone cannot guarantee employment.

The inability of the country's poor education system to meet the continually growing demands of the private sector for skilled graduates makes the unemployment situation even worse (Rasool and Botha, 2011; WEF, 2013). Specifically, the failure of the tertiary education sector to produce the necessary skills to grow the economy is worsened by the poor quality of grade 12 learners and weak links between higher education institutions and the private sector (Dinokeng Scenarios, 2007). For instance, besides several education transformations, students still enrol for qualifications that are not required by the private sector, resulting in considerable shortages of significant skills in the country (Rasool & Botha, 2011). The labour market has a serious oversupply of irrelevant skills compared to the skills required by firms and the economy (Moleke, 2009; Nel & Neale-Shutte, 2013). Many graduates lack the right education and skills, and even if they do get jobs, a lot of them remain under-employed (Shierholz et al., 2014:4). Even recently, finding the candidates with the right skills for vacant jobs has become more difficult for many firms (AEO, 2012; Career Builder, 2014; Diamond, 2012).

In a study done among 36 African countries about the most important employment challenges facing the young, in more than half of the countries surveyed, a mismatch of skills was seen as a foremost obstacle in labour markets (AEO, 2012:4). Even for graduates who actually find employment, the majority remain ill matched with their current jobs and underpaid when they get jobs that are not in their field of study (OECD, 2014a). In many cases, it takes them some time to get these jobs; a process explained as just being transitional as they are waiting for good jobs (AEO, 2012).

The concentration on graduates is necessary given the substantial resources that often are invested in their education (Moleke, 2006). Furthermore, the rising unemployment among young people is a policy concern, and young graduates are not an exception (Nel & Neale-Shutte, 2013:438).

1.2   PROBLEM STATEMENT

It is a widely believed view that those with high education qualifications have an added benefit in the labour market because of better employment prospects.

However, Moleke (2006:1) argues that such an advantage is not always enjoyed by all graduates, mainly because of distinct situations and skills/job mismatches that exist in the labour market. More specifically, a number of studies show that the current generation of young people in South Africa is confronted with many labour market challenges manifested in complex ways (Kane-Berman, 2015:3; Mlatsheni, 2012:31; Moleke, 2006). While the current South Africa has gone through vast transformations since its years of racial inequities, South African graduates are still faced with serious employment challenges threatening both their and the country's future. According to the African Economic Outlook (AEO, 2012:4), many employers in Africa are finding it very challenging to find suitable candidates with the right qualifications.

Published studies argue that graduates are not prepared for the world of work despite having tertiary qualifications (Acquah, 2009:28; Pauw *et al.*, 2008; The Conference Board *et al.*, 2006:7; Weligamage & Siengthai, 2003). For instance, in South Africa about 600 000 university graduates were unemployed while the private sector was struggling to fill an estimated 800 000 vacancies (The Economist, 2012:5). It seems, therefore, that jobs are there but many of these graduates are not always employable. Some studies have argued that perhaps there is a mismatch between qualifications and labour market skills required, or there could be a problem in the expectations of companies (MacGregor, 2007:1), as a large number of young graduates, who majored in certain sciences were finding it very difficult to find jobs (CHEC, 2013; Fisher & Scott, 2011; Van Der Berg & Van Broekhuizen, 2012). It is still not certain that graduates that have not been given a chance on the job market lack the skills.

Younger graduates are twice as likely to be unemployed than older graduates, where the term older graduates refers to those individuals in the 35-65 year age category (Altbeker & Storme, 2013; Amare, 2014). About 45 percent of 18-29 year olds with tertiary education were unemployed in 2011 (National Treasury, 2011:5). The study further found that only one in eight young people under 25 years of age are working in comparison to 40 percent in other emerging countries. Bhorat (2004:957) also found graduate unemployment to have more than doubled since 1995-2002. In their study on the employability of the 2011 UNISA graduates, Archer and Chetty (2013:137) found unemployment of these graduates increased from 7 percent to

12.5 percent. In contrast to a non-increasing graduate unemployment reported by Van Der Berg and Van Broekhuizen (2012:2); Altbeker and Storme (2013:1); Van Broekhuizen (2012:9); and Pauw *et al.* (2006), which found that unemployment among South African graduates has in fact been at 5 percent or slightly higher. Considering these conflicting studies, research on the status of graduate unemployment is still not clear enough.

Although some of the studies mentioned reveal low unemployment rates among graduates, it is not clear whether graduate unemployment is high or not. Considering South Africa's racial past, it can be assumed that perhaps race is a significant predictor of employment prospects considering the different unemployment rates found for different races (Stats SA, 2014a:8; CHEC, 2013:13; Seekings, 2003). A number of gaps in the literature need to be addressed. Questions like whether those who are unemployed, are they structurally or frictionally unemployed? Research on the status of graduate unemployment is still not clear enough considering the conflicting studies. Against this background, this study aims to investigate the determinants of employment status of young graduates with emphasis on graduates from a South African university.

1.3   OBJECTIVES OF THE STUDY

The following objectives were formulated for the study:

1.3.1 Primary objective

This study focuses on identifying the determinants of the employment status of young graduates from a South African university.

1.3.2 Theoretical objectives

In order to achieve the primary objective, the following theoretical objectives were formulated for the study:

- Define unemployment and graduate unemployment as concepts.
- Conduct a literature review on the different types of unemployment.
- Examine the trend of graduate unemployment in South Africa.
- Review the factors that affect graduate unemployment.

- Review empirical studies on the issue of unemployment from a global, regional and national perspective.

1.3.3 Empirical objectives

In accordance with the primary objective of the study, the following empirical objectives were formulated:

- Determine the average time it takes a graduate to find employment.
- Assess if the employed graduates are employed in their field of study.
- Establish the personal and social economic factors that determine the employment status of graduates in South Africa.
- Determine if degree choice plays a significant role in graduates' employment prospects.

1.4   RESEARCH DESIGN AND METHODOLOGY

The study comprised of a literature review and an empirical study. A quantitative research method was deemed suitable for the purpose of this study. The worldview that best fits this research study is post-positivism which is discussed in chapter 4.

1.4.1 Literature review

In order to acquire information about the topic, a wide range of the relevant literature were reviewed from textbooks, government publications, the Internet and published reports as well as unpublished reports like thesis in order to acquire an in-depth understanding of the problem. Sources such as newspapers were also consulted.

1.4.2 Empirical study

The empirical analysis of this study included an analysis of primary data that was collected from graduates both employed and unemployed who are 35 years old or less so as to fit in the young graduate categorisation. South Africa's national youth policy defines young people as those in the 14-35 age categories (National Youth Policy, 2015:10). A detailed discussion on this section is given in Chapter 4. The empirical portion of this study comprised the following methodological dimensions:

1.4.2.1   Target population

The target population were male and female graduates (35 years or less) that obtained their higher education qualification (i.e. at least a bachelor's degree or equivalent and higher educational qualifications) at a South African university between 2004 and 2014. The time period was chosen based on the time the University in question was officially established. In this study, a graduate was defined as an individual with at least a diploma or degree from any higher education institution. "At least three years of hard labour spent in colleges and universities" (South African Graduates Development Association, 2012:3).

1.4.2.2   Sampling frame

In this research study, the sample frame comprised of graduates both employed and unemployed, disregarding where they live, who successfully completed their study at a South African university between 2004 and 2014 and are 35 years or less.

1.4.2.3   Sampling technique

For the purpose of this study, a purposive sampling method was deemed suitable as the researcher consciously targeted graduates who were 35 years or less and completed their degree qualification between 2004 and 2014. To avoid bias owing to the use of non-probability sampling, the university in question granted access into the alumni database where graduates were then chosen randomly, regardless of the course they studied however still within the set criterion. While the main limitations of non-probability sampling may be the difficulty in calculating sampling errors (Singleton *et al.*, 1993:159), purposive sampling can be exceptionally valuable for circumstances where a researcher needs to reach a targeted sample quickly and where sampling for proportionality is not the key concern (Kelley *et al.*, 2003).

1.4.2.4   Sample size

In this research study, the sample size is 233 graduates. Because a sample size (n) greater than 30 is deemed sufficient for normal distribution (Swanepoel *et al.*, 2010:200), statistically the 233 sample size is large enough.

1.4.3 Data collection method

Data were collected using a survey questionnaire (see annexure A), where questionnaire ideas were adapted from Moleke (2006) and CHEC (2013) among others. The survey was conducted from 17 July to 31 August 2015. The survey was self-administered and sent via email to graduates accessed from the university's alumni database with a cover letter typed in both English and Afrikaans (refer to annexure B-1 and B-2), accurately explaining the purpose of the study, the length of the questionnaire, details of the researcher and how the results of the questionnaire will be used.

1.4.4 Statistical analysis

The Statistical Package for Social Sciences (SPSS) was used to analyse the captured data. The following statistical methods were used on the empirical data sets:

- Descriptive analysis (mean, median, and mode)
- Cross tabulation analysis
- Significance tests
  - Analysis of variance (ANOVA)
  - Regression analysis

1.5   ETHICAL CONSIDERATIONS

Before proceeding to collect the data, the questionnaire was presented to the university's ethics committee and was approved. The study complied with ethical standards of academic research where participation was voluntary and all participants were ensured of confidentiality and anonymity. All survey responses were held in strict confidence and only disclosed in the form of aggregate statistical summaries. For privacy and ethical purposes, the name of the university where graduates were sourced is not disclosed.

1.6   CHAPTER LAYOUT

Chapter 1 (The problem and its setting)

This chapter introduces the field of the research under study. It further introduces the research problem and the objectives of the study. In addition, it provides a clear and brief outline of the research and topics to be discussed.

Chapter 2 (Theoretical aspects of the study)

This chapter provides a literature review on unemployment with a focus on definitions, measurements and types with consequences.

Chapter 3 (Empirical literature review)

A profile of the unemployment situation from a global, regional and South African perspective is given in this chapter. The crux of the chapter is on South Africa. The chapter further reviews the graduate unemployment situation.

Chapter 4 (Empirical research methodology)

This chapter describes the nature and the scope of the methodology applied in the study.

Chapter 5 (Analysis and interpretation)

This chapter analyses and discusses the findings of the empirical research undertaken.

Chapter 6 (Summaries, conclusions and recommendations)

This chapter summarises and conclude the study.

CHAPTER 2: THEORETICAL ASPECTS OF UNEMPLOYMENT

2.1   INTRODUCTION

Unemployment is a situation where one is willing and able to work but cannot find a job. In most cases, the individual will have gone to school or have gone through training to make themselves employable and yet due to circumstances in the economy the individual remains unemployed. This is a problem, which is then linked to many other social problems, as the unemployed have to depend on the society for their welfare. The World Economic Forum (WEF, 2014) argues that unemployment is interconnected with other problems facing societies. Swanepoel and Van Zyl (1999:262) and O'Higgins (2015) contend that unemployment can also be a cause of persistent poverty, high levels of crime, inequality and unfulfilled economic potential in people. It also causes a lack of financial resources that leads to indebtedness (Forstater, 2004). The devastating effects on the unemployed are not only felt by unemployed individuals but by the entire community. Over recent years, the world has experienced continually increasing unemployment rates, especially among the youth who really face substantial employment challenges (Stats SA, 2014a).

Efforts aimed at dealing with unemployment have surfaced from different angles. One of the angles has been education. The role of education in employment success is well documented (O'Higgins, 2003:8; OECD, 2008; Stats SA, 2002; 2014; GCE, 2010; World Bank, 2006). The role of education in increasing chances of finding employment, or rather lowering unemployment, is also supported by empirical evidence. For instance, background work of Giuliano and Tsibouris (2001) finds that persistent unemployment decreases with the level of education. In other words, the more people further their education, the better their chances of securing a job. However, the fact that unemployment has been increasing over the years shows that education cannot guarantee employment, pointing to issues such as job market mismatches.

This chapter discusses the theoretical background of unemployment as a general phenomenon. The sections will define unemployment and its types, outlining its determinants, measurements and its consequences. The aim of this section is to provide an in-depth understanding of unemployment.

2.2   THEORIES AND DEFINITIONS OF UNEMPLOYMENT

Unemployment is an imperative economic indicator as it can basically tell whether an economy is growing or not (Lovati, 1976). The importance of unemployment figures is evidenced by the fact that they have a significant influence on votes, stock markets, capital and investment movements (Lesotho Bureau of Statistics, 2011:103). The World Bank (2013:2) states that, "jobs are the cornerstone of economic and social development". According to Al-Habees and Rumman (2012:1), unemployment denotes economic shortcomings affecting the social structures of societies, often regarded as a negative occurrence in any human society. The majority of countries face this phenomenon, be it developed or developing, and in many instances, sustained growth with employment-generating policies eventually decreases the problem of unemployment (Hussain *et al.*, 2010:332). In his study, Du Toit (2003:5) also maintains employment as one of the necessities for economic growth, clearly demonstrating that unemployment can only decline through economic growth. High economic growth indicates the need for additional labour to be employed from the surplus labour market (Al-Habees & Rumman, 2012:675).

Mohr *et al.* (2009:498) argues that unemployment results in income loss, shock and frustration. However, it also means a loss of human development, including skills and experience developed and attained. The effects of unemployment not only hurt the affected individuals but spread to the entire economy (Gul *et al.*, 2012). Indeed, policy makers agree that unemployment is one of the main obstacles related to the negative social and economic costs for the society at large (Forstater, 2004). Because unemployment remains an imperative aspect of the national policy, knowledge on this state is crucial (Freeman, 1979:109).

The subsequent subsections explain and discusses definitions of unemployment. The chapter further looks at the different types of unemployment, causes and measurements of unemployment, as well as its presumed consequences.

2.2.1   Definition of unemployment

From the periods of the Great Depression about 80 decades ago, unemployment was acknowledged as very perplexing for the effectiveness of economic policy (Lester & McCain, 2001:133). Nonetheless, many disagreements still surround the

definition of unemployment. Strobl and Byrne (2002) argue that, though the calculation of unemployment rate is not difficult, much of the challenge lies in actually categorising those not working as unemployed. The problem lies with deciding on whom to contain in the labour force as well as clearly describing an unemployed individual (Fourie & Burger, 2010:476), as in some countries certain persons like students are included in the labour force while in some countries they are not (Gorlich *et al.*, 2012). Underemployment further contributes to the difficulty in defining unemployment, as it refers to a situation where people just work for the sake of having a job, even if it means getting a job that is not in their line of skills and abilities (Dubihlela, 2010:25; Swanepoel & Van Zyl, 1999:263).

The definition of unemployment is often based on the following criteria: (1) without work, (2) currently available for work and (3) seeking work (ILO, 2005). Hence, this definition has been set as a guideline in defining unemployment. It is used by more than 80 percent of countries in the world, according to Kingdon and Knight (2001), and thus been accepted by a number of countries throughout the world. When a person is recognised as being without work, it means that they should not have been in any form of employment where they were being remunerated. The second criteria means that if one is to be considered unemployed, the person must be available for a paid job during the reference period. Lastly, if a person is said to be seeking work, it means that they must have taken steps or been actively looking for work through applying to a job post (Fourie & Burger, 2010:478).

Controversial arguments have surrounded the International Labour Organisation's (ILOs) unemployment definition, so much so that a lot of researchers argue about certain aspects of the definition, which are said to be debatable, and in effect have certain implications and parts that need to be taken into consideration. Strobl and Byrne (2002) argue that the requirement of the unemployed to be actively seeking for employment presents restrictions to people living in the developing countries, and as such active job search in defining individuals as unemployed is thus questionable. Such restrictions can include a lack of financial resources and a lack of labour market information as to where job openings are and what kind of skills or individuals are required.

According to Swanepoel and Van Zyl (1999:262) and agreed with by Mohr *et al.* (2009) and Maree (1978:16), people are unemployed when they have the desire to work, are able to work but struggling to get a job. Fourie and Burger (2010:475) describe unemployment as a situation that occurs when a person wishing to work is not able to find employment, except children, scholars and the elderly. If a person is without a job and would agree to take any appropriate job, he/she is regarded as unemployed (Lester & McCain, 2001:133). Forstater (2004) defines unemployment as not being able to get a job that earns an income.

In South Africa, unemployment is defined in two ways, such as the strict (narrow) definition and broad (expanded) definition. The strict definition explains an unemployed person as one with no job but has been looking for employment in the previous week; while by the expanded definition an unemployed person is one who does not have a job even though they have not been searching for it in the previous week (Kingdon & Knight, 2001:4). Statistics South Africa defines the unemployed as persons between the age of 15-64 who were without work a week before the survey, desires to work and have been actively looking for employment four weeks earlier, and is available to start working or begin some business (Stats SA, 2004). This is known as the official unemployment definition. According to Lehohla (2004), the main difference between the official definition and the expanded one is the removal of the third standard (actively looking for work). According to the ILO (2005:16), this criterion is defined as "activity or efforts undertaken during the specified reference period or prior to it in order to find a job" including checking jobsites, applying to employers and listing at a recruitment agency.

The use of either definition (official or expanded) has received a lot of attention over the years. At the heart of this debate lies a question regarding the inclusion or/and the exclusion of persons not actively searching for work (Posel *et al.,* 2014:68). The argument surrounding the use of the expanded definition maintains that this definition tends to exaggerate the unemployment problem since people who are slothful to either work or look for work are counted as unemployed (Fourie & Burger, 2010:479). On the other hand, those opposing the use of the narrow way of defining unemployment argue that the narrow definition of unemployment does not reflect the real and true story behind unemployment (Borjas, 2010:498; Kingdon & Knight,

2007:10). Many people maintain that quite a large number of discouraged job-seekers are influenced by circumstances (Posel *et al.*, 2014:69). Kingdon and Knight (2001:8) argue that job search for discouraged job-seekers is often delayed, if not hampered, by obstacles such as poverty, long duration of unemployment and hostile local economic circumstances. Similarly, Kingdon and Knight (2007) found that in South Africa, discouraged job-seekers were on average more underprivileged and destitute than those actively searching for employment.

Furthermore, the lack of financial resources seems to play a significant role by hindering job search for many people living in underdeveloped areas; on the other hand, others simply believe that they do not have the skills required by firms (Lehohla, 2004). Strobl and Byrne (2002), who argue that many people in developing countries are discouraged, support this view and the requirement that in order to be referred as an unemployed individual one has to be actively seeking for employment is simply a challenge. All these factors often result in cases where unemployed persons may stop actively searching for employment. Under this interpretation, figures on discouraged job-seekers are still being published by almost every country and they continue to shape employment policy decisions around the world (Kingdon and Knight, 2001:8). For instance, for the South African labour market, the expanded unemployment rate is regarded as the more precise reflection of unemployment than the strict unemployment rate (Kingdon & Knight, 2007:10), thus government's focus is on reducing long-term unemployment (Department of Labour, 2012:366).

Notwithstanding the debatable definitions of unemployment, a number of ways can be used to explain unemployment comprehensively. To have a thorough understanding of the nature and intricacy of unemployment, a distinction is made between the different types of unemployment, namely seasonal unemployment, frictional unemployment, cyclical unemployment and structural unemployment. These kinds of unemployment will form the centre of the discussion in the subsections that follow. In addition, regardless of how unemployment is defined, there is no doubt that it remains one of the most severe and pervasive economic problems facing the global economy (Mohr *et al.*, 2009:498).

2.2.2 Types and effects of unemployment

In order to have a thorough understanding of the magnitude and multifaceted nature of unemployment, a distinction needs to be made between different types of unemployment. There are four types of unemployment and they are clearly discussed below, with their effects. Knowledge on the various types of unemployment provides a better way of addressing the unemployment problem (Diamond, 1981; Msimanga, 2013:30). The discussion starts with the least important types of unemployment to the most alert-raising ones.

2.2.2.1   Seasonal unemployment

The seasonality of unemployment is explained by the fact that some jobs are always highly demanded in some seasons and not in others. Certain industries are always busy during certain seasons of the year, as such; they will always require additional labour in those busy times. In the agricultural industry, more people are employed during harvest times, and lose their jobs during winter times (Swanepoel & Van Zyl, 1999:264). According to Barker (2007:177), seasonal unemployment is a very predictable type of unemployment that happens on a regular basis. This type of unemployment does not clearly explain what unemployment is all about as all the unemployed individuals will be reemployed once the employment season starts (Borjas, 2010:504).

2.2.2.2   Frictional unemployment

Frictional unemployment occurs while a person is searching for a job, usually short-term in nature, mainly because of difficulties with job searching and matching in the labour market (Gronau, 1971; Keynes, 1973; Lindbeck, 2015:738). According to Swanepoel and Van Zyl (1999:263), this form of unemployment takes place when people move between various jobs, for instance, after leaving their job. "Both employers and workers more or less cannot find each other in weeks or months" (Janoski *et al.*, 2014:7). Frictional unemployment does not propose that an economy is confronted by an important structural problem; therefore, it is not alarm raising (Borjas, 2010:504). Graduates can also be referred to as being frictionally unemployed due to lags in the labour market that occur while they are looking for jobs; chances are they will usually get employment within a very short space of time

(AEO, 2012). As a result, by its nature, frictional unemployment only results in short-term unemployment spells (Borjas, 2010:504; Lilien, 1982).

According to Bangane (1999:11), what makes frictional unemployment inevitable is the fact that at any given time, not all active employment-seekers will have found employment and moreover, not all firms would have filled vacant job openings. Although there may be jobs in the economy, unemployed job seekers may not be aware of existing jobs in the economy due to a factor like imperfect labour market information, which is not always readily available, or they could not act instantaneously to job openings (Diamond, 1981). Moreover, employment-seekers sometimes do not have a lot of information regarding available jobs and firms on the other hand may take time not only to find the right people, but to fill the right positions (Mirko, 2005:53). Hence, the fact that there are employees quitting their jobs, others being retrenched, others entering the labour market, others moving between jobs, frictional unemployment will always exist, regardless of how the economy is performing (McConnell *et al.*, 2009).

Frictional unemployment is also caused by the rigidity of labour, which is normally caused by costs incurred in moving to where jobs are accessible (Mirko, 2005). Diamond (1981:798) contends that frictional unemployment is not essentially efficient. He argues that efficiency will increase when job seekers are encouraged to decline jobs that have high moving costs. Sometimes it is not necessarily a bad thing for job-seekers to have to wait for the right job at the right time. Because frictional unemployment can be experienced during periods of low unemployment (economic upswings), it is regarded as a natural part of a well-organised labour market (Leonard, 1987:1). As such, this type of unemployment is not seen as problematic for an economy (Mohr *et al.*, 2009:499).

2.2.2.3   Demand-deficient (cyclical) unemployment

The number of employed people differs along the economic cycle, declining in economic upswings and increasing during economic recessions (Freeman, 1979:119). During this phase of the business cycle, there is aggressive competition for jobs as unemployed individuals not only compete with other unemployed persons but also with employed work seekers who are looking for better jobs or higher earnings (Longhi & Taylor, 2013:1). The unemployment situation is perpetuated by

the fact that both unemployed and employed persons tend to apply for the same jobs, and since potential employers are not in a position to observe productivity, they may often deduce prior or present unemployment as an indication of low productivity (Longhi & Taylor, 2013). Thus, it is possible that employers will prefer employed job candidates than unemployed ones (Longhi & Taylor, 2012). For this reason, the prospects of unemployed persons finding jobs should be lessened by the existence of employed work seekers.

According to Mohr *et al.* (2009:500), cyclical unemployment stems from the demand side of the economy, and is often referred to as demand deficiency. Lindbeck (2015:738) also explains cyclical unemployment occurring as a result of the labour market disequilibrium where labour supply is said to be in excess at prevailing wage rates. This imbalance between the number of jobs available in the market and number of people looking for jobs will last as long as certain characteristics of the economy change. For instance, as long as the business cycle is in recession, cyclical unemployment will prolong until the economy is said to be recovering.

During the downswing stage in the business cycle, demand for goods and services declines, resulting in production deteriorations; the insufficient aggregate demand fails to generate enough jobs in the economy (Zarnowitz, 1992:26). Thus, employers would need a small number of workers in order to satisfy the declining consumer demand (Borjas, 2010:505). Consequently, many employees lose their jobs and in effect, this leads to even larger increases in unemployment (Mueller, 2012:2).

In their recent paper, Bachmann and Sinning (2012:6) found that during these recessionary periods in the economic cycle, the odds of people changing from being employed to unemployed are very high. The length of cyclical unemployment is determined by how profound economic declines are. The longer the recession, the larger the number of people who are unemployed (Swanepoel & Van Zyl, 1999:264). However, when the economy moves up along the business cycle, economic activity start increasing and as a result unemployment starts to fall (Mohr *et al.*, 2009:500). However, the worst case scenario is that if cyclical unemployment is allowed to persist, it can result in structural unemployment (Mathy, 2003), which has limited scope for correctiveness; and even if policy responses take place, the time lags are

very wide. The cyclical instabilities can become a serious problem as times goes by (Zarnowitz, 1992).

2.2.2.4   Structural unemployment

The unemployment rate alone cannot comprehensively provide a clear picture of the unemployment situation; what is also important is the duration of the unemployment (ILO, 2014). According to Mirko (2005:52), unemployment can either stem from an excess supply of labour or as a result of frictions in the labour market. Structural unemployment is of long-term nature, and as a result, there are often arguments that it is the most unpreventable type of unemployment. Freeman (1979:118) maintains that sometimes unemployment exists, not because jobs are insufficient, but because there are rooted structural challenges in the labour market that often reduce employment prospects. Some of these structural problems can be attributed to education, including skills scarcity, illiteracy and skills mismatch.

Structural unemployment can also be argued to be an involuntary manifestation that arises as a result of structural changes in the economy. In most cases, these changes can extend to being permanent (Borjas, 2010:504). Swanepoel and Van Zyl (1999:264) describe structural unemployment as a type of unemployment that is associated with a change in the economy to being modern through technological changes, variations in consumer choices, including competition. These may include the introduction of certain technological techniques that are more efficient than labour. According to Lindbeck (2015:738), the importance of these structural features on this type of unemployment is tied to their effects on the demand and supply of labour, price and wage determination and the effectiveness of the process of job matching and searching in the labour market.

Bangane (1999:12) argues that because of biased factor prices, capital intensiveness among firms has increased, consequently raising labour unemployment. Interestingly enough, academicians like Karl Marx (1867) also blamed capitalism for creating unemployment. He argued that because capitalists always try to find ways to lessen their costs of production (while maximising profits) by making use of machines that displace labour, thus labour unemployment always increases (MIA, 2007). As far as consumer patterns are concerned, a change (especially a decline) in the demand of a product causes unemployment in that

industry (Mohr *et al.*, 2009:500), and because some employee skills are not transferable from sector to sector, and they might also no longer be needed in that sector, retrenchments are inevitable. Consequently, the unemployment spells of the laid-off workers might persist and last for a long time because they must improve their skills or attain new ones (Borjas, 2010:505).

With structural unemployment, employment prospects are continuously fewer than the total labour force (Fourie & Burger, 2010:491). This type of unemployment can be linked to the problem of a mismatch between skills attained by individuals and jobs available in the market (Levine, 2013). Having the wrong skills makes it hard to get a job (Kirk, 2011:7). In other words, it is likely to simultaneously have additional demand for labour and unemployment, as at times those looking for employment do not have the skills required by current vacant jobs (Mirko, 2005:53). The effects of job mismatches can be profound as they often lead to inefficient use of human resources and welfare cost to the economy (Farooq, 2011:19).

Many factors lengthen the period of unemployment, according to Freeman (1979:119), things like austere labour market conditions. Usually these conditions are imposed normally by governments as a way of bettering the lives of citizens (workers), or as poverty reduction strategies during periods of unemployment. Freeman and Levine (2013) further argue that labour incentives, like unemployment insurances, contribute to structural unemployment by making the unemployed less motivated to go and look for work, consequently increasing the unemployment period. If an individual knows that they are getting a monthly income without working, there are high chances that they will be reluctant in looking or searching for employment.

Differences in geographical locations, demographics and age can also result in structural unemployment. According to Swanepoel and Van Zyl (1999:264), geographical imbalances occur when people looking for employment are not situated where employment opportunities are. For instance, in South Africa, many jobs are situated in the cities and most people who are situated in the rural, underdeveloped areas are unemployed and thus find it very difficult to find jobs. It is a matter of being secluded from areas where there is work. Fourie and Burger (2010:483) argue that because unemployment is part of the larger problem, *inter alia* under-development in

the country, conditions such as poverty often prevent people from moving to these big cities.

Instabilities in the global finance arena also contribute to structural unemployment as according to Janoski *et al.* (2014:2) they cause more frequent and lengthier recessions that ultimately increase the duration of unemployment. With the increase in unemployment, consumer spending decreases, further slowing down recovery and lengthening duration of unemployment. For instance, Huang *et al.* (2011) used a survey to examine the effect of the 2007-2009 global financial crises on off-farm employment of China's rural labour force and found that the crisis substantially reduced employment by 6.8 percent. Although the effects of recessions may differ per country, another study by Junankar (2011), which analysed the impact of the global economic crisis on unemployment and long term unemployment in the OECD countries, found that the financial crisis resulted in a significant decline in employment in the region as compared to before the crisis. The results reveal that between 2007 and 2010 the number of unemployed persons increased by 16.4 million from 30.6 million to 47 million, while long-term unemployment rose to 14.9 million from 8.5 million. Interesting results are also observed in Verick's study (2010), which reports that although the 2008 global financial crisis resulted in almost 900 000 job losses in South Africa, what is alarming is the number of discouraged job-seekers that significantly increased within a short period of time. Between the second quarter of 2008 to the third quarter of 2009, the number of discouraged job seekers had increased by 550 000 from 1.08 million to 1.63 million (Verick, 2010). The impact of the crisis is consequently long-term unemployment, and this is true as Statistics South Africa (2015:2) reports that as many as 1.5 million unemployed people in the third quarter of 2014 have been searching for employment for more than five years, up from 974 000 in 2008. Collectively, these studies outline the critical role that instabilities in the global financial arena play in the problem of unemployment.

Structural unemployment is thus the most persistent type of unemployment. Mcclelland and Macdonald (1998) maintain that the most severe hardships experienced by those who are structurally unemployed include poverty, debt, financial adversities, family tensions and breakdowns, stigma, crime, deteriorating

work skills, lack of experience and ill health. The longer the period of unemployment, the more profound and pervasive its effects are to the society (Gul *et al.*, 2012:703) and the less likely the unemployed persons are to find employment (Stats SA, 2015:1). Consequently, the unemployment problem becomes very difficult to address.

2.3   MEASURING UNEMPLOYMENT

As difficult as it is to define unemployment, the same is true with measuring it, especially pertaining to the fact that aspects attaining to the measurement differ from country to country (Riddell, 2000). Below the occurrence of unemployment lie intricate and myriad difficulties, particularly pertaining to which people to include when calculating unemployment (Jones & Ridden, 1999:147; Kaufman & Hotchkiss, 2006:669). First, in order to measure unemployment, the country's population has to be divided into two fragments, that is, the economically active population and the non-economically active population (Fourie & Burger, 2010:476). According to the ILO (2005:11), the unemployment rate is calculated by stating the number of people who are unemployed as a percentage of the total labour force (see equation below).

$$Ur = \frac{Number\ of\ unemployed\ persons}{Total\ labour\ force} \times 100$$

It comprises of people who are unemployed divided by total labour force (Janoski *et al.*, 2014:4). Nonetheless, Sengenberger (2011:7) argues that unemployment statistics are often criticised for not reflecting the real magnitude of the unemployment problem. The various methods used in measuring unemployment are discussed below.

2.3.1 Census method

The census approach encompasses counting all citizens of a country to determine those that are unemployed and those who are employed (Janoski *et al.*, 2014:5). This method has some shortcomings. Kaufman and Hotchkiss (2006:670) and Mohr *et al.* (2009:498) argue that the census method insufficiently captures and undervalues the real unemployment situation as there are large time gaps from the time they start collecting data to when the statistics are published. A further reason that makes the census method debatable is the fact that it is only conducted every

five years, and before it is conducted, many changes occur in people's employment circumstances.

According to Swanepoel and Van Zyl (1999:266), the following factors also form part of the inadequacies of the census methods:

▪ Some of the questions included in the census method are not adequate to actually understand the real and multifaceted nature of unemployment; and

▪ Analysis and interpretation of some of the questions can have a serious effect on the census data. This argument is supported by Kaufman and Hotchkiss (2006:670) who also maintain that at times this measure is often insufficient and perhaps an ambiguous indicator of the economic and social costs associated with unemployment.

2.3.2 Registration method

The second method also used in measuring the unemployment rate is the registration method, where individuals normally register their employment status with their labour department by submitting returns thereof. According to Barker (2007:184), these returns indicate people who have registered at their respective labour departments as unemployed. Some of the reasons these individuals register are, they want to qualify for unemployment benefits (Mohr *et al.*, 2009:498), and they hope to be placed for employment by the department (Barker, 2007:184).

The registration method has some shortcomings too, as it is argued that unemployment data generated from the use of this measurement tool cannot be compared across countries since it is subject to national legislations, which evolve over time (OECD, 2014c). In the same vein, Barker (2007:184) also points out that data obtained from the registration unemployment data does not relate to the unemployment figures calculated according to other methods. This is true, particularly concerning the fact that at any given point in time, not all unemployed persons will go and register as being unemployed due to factors such as lack of transport to labour centres and lower chances of being placed for jobs. On the contrary, the registration method is considered a more precise measure of short-term employment developments that occur from month to month (Statistics Norway, 2007:16).

2.3.3 Survey method

Under the sample survey method, an analysis would be undertaken amid a number of households with the aim of determining their economic status (Barker, 2007:178), and from the household's responses, the size of the labour force, the number of people without jobs and the monthly unemployment rate would then be estimated (Ohio, 2013:2). According to Summers (1981:611), one of the limitations of this unemployment measurement is that it is likely to give rise to significant inaccuracies including those associated with responses, sampling and seasonal adjustments. Summers further argues that the large standard errors in unemployment rates for individual demographic groups are, in most cases, reflecting the smaller sample. An equally significant weakness of the survey method is that because survey unemployment figures are based on a sample survey, data for small areas is very poor (Beatty *et al.*, 2012:7). However, to determine the differences between the survey method and registration method of measuring unemployment, Statistics Norway (2007:16) found that this method does not just give a figure of unemployment but can also measure an individual's connection to the labour market in a wider sense. In South Africa, the survey method is used to measure unemployment on a quarterly basis (QLFS). Previously, the Labour Force Survey (LFS) was used and only conducted in March and September each year (Stats SA, 2015:1) and its use was stopped mainly because of criticisms concerning the scope, coverage, timeliness and frequency of the survey (Stats SA, 2008:1). Thus, in response to the criticism, the LFS was revised.

2.4 SUMMARY AND CONCLUSIONS

This chapter made an effort to cover the theoretical aspects concerning the field of unemployment. As previously stated, an individual is said to be unemployed when they are willing and able to work but cannot find one. These individual job seekers should have been taking active steps in finding employment, particularly a week before surveys are to be held. Over the years, a lot of controversy has surrounded this definition of unemployment, particularly the fact that discouraged job seekers are excluded in it. One of the main arguments is that this definition is said to be undermining the real unemployment situation as you may find that often the narrow unemployment rate is lower than the expanded unemployment rate (the one

encompassing discouraged workers). Some debates stem from the requirement of job-seekers actively looking for jobs as many opposing this criteria argue that meeting it is a serious challenge, singularly on people living in rural underdeveloped areas and in poverty due to lack of financial resources.

In addition, types of unemployment were addressed, and based on the literature, it can be concluded that structural unemployment remains the most pervasive form of unemployment due to it its long-term nature. The consequences of unemployment do not just affect people in such a state, but the society and economy at large. As far as the unemployed individual is concerned, unemployment results in skills losses, crime as people try to survive, poverty because of lacking basic needs, emotional pain and so forth. As far as the government is concerned, unemployment often results in substantial debts as the government tries to increase its spending under tight budgets (low tax income since people are not working). Again, measurements of unemployment were discussed, and they include the census method, registration method and survey method. The use of either method has its own shortcomings, which governments have to take into consideration.

CHAPTER 3: EMPIRICAL LITERATURE

PROFILING YOUTH UNEMPLOYMENT

3.1   INTRODUCTION

The following section will be providing the empirical literature in as far as general unemployment, youth unemployment and graduate unemployment is concerned. The unemployment situation will be discussed from a global, regional and South African perspective. In addition, a discussion on the factors affecting graduate unemployment will also follow. It is very important to note that the unemployment problem is a broader predicament as it spreads not only across age, but gender, education and in the case of South Africa, race. The crux of the chapter will be on South Africa.

3.2   UNEMPLOYMENT FROM A GLOBAL PERSPECTIVE

Unemployment is nothing new to the world, from as early as the 1930s it brought devastating effects to the world with growth levels plummeting to negative growth. Surprisingly enough, this occurrence is still being felt. In 2013, an estimated 202 million people were unemployed, an increase of about 5 million compared to 2012 (ILO, 2014:10), while the world economic growth rate was down-cast to 3.5 percent in 2015 (IMF, 2014). The ILO (2014:10) estimates the number of unemployed people to increase by more than 215 million in 2018, an indication that the global economy is not creating enough jobs to cater for the growing labour force.

According to Shierholz *et al.* (2014:3), even though one of the greatest recessions to hit the global economy ended in 2009, the labour market continues to make a slow recovery, bringing with it distressing effects for workers of all ages. The future for youth does not look bright either. In 2013, about 1.2 billion people were classified as youth and from that, an estimated 358 million were neither in education no training and the number is believed to be higher currently (WEF, 2013). It is also estimated that about 40 percent of the world's unemployed are young people (WEF, 2014; World Bank, 2013:4). The global employment prospects remain challenging and continue to be blurry (ILO, 2015a; IMF, 2015; Shierholz *et al.*, 2014; WEF, 2014:10). As unemployment continues to be more persistent, labour market attachment tends

to decline and skills depreciate (ILO, 2014:25) and because of that, individuals get to witness the failure of their investments in education and training to materialise.

Figure 3.1 shows that unemployment rates remain high in Europe, with Spain being the most affected in the region. In some economies such as those in the MENA regions, the growing unemployment rate has widened the already evident gender gap in the labour market, with women being the hardest hit and most vulnerable (WEF, 2014:11). Average duration of unemployment increased for all economies in the world, especially after the 2009 global recession. The Euro-region has the highest duration of unemployment, with Greece at 10 months, followed by Spain at eight months, and United Kingdom at seven months (ILO, 2015:25).

Figure 3.1: Average unemployment duration (months)
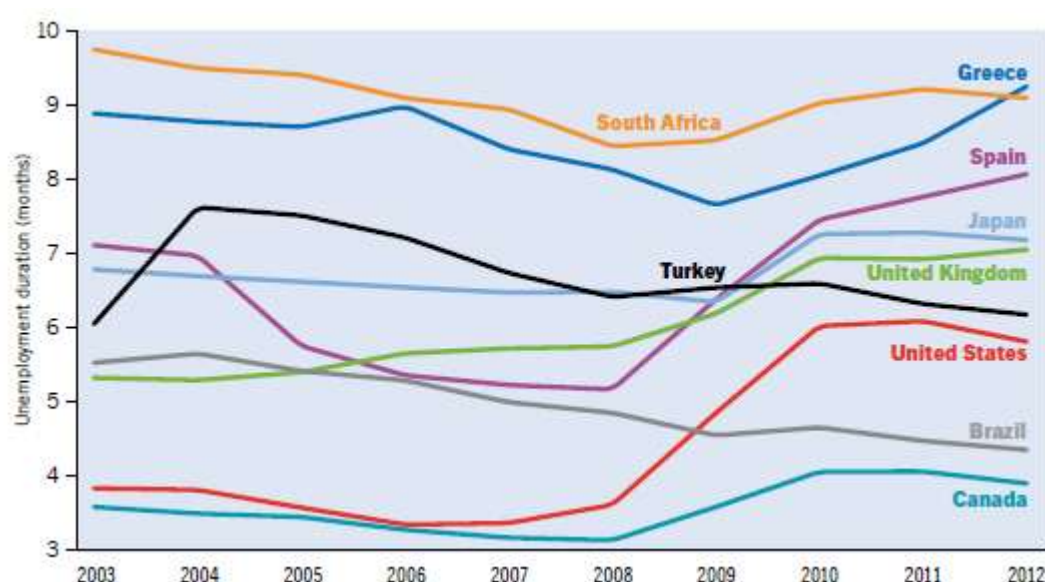
Source: ILO (2014)

South Africa remains the country with the highest duration of unemployment and youth unemployment rate compared to all its BRICS counterparts. The United Nations Development Programme (UNDP, 2014:5) reports that in 2012 South Africa's youth unemployment was almost four times higher than in Brazil, Russia, India and China at 54.5 percent. These high unemployment durations often result in discouragement since a person would have spent a long time searching for a job. In addition, in such situations, the longer the spells of unemployment, the more difficult it will be to get a job (Stats SA, 2015:1). Overall, it is estimated that in 2013 some 23

million people were no longer looking for jobs while about seven million economically active populations decided not to partake in the labour market anymore (ILO, 2014:10).

According to Crowley *et al.* (2013:2), cross-country differences in youth unemployment are complex with many factors playing a significant role in each country's youth unemployment rate. Some of the factors incorporate the system of education, work market establishments and the condition of the national economy. Youth unemployment continues to be high with an estimated 18.3 percent of young people unemployed (ILO, 2014:10) or more than 73 million young people aged 15-24 years are unemployed (Lam, 2014:2). The global youth unemployment rate is nearly three times higher than the unemployment rate for adults. According to the World Bank (2013:4), the number is higher as it estimates that at least 300 million young people have no productive work or earn living wages, while about 621 million youth are neither working nor studying. The problem is exacerbated by the problem of "youth bulge" in which annually, more than 120 million young people who enter the labour market for the first time yearly struggle to get jobs (Ortiz & Cummins, 2012:1).

Figure 3.2: Youth unemployment rates in selected countries and other country groupings (2013)
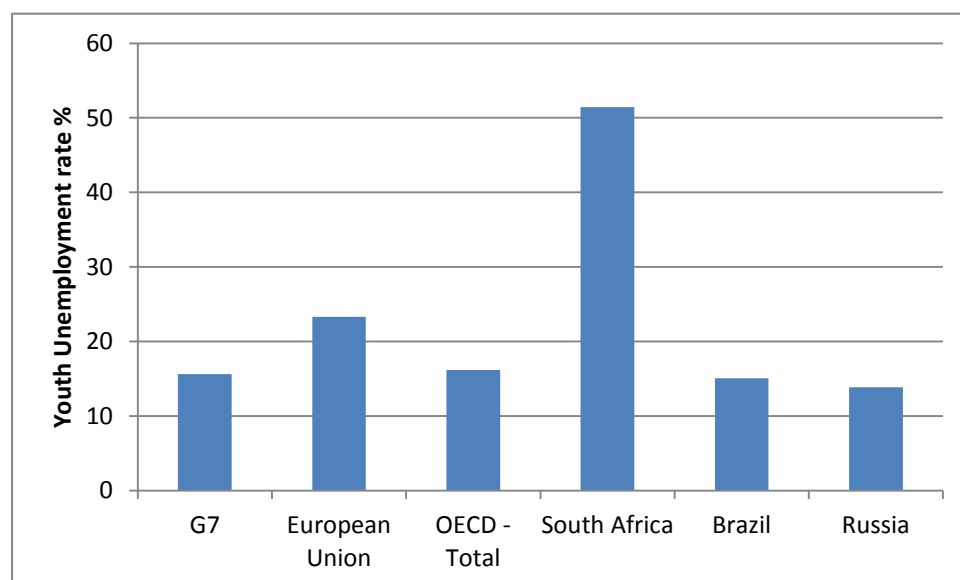
Source*:* OECD database (2014)

Figure 3.2 shows that youth unemployment rates remain high across many countries with South Africa's unemployment rate exceeding 50 percent. Although the unemployment rate in the European Union is just above 20 percent, many of its countries have very high youth unemployment rates (ILO, 2014; IMF, 2014; OECD, 2014). Youth unemployment rate in Greece is at an estimated 60 percent, followed by Spain at 55 percent and Italy at 44 percent (OECD, 2014).

Due to the youth's lower seniority and job protection as compared to adults, young adults are the first to face job losses (OECD, 2013). What is worrisome is the widening employment gap for young adults in the 24-34 age categories. The ILO (2014) reports that huge employment losses have been experienced by this age group since the onset of the global recession. For instance, in Greece, Ireland and Portugal, youth employment decreased by 1.6 million between 2007 and 2009.The same situation was experienced in Spain, where, during the same period, many young people lost their jobs. Older workers in the 55-64 age categories in fact experienced an increase in employment (ILO, 2014; OECD, 2013). In its latest report, International Development Committee reports that at least 600 million young people will compete for 200 million jobs over the next decade, presenting problems especially for the African continent (cited by Jones, 2015:3).

On the other hand, although youth unemployment rates have increased in the developing regions, the statistics are still slightly lower than in advanced economies (WEF, 2014:33). However, the ILO (2013) contends that even though many of the youth in the developing regions appear to be employed, they seem to get jobs in the informal sector. In 2012, the poorest countries in the world had large informal sectors, which employed up to 90 percent of the working age population (AEO, 2012). Supporting this statement is Page (2012:5), who argues that while the youth in these regions get informal jobs, they are being destined to vulnerable employment which according to the United Nations (2007) is characterised by "inadequate earnings, low productivity and difficult working conditions that undermine worker's fundamental rights". As Africa experienced many structural changes in the past two decades, labour has shifted to employment in the lower productivity cohort (Mcmillan & Rodrik, 2011).

As previously discussed, education has always brought benefits to individuals, particularly concerning employment prospects. Generally, those with higher education qualifications have better chances of getting a job; however, higher education does not always warrant a job, or at least a better one. In 2010, developing countries had a high number of underemployed youth at 536 million compared to 1.5 million in the European Union region (WEF, 2013).

In Tunisia, about 40 percent of university graduates were unemployed against 24 percent non-graduates (WEF, 2013). Highly educated young females are increasingly vulnerable in some countries. The WEF (2013) reports that in countries such as Iran and the United Arab Emirates, unemployment among female graduates is almost three times higher than that of male graduates; Turkey's female graduate unemployment was more than three times higher, while Saudi Arabia had a worse situation, where unemployment among university-educated men is nearly eight times higher.

Actually, in some Middle East and North African (MENA) countries, educational accomplishment increases the chances of not finding employment (ILO, 2014:64). Unemployment rate among university graduates in the Gulf Cooperation Council countries is more than 35 percent (O'Sullivan *et al.*, 2011:3), and the situation worsened as the region still had the highest rate of joblessness in the emerging markets (The Economist, 2013:12). Figure 3.3 shows that graduate unemployment rate is highest in Saudi Arabia followed by the Palestinian Territory.

Figure 3.3: Graduate unemployment in MENA region, 2011
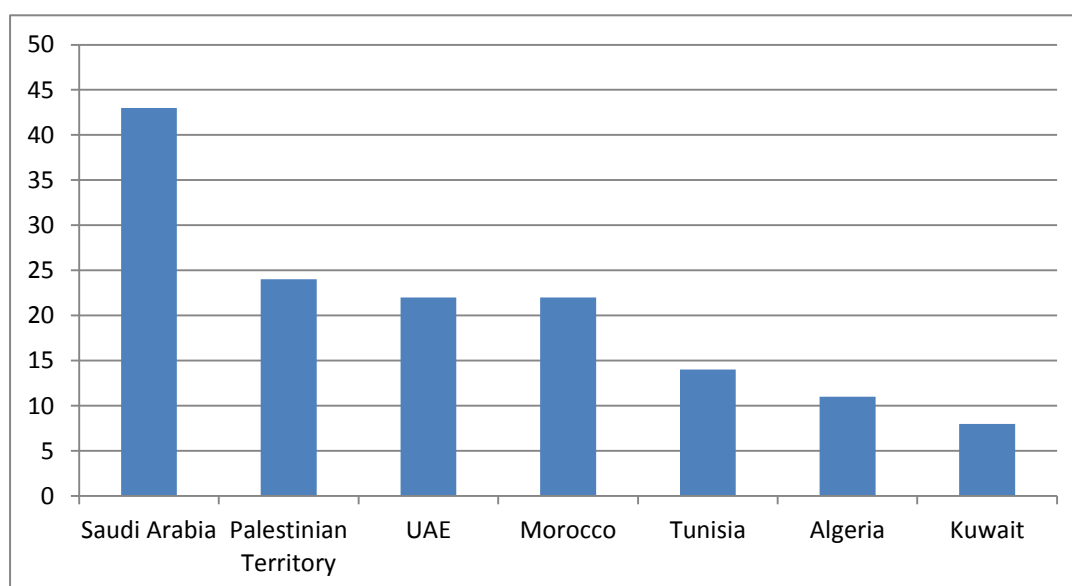
Source: World Bank (2011); O'Sullivan *et al.* (2011:3)

In many Eastern countries, unemployment rates continue to reflect large gender disparities. The WEF (2013) reports that the countrys' female graduate unemployment is more than three times higher than that of male graduates; in Iran and the United Arab Emirates, the unemployment rate is almost three times higher; and in Saudi Arabia, it is eight times higher. Graduate unemployment was reported to be at 16.4 percent in Brazil, indicating serious skills/qualification mismatches in the labour market (Rodriguez *et al.*, 2008). The same situation is true for the United Kingdom, as in 2014 nearly 40 percent of graduates were reported to have been unemployment for six months, with 25 percent unemployed for 12 months (Alexander, 2014:2). Skills mismatches are a serious problem and in most cases relate to poor basic education, as a study done in nine countries (Brazil, Germany, Britain, USA, India, Mexico, Morocco, Saudi Arabia and Turkey) found that only 43 percent of employers surveyed think they can find and hire skilled entry-level employees (JA Worldwide, 2011:13).

3.3 UNEMPLOYMENT FROM A REGIONAL PERSPECTIVE (SUB-SAHARAN AFRICA)

The African continent often is referred to as the Dark Continent where majority of its countries face substantial developmental challenges, including the problem of

chronic unemployment (African Development Bank, 2014:2; Daniel, 2013:1). Economic growth, which is one of the main requirements for employment creation, remains one of the lowest in comparison to other regions (IMF, 2014). According to Zamfir (2016:8) Sub-Saharan's gross domestic product (GDP) lies between that of Germany and Brazil and because the region has the world's highest population growth rate, GDP per capita also remains very low compared to other regions. Even with similar challenges, each country in the region has its own unique characteristics, which often explain a major part of its current economic circumstances. As African Economic Outlook (AEO, 2012) points out "Africa's employment challenges are as diverse as the continent itself". Therefore, data are not generally comparable across African countries; however, much can be learned from existing evidence (Filmer *et al.*, 2014). For instance, South Africa's situation is unique. The root of its unemployment problem stems from its apartheid regime, and quite a lot of its African counterparts did not experience the racial segregations, especially considering how young the country's democracy is.

According to AEO (2012), youth unemployment is one of the pressing challenges facing Sub-Saharan Africa. In 2003, youth unemployment in the region surpassed that of all other regions in the world except the Middle East and North Africa (Garcia & Fares, 2008:6). In 2013, youth unemployment in the region was estimated to be at 22.8 percent (Peace Child International (PCI), 2013:5; AEO, 2012). Employment levels and worker productivity are generally low, reflecting a trend, which is directly interconnected to the regions social and human development challenges (Garg, 2014:3). Furthermore, creating gainful employment opportunities continues to be a challenge for many of Africa's policy-makers (ILO, 2014a:70; Garg, 2014). According to Garcia and Fares (2008) the large youth cohort (under 25 years of age) is also posing problems in the region. As the rest of the population in the world is aging, Sub-Saharan Africa's youth population continues to increase and it is the largest in all regions (Filmer *et al.*, 2014:2). Young people in the region enter the labour force at an early age, often unprepared with no skills or education. The region's large youth cohort and the absence of job opportunities is also giving rise to a large informal sector which intensifies vulnerable employment which includes working for no pay, under-employed, self-employed and ultimately working in poverty (Garg,

2014:4; Page, 2012:5). In 2013, the region had the highest vulnerable employment rate, at 77.4 percent compared to all regions of the world (ILO, 2014).

On the other hand, the regions' large youth cohort presents opportunities in terms of employment creation. Filmer *et al.* (2014:3) maintains that Sub-Saharan Africa could become the key supplier of labour in the world, either through the production of goods and services in the region or by sending workers to regions that have an inadequate number of workers. Another argument is that the large youth population can mean that adult dependency ratios will decline, making room for more savings and investments, hence sustained economic growth (Filmer *et al.*, 2014:3).

However, the large youthful population accompanied by the inability of economies to create employment further fuels youth unemployment (Lam, 2014:2). High population growth rates without simultaneous increase in jobs contribute to high unemployment rates. Page (2012:5) argues that many African countries are not creating an adequate number of jobs to absorb 10 to 12 million new entrants in its labour market. The large youth cohort does not only present opportunities in terms of youthful labour force, but it also further perpetuates the unemployment rate. Garcia and Fares (2010:6) contend that if the youth cohort size increased by 1 percent, youth unemployment would increase by 0.5 percent. In the coming years, it is predicted that the region's population will be the second highest in the world after South Asia (Monga, 2013).

3.3.1 Unemployment by age

Youth unemployment rate in Africa has been going up and down in recent years. Although a declining trend has been forecasted, the nature of youth unemployment and the extent at which jobs are being created is becoming worrisome. The ILO (2014c) reports that three in five young workers in Sub-Saharan Africa lack the necessary education to enable them to be productive on the job. While Africa has created many jobs in the past decade, there have not been enough to accommodate the high number of young people in the job market (AEO, 2012).

Long spells of unemployment are also becoming a distressing factor perpetuating the unemployment problem. As O'Higgins (2003:23) argues, "negative consequences of unemployment are mostly associated with lengthy spells of

unemployment rather than unemployment *per se*". You may find that a large number of young people are in poverty, because they have been unemployed for a very long time before completely giving up job searching or settling for less than ideal jobs. In 2014, the prevalence of long-term unemployment amongst the youth in Sub-Saharan Africa was 48.1 percent, one of the highest in the world (ILO, 2014c). According to a labour market study done on 13 countries in Africa, results show that in some of these countries (Malawi, Ethiopia, Kenya, Gambia, São Tomé and Principe and Cameroon) young people wait an average of five years before finding employment (Garcia & Fares, 2008). The waiting period for young people in Mozambique is even higher at an average of seven years.

There are also large widening differences in the unemployment rate of both adults and youth. In many African countries, youth unemployment rates are more than two times higher than the adult unemployment rates, causing an obstacle to the region's development (AEO, 2012; ILO, 2015b). Youth unemployment rate in Sub-Saharan Africa was estimated to be 3.5 percent higher than the adult employment rate (African Economic Research Consortium (AERC), 2013:6). According to Devlin (2013:3), some of the highest youth unemployment rates in the region are found in the Southern Africa region, where an estimated 51 percent young women and 43 percent young men are without jobs. In 2014, South Africa and Namibia had the highest rates of youth unemployment in the region at 49 percent and 41.7 percent respectively (Stats SA, 2015d; Wanjiku, 2015:5). Very high unemployment rates among youth can make countries more susceptible to political uncertainties or volatilities (Azeng & Yogo, 2013). If young people are left with no choice but poverty and unemployment, they are more likely to find alternative ways of survival and as a result, resort to things like criminal activities (Urdal, 2012:2). In many African states, the number of discouraged youth is larger than the unemployed ones, suggesting serious employment challenges (AEO, 2012:108).

Adult labour force participation rates are more than double participation rates for the youth, which in 2014 were at a low 54.3 percent. The quality of employment being created is also a cause for serious concern as Sub-Saharan Africa's vulnerable employment remains one of the highest in the world (ILO, 2015b:54). In addition, the limited number of jobs that are being created often cause young people to settle for jobs that are not ideal or safe (Devlin, 2013:4). Many of Africa's youth find

themselves underemployed with meagre wages and poor working conditions (UNESCO, 2012:1). The ILO (2015:54) reports that eight in ten people are in vulnerable unemployment in Sub-Saharan Africa. The effects of this high unemployment are not only social instability but also poverty as people struggle to make a living for themselves (Page, 2012:5). For instance, the AEO (2012:113) reports that on average, an estimated 73 percent of Africa's youth population lives on less than two dollars per day. Again, in middle-income countries a high number of unemployed young people are more food insecure, perpetuating the state of poverty (Daniel, 2013:1).

3.3.2 Unemployment by gender

Women continue to be the most vulnerable people in the region compared to men. The female unemployment rate is at an estimated 8.4 percent, with the unemployment rate for males at 6.8 percent. Gender disparities are visible so much so that labour force participation rates for males are 15.6 percent higher than for females (ILO, 2014; IMF, 2013). Annual employment growth for males is also higher than it is for females (see Table 3.1) and the ILO projects this downward trend to continue until 2018. A study by African Development Bank (ADB) analysing labour market situation in Africa found that in eight out of the twelve Sub-Saharan African countries surveyed, young females had a high possibility of being unemployed than young males (ADB, 2012).

Many of the regions' female workers find themselves not receiving any form of monetary payment. In 2014, the regions' average vulnerable employment rate was 31 percent higher than the global average (ILO, 2015a:54). Vulnerable female employment is also significantly higher at 84.3 percent in comparison to 70.1 percent for males. A large number of females often are forced to settle for low-paying, voluntary and unsafe jobs, where they are underemployed just to survive and avoid poverty (Devlin, 2013:4; Fields, 2011:4; National Statistic office of Malawi, 2015:6). According to Fields (2011:4), the problem in many developing countries is that there are not a lot of wage-paying jobs (i.e. good jobs) for all job seekers, including women.

The unemployment rate for young females in the region is even higher. In their study, Garcia and Fares (2008:63) found that large numbers of young females, aged

15 to 24, are more likely to not be working or attending school. The rates were very high in all countries that were under observation. Ethiopia had a female unemployment rate of almost 70 percent, followed by Mozambique at approximately 58 percent. Young women are disadvantaged further by factors such as social norms, which often segregate jobs by gender (Filmer *et al.*, 2014:7).

Table 3.1: Labour market situation in Sub-Saharan Africa (2009-2018)

		2009	2011	2013	2015	2018
Labour force participation rates	**Adult male**	87.4	87.4	87.5	87.7	87.9
	Adult female	71.4	71.6	71.8	72.1	72.4
	Youth	54.2	54.1	54.3	54.4	54.3
	Total	70.4	70.5	70.8	71.0	71.2
Unemployment Rate	**Male**	7.1	7.0	6.9	6.8	6.7
	Female	8.4	8.4	8.4	8.3	8.3
	Youth	12.1	11.9	11.7	11.7	11.7
	Adult	6.0	6.0	6.0	6.0	6.0
	Total	7.7	7.6	7.6	7.5	7.5
Employment Annual Growth Rate	**Male**	2.7	3.1	3.1	3.2	3.1
	Female	2.9	2.9	3.0	3.1	3.0
	Youth	2.1	2.7	2.7	2.8	2.7
	Adult	3.0	3.1	4.8	5.7	5.7
	Total	2.8	2.9	3.0	3.1	3.1

Source: ILO (2014); IMF (2013)

3.3.3 Unemployment by education

A large proportion of unemployment in the region is explained by the lack of education (AEO, 2012:115). In essence, education often shapes opportunities (Filmer *et al.*, 2014:10); those with no education have a high chance of not only being unemployed but also being in vulnerable employment. A rising number of unemployed youth in many African countries are university and college graduates (AERC, 2013:3). According to Daniel (2013:3), a high proportion of the continent's unemployment rate is linked to its weak educational structure, which does not correspond with current economic conditions. Even though the current African generation is the most educated or most schooled ever, their employment prospects differ widely from their parents; the situation is worse in other countries (Filmer *et al.*, 2014:1).

Research shows that the continents' unemployment rates among the educated tend to be much higher in resource-rich and middle-income countries than in lower income countries (AEO, 2012; Filmer *et al.*, 2014). North-African countries have the highest graduate unemployment rates. In their review of the labour market dynamics in Tunisia, Stampini and Verdier-Chouchane (2011:9), found that university education is often associated with a high rate of unemployment. In Tunisia, the unemployment rate among university graduates in 2008 was 33 percent among men and 46 percent among women (Stampini & Verdier-Chouchane, 2011), while Haouas *et al.* (2012) found the overall graduate unemployment to be over 50 percent in 2010. In Nigeria, the unemployment rate among those with first degrees was at 23.1 percent in 2014, while some reports estimates the time it takes a graduate in Kenya to get a job to be five years (Makoni, 2014:10). Although graduates represent approximately 3 to 4 percent of the Sub-Saharan region, the issue of the struggle to find employment remains a persisting challenge in the region (Filmer *et al.*, 2014:5). "In many instances the reality is worse than is indicated since many of those in employment are not engaged in graduate level work, or are not in work that corresponds to their degree area" (The British Council, 2014:5).

In its most recent labour statistics report, the Central Statistics of Botswana (2015:24) reported the 2011 overall unemployment in Botswana to be at 19.9 percent where approximately 6.5 percent of those were university degree and

diploma holders. The unemployment numbers were even higher for those with secondary and primary education at about 77.9 percent. In Malawi, the tertiary education level has lower unemployment rates across all educational levels (National Statistics office of Malawi, 2014:10). Due to the unavailability of the most recent data in Lesotho, the 2008 labour force survey reported graduate unemployment to be at a low 0.4 percent; unemployment rates seemed to decrease with higher educational levels (Lesotho Bureau of Statistics, 2011:107). The same is true in Tanzania, as in 2014, unemployment among those with tertiary education was the lowest in all educational categories (Tanzania Bureau of Statistics, 2015:39).

In other countries the economy seems to be unable to absorb the growing number of graduates, a challenge confronting many of the region's economies. Mwesigwa (2014:11) reports that about 40 000 graduates in Uganda are struggling to find work as the market can only provide 8 000 jobs annually. In Egypt, graduate unemployment was 34.0 percent in 2012 and according to the United Nations (2009:3), these high unemployment rates point at serious incompatibility between educational systems and labour market, as well as small public and private sectors unable to absorb the unemployed youth. A mismatch between the skills and qualifications needed by employers and those attained by graduates further contributes to a lack of labour demand for the youth (Garg, 2014:4). In their 2014 Going Global report, the British Council (2014:3) reports that many employers across the Sub-Saharan Africa region complain that a large number of graduates lack basic, technical and transferable skills. The report further identifies quality as a challenge as many of the countries are failing to ensure that higher education institutions provide quality education that is relevant to the labour market needs.

As the working-age population is expected to increase in Sub-Saharan Africa and Asia in the coming 15 years, an additional 600 million new jobs will be required to absorb the increased population (World Bank, 2013). A number of challenges remain. Firstly, the job creation outlook is poor considering the decreasing public sector share in employment creation over the years (AEO, 2013). Furthermore, factors such as low levels of education, access to adequate infrastructure, poor regulatory environment among others continues to discourage private sector development in the Sub-Saharan region (United Nations Industrial Development

Organization (UNIDO), 2008), and if left unresolved, these issues poses great risks to social stability.

3.4 UNEMPLOYMENT FROM A SOUTH AFRICAN PERSPECTIVE

South Africa has been confronted by continually rising unemployment rates since the end of apartheid (Dias & Posel, 2007:1). The country has been struck by persistently high unemployment rates (Stats SA, 2015:1), so much so that a number of initiatives to boost employment have failed to do so. For instance, the media argues that the government's initiative of Black Economic Empowerment (BEE) has failed to promote jobs as about 27 percent of jobs in the mining sector have been lost since its inception (Kane-Berman *et al.*, 2015). Other policies which are already lagging behind their set objectives include the Growth Employment and Redistribution (GEAR), Accelerated and Shared Growth Initiative for South Africa (ASGISA), the New Growth Path (NGP) and the National Development Plan (NDP) (ITRISA, 2015; Mahadea & Simson, 2010:391).

Employment creation and reducing unemployment are one of the key social difficulties in South Africa (Leibbrandt *et al.*, 2010:4). Unlike other developing countries, and irrespective of how it is defined, unemployment in South Africa remains high and continues to be one of the most serious economic challenges threatening the country (Banerjee *et al.*, 2008:716; Mohr *et al.*, 2009:498; Oluwajodu *et al.*, 2015:2; Pauw *et al.*, 2008). In January 2015, the ILO ranked South Africa as the country with one of the highest unemployment rates, ranked 8th position in the world (ILO, 2015a), and the country has also been in the top ten countries with the highest unemployment rates since 1997 (Business Tech, 2015:13).

3.4.1 The nature of unemployment in South Africa

Structural economic development challenges have had a big influence in South Africa's economy from as early as prior to apartheid. The causes of unemployment in South Africa are at the root of the country's socio-political and economic structures, making it pervasive (Hofmeyr, 2014:2). Unemployment has been driven mainly by a decline in both the demand for the less educated (i.e. less skilled) and a rise in the supply of people with low levels of education (Verick, 2011:1). Kingdon and Knight (2001:15) found some salient features of South African unemployment, particularly in rural areas as being explained by the countries historical policies, which limited

people's mobility. They further discovered that much of South Africa's unemployment seemed to be from the labour market's demand side. According to the Industrial Development Corporation (IDC, 2013:21) factors such as skills mismatch, the switch to capital methods of production, rigidities in the labour market, the weak relationship between wage increases and productivity growth are some of the main causes of the inability of the economy to absorb a growing labour force.

In the third quarterly labour force survey of 2014, Stats SA reports that the prevalence of long term unemployment is so severe in South Africa that when a person has been unemployed for a long time, they are unlikely to find employment (Stats SA, 2014c). In the last quarter of 2014, more than 1.5 million people were found to have been unemployed for more than five years in comparison to 974 000 people in 2008 (Stats SA, 2015a). Put differently, the longer the period they stay outside the labour market, the lower the odds of getting a paid and stable employment. Unemployed persons are confronted by a high possibility of remaining unemployed, whatever their search activity (Kingdon & Knight, 2001:13).

Since South Africa is classified as a developing country, a couple of controversial arguments surround the nature of its unemployment. The prevailing opinion is that in many developing countries a larger share of unemployment is voluntary (Harris & Sabot, 1982). In their paper on the nature of unemployment in South Africa, Kingdon and Knight (2001:3) found that some of the unemployed workers in South Africa often decide to be unemployed and to search or to wait than joining the informal employment sector. Wage earning differences play a big role in deciding to stay unemployed or joining the informal work force. Kingdon and Knight (2001) fond that wages are lower in informal employment than in formal employment, suggesting that as opposed to self-employment, wage-employment was the preferred state in South Africa, hence the high unemployment with a small informal sector. High poverty rates accompanied with economic marginalisation of rural areas also explains a large part of South Africa's high unemployment rate (Posel *et al.*, 2014:69).

Notwithstanding improvements made in growing employment and growth, the increases have not been able to keep up with the continually growing labour force (Moleke, 2010:88; NPC, 2011). In Figure 3.4, a similar pattern is observed where between 2003 and 2013 employment growth had been lagging behind economic

growth. In 2014, more jobs were lost than created as the private sector failed to recover from the 2013 labour market instabilities (Stats SA, 2015a). AEO (2015:13) reports that only 36 percent of lost jobs during the global recession were recovered by the private sector. In 2014, the economy grew by an estimated 1.3 percent while between the second and third quarter employment declined even further (Stats SA, 2015d:5). In the first quarter of 2015 unemployment increased to 26.4 percent while economy is expected to grow at levels below 2.2 percent throughout the year (South Africa, 2015), a growth rate seen as too low to create enough jobs.

Figure 3.4: Real GDP and employment 2003-2013
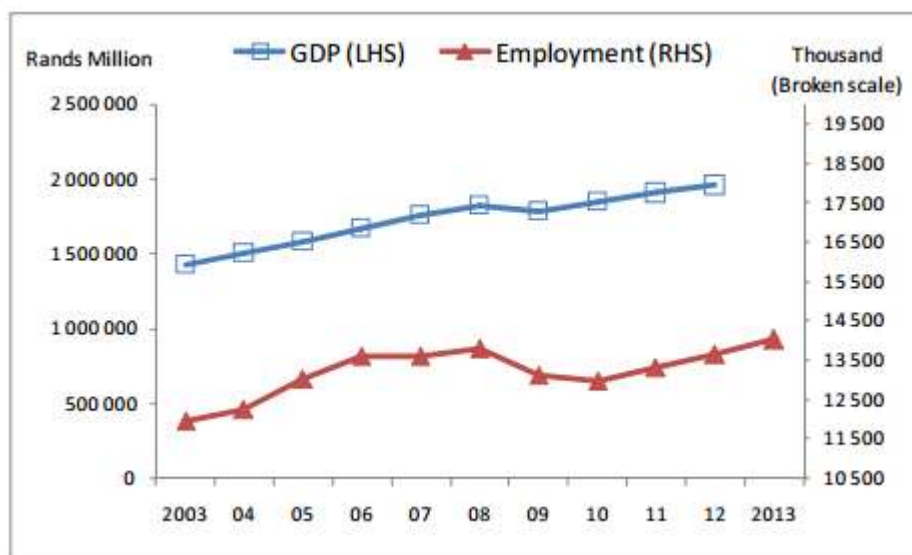
Source: Stats SA, 2013

The country's lacklustre economic growth performance and its inability to create employment is further worsening employment outlook. There is evidentiary support that growth and unemployment are complementary (Aghion & Howitt, 1994; Al-Habees & Rumman, 2012; Herman, 2011; Hussain *et al.*, 2010; ILO, 2015a:19). It is widely recognised that the pace of economic growth plays a crucial role in providing job opportunities in the labour market (Stats SA, 2013:2). Arora and Ricci (2006:31) state in previous research reports, that in order for significant improvements to be made in a country's unemployment state, there needs to be an estimated 6 to 7 percent increase in investment and growth.

The opposite is reality in South Africa. For instance, there is growing distress among academics and policy makers that South Africa has established years of slow economic progress, with growth rates below 3 percent being the new trend, hindering employment increase (Jones, 2015). Constrained global trading conditions, the Eurozone debt crisis that has supressed demand and investments are among the other factors, which have led to the country's slow growth performance (ITRISA, 2015:313). The New Growth Path (NGP, 2011:3) reports that the economy has been unsuccessful in generating enough job opportunities, which is the crux of solving many of the country's development challenges.

Despite the country's weak economic performance in comparison to its counterparts, a much higher growth rate is required primarily to tackle unemployment by drawing unemployed South Africans into economic activity and produce the income expected to back government's long haul advancement arrangements (NDP, 2013:11). South Africa cannot afford to grow at 2 percent if it wants to deliver sustainable job growth (Schussler cited by Plaut, 2013:11). Projections for 2015 estimate the economy to grow at just 2.2 percent (Stats SA, 2015d). In many instances, sustained growth with employment generating policies eventually decreases the problem of unemployment (Hussain *et al.*, 2010:332). As the NDP points out, the economy is required to grow by more than 5 percent per annum to at least lift its economic development challenges and deliver a sustainable job growth (NPC, 2011; Plaut, 2013:11).

3.4.2 South Africa's unemployment trends (1994-2014)

As previously mentioned, unemployment seems to be a very perplexing state confronting South Africa. South Africa's past imbalances played an important role in the country's development path as well as its unemployment problems. Presently, the official unemployment rate is at an estimated 25.5 percent, with the expanded unemployment rate believed to be more than 10 percent higher or at approximately 35 percent (Stats SA, 2015d). Even though a number of improvements, including growth in employment, have been experienced since democracy, a growing labour force still outpaced that growth (Arora & Ricci, 2006; Mahadea & Simson, 2010). Put it differently, the growth in the number of the economically active population has not been able to correlate with the number of jobs created on an annual basis (Department of Labour, 2014:22).

The economy's ability to absorb a large number of work seekers has been questionable, especially prior and post 1994. In Figure 3.5, between 1980 and 1994, the expanded unemployment rate increased enormously. By 1994, the unemployment rate had increased by an estimated 28 percent. A similar trend is also observed in the official (i.e. strict) unemployment rate, which also increased considerably since 1980 to 1994, from 11 percent to about 27 percent. Many factors played a significant role in both the increases, including the political tensions that divided the economy. South Africa's unemployment rates between 1980 and 1993 originated from unrests brought by massive political and economic instabilities (Murwirapachena, 2011:26).

A further factor contributing to the trend was a change in methods of production especially for the labour intensive industries, which changed to methods of production that were now capital intensive. One of the reasons given for the change was to cut costs. Many firms wanted to lessen their heavy dependence on the unstable and unpredictable South African labour market (Stryker *et al.*, 2001:26). The reality is that during the period under observation, the effects of the changes in the country's external political and economic environment resulted in labour conflict, a racially separated workforce and a stagnant economy.

Figure 3.5: Unemployment rates in South Africa (1980-1994)
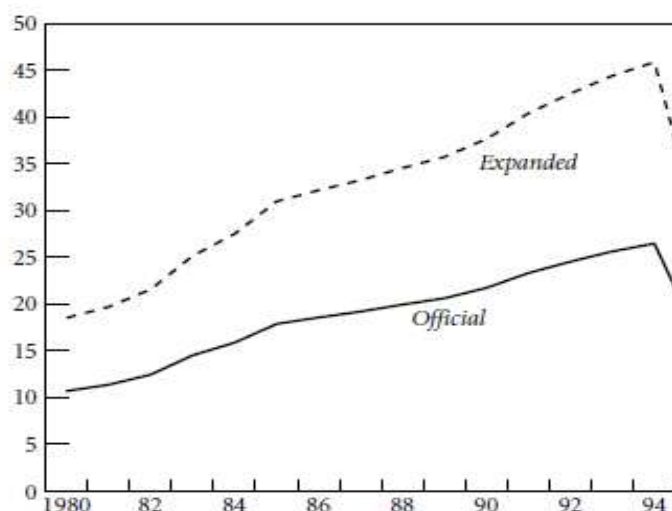
Source: Arora & Ricci (2006)

Over time, unemployment started declining as the new government started responding with many initiatives to address and speed up job creation (Mahadea & Simson, 2010:391). This saw the introduction and implementation of policies like the RDP, ASGISA, and GEAR, among others, which played a significant role in containing the unemployment rate even though some of them did not meet their set targets (Murwirapachena, 2010:25). The Industrial Development Corporation (IDC, 2014:21) reports that average annual employment growth increased from a rate of 0.5 percent over the period 1994 to 2000 to 1 percent during the years 2001 to 2007.

The beginning of the 2008 global recession had a severe impact on employment creation as more jobs were being lost than created. The slow economic growth caused by the power crisis, high interest rates, high food prices and suppressed demand in the wake of the Eurozone debt crisis did not help improve the situation (ITRISA, 2015:313). According to Stats SA (2014a), during the period of 1994 to 2014, the strict unemployment became 34.2 percent higher with employment growth at very weak levels (see Table 3.2 below).

Table 3.2: Labour force in South Africa (1994-2014)

Years	1994	2014	Change	Change (%)
Strict (000)				
Employed	8 896	15 055	6 159	69.2
Unemployed	2 489	5 067	2 578	103.4
Unemployment Rate	**22%**	**25%**	**+3.3% points**	-
Expanded (000)				
Unemployed	4 707	8 157	3 450	73.3
Unemployment Rate	**35%**	**35%**	**Unchanged**	-

Source: Stats SA (2014a)

Nothing positive can be said about the expanded unemployment rate during the past twenty years, as it remained very high and unchanged. Labour market instabilities

and slow economic growth due to suppressed global demand were among the factors that contributed to the rise in unemployment during this period (Leibbrandt *et al.*, 2010:9). With the GEAR policy promising to create 400 000 new jobs by 2000, ASGISA halving unemployment rate by 2014, the economy was only able to create 50 000 jobs annually between 1994 and 2012; a creation of only 950 000 new jobs (IDC, 2013).

The number of unemployed people doubled from 2.4 million in 1994 to 4.8 million in 2013 (The Presidency, 2014:91). In 2014, there were an estimated 5.1 million people without jobs in the country (Stats SA, 2015a). The South African labour market seemed to improve a bit in achieving job creation (because of factors like the 2010 FIFA World Cup related injections) (ITRISA, 2015:313). However, the unemployment situation still remained and continued to be very tense in the country mainly due to strikes and crime which together deter investments, shortage of necessary skills, high wages accompanied by low productivity, rigid labour laws, corruption among others (Department of Labour, 2012:6; ITRISA, 2015). From the onset of 2000, the broad unemployment rate continued to be above 20 percent, reaching approximately 30 percent in 2003.

Job losses are not spared from this problem as a large number of job losses that were recorded since 2008 have not been recovered, even in 2015. About 1.69 million jobs were lost in agriculture, forestry, fishing, manufacturing and construction sectors over the period of 1994-2012 (IDC, 2013; Stats SA, 2013). In 2010 alone, an estimated one million jobs were lost (NGP, 2011). In February 2014, the economy shed an estimated 118 397 jobs, which were the biggest job losses since 2011 (Adcorp, 2014:1). About 105 593 permanent jobs were lost and temporary work losing 26 832 jobs. Factors underpinning these job losses included a lack of education, growing population, slow employment creation, increased number of economically inactive people, high employment search costs and lack of access to information by the poor and disadvantaged (Department of Labour, 2012:5). The depressed economic conditions after 2008, *inter alia* the effects of the global financial crisis that are still present even in 2015, is also a factor. The official unemployment rate increased from 25 percent in the second quarter to 25.5 in the third quarter of 2015 (Stats SA, 2015d).

The duration of unemployment is also a very crucial aspect because an increase in the proportion of long-term unemployment is likely to reflect structural problems in the labour market (IL0, 2014). High unemployment is not an alert-raising concern when it is just a temporary movement between jobs or new entry in the labour market; it is a serious problem if it persists for lengthy periods (Garcia & Fares, 2008:61). The prevalence of long-term unemployment in South Africa is more profound in comparison to other countries as depicted in Figure 3.6. In 2014, about 1.5 million of the 5.1 million unemployed people are said to have been searching for employment for more than five years, an increase from 974 000 in 2008 (Stats SA, 2015a:1).

Figure 3.6: Long term unemployment in selected BRICS countries (South Africa and Russia) 2013
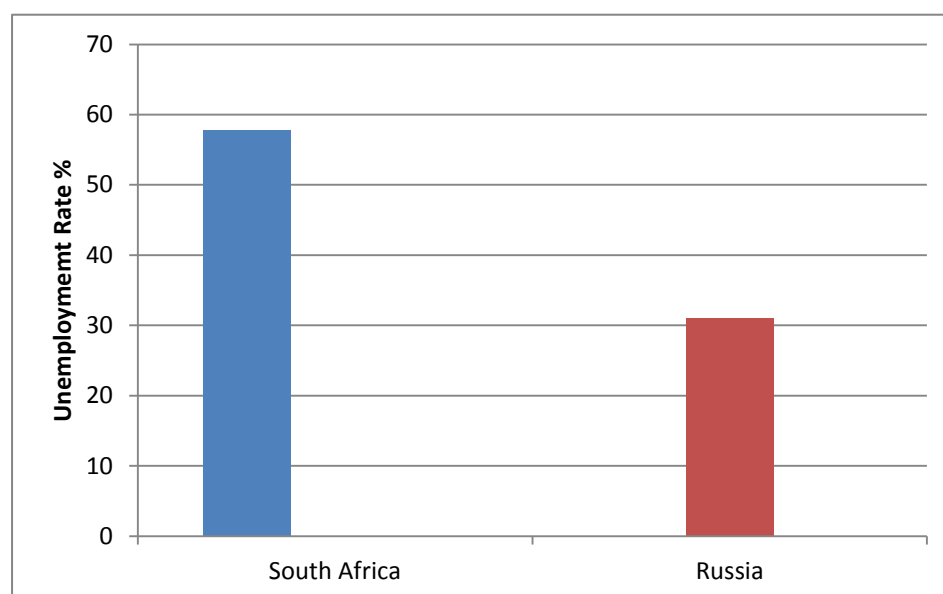
Source: OECD (2013)

Figure 3.6 shows the long term unemployment rate for selected BRICS countries for 2013. Due to unavailability of data, India, Brazil and China are excluded. However, according to the OECD, in 2012, Brazil had a long term unemployment rate of 14.6 percent while in 2013 the long-term unemployment rate for India was 38.2 percent. In comparison to some of its counterparts, South Africa has the highest incidence of long term unemployment. In 2012 there were about 4.5 million unemployed persons, where 71 percent were youth between the ages of 15 to 35 and 67 percent were

jobless for more than one year (Department of Labour, 2012:7). Between 2008 and 2014, the number of discouraged work seekers increased from 13.5 percent to 14.5 percent (Stats SA, 2015b:4). In 2015, 15 percent of the unemployed individuals were discouraged job-seekers, a number which increased by 0.5 percent from 2014 (Stats SA, 2015d).

3.4.2.1 Unemployment by gender

Generally, in South Africa, women experience higher unemployment than men. Unemployment figures in the country have always been associated with inequality and poverty between the country's citizens (McCord & Bhorat, 2003:125; Perry & Francis, 2010). According to Kingdon and Knight (2000:1) the inequality is evidenced by greater differences that lie in race, gender, region, age and education.

Between 2008 and 2014, the number of employed youth in South Africa declined by 467 000 to 6.0 million, while the number of unemployed increased by 319 000 to 3.4 million (Stats SA, 2014b). Female unemployment rates are always higher than those of males by a larger margin, irrespective of age (Stats SA, 2014c:1). For instance, in the last quarter of 2014, the long-term unemployment rate for woman was 52.5 percent while that of men was at 47.5 percent (Stats SA, 2015a:6). The report further reveals that young women seem to be the most hit in terms of unemployment, with the unemployment rate much higher than that of men (Stats SA, 2014a:1). These greater gender disparities are depicted in Figure 3.7.

Figure 3.7: Male and female youth unemployment rate 2008 and 2014
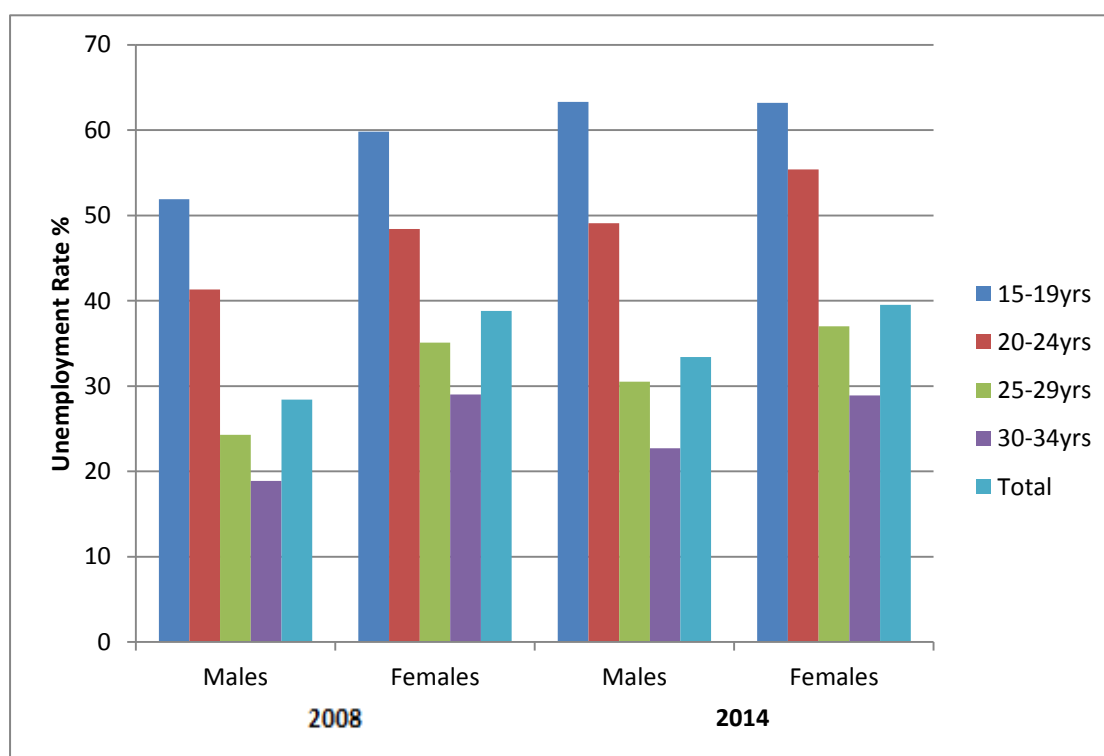
Source: Stats SA (2014)

In terms of the education levels, although young women seem to be more educated than young men, unemployment rate for educated men is lower than the unemployment rate for women regardless of education level (Stats SA, 2015a). Amongst employed young women, 22.4 percent had a tertiary qualification and 42.3 percent had matric, compared to 15.8 percent and 35.7 percent respectively among employed men aged 15–34 years (Stats SA, 2015b).

3.4.2.2   Unemployment by race

Generally in South Africa, Blacks have always had a higher probability of being unemployed than Whites (CHEC, 2013; Kingdon & Knight, 2000; Moleke, 2009; Stats SA, 2014a). Figure 3.8 shows that in 2014, the youth unemployment rate amongst Blacks and Coloureds was 29.8 and 23.7 percentage points higher than that of the White and Indian/Asian youth respectively (Stats SA, 2014a:8).

Figure 3.8: Youth unemployment rates by race (1994-2014), 15-34 years age category
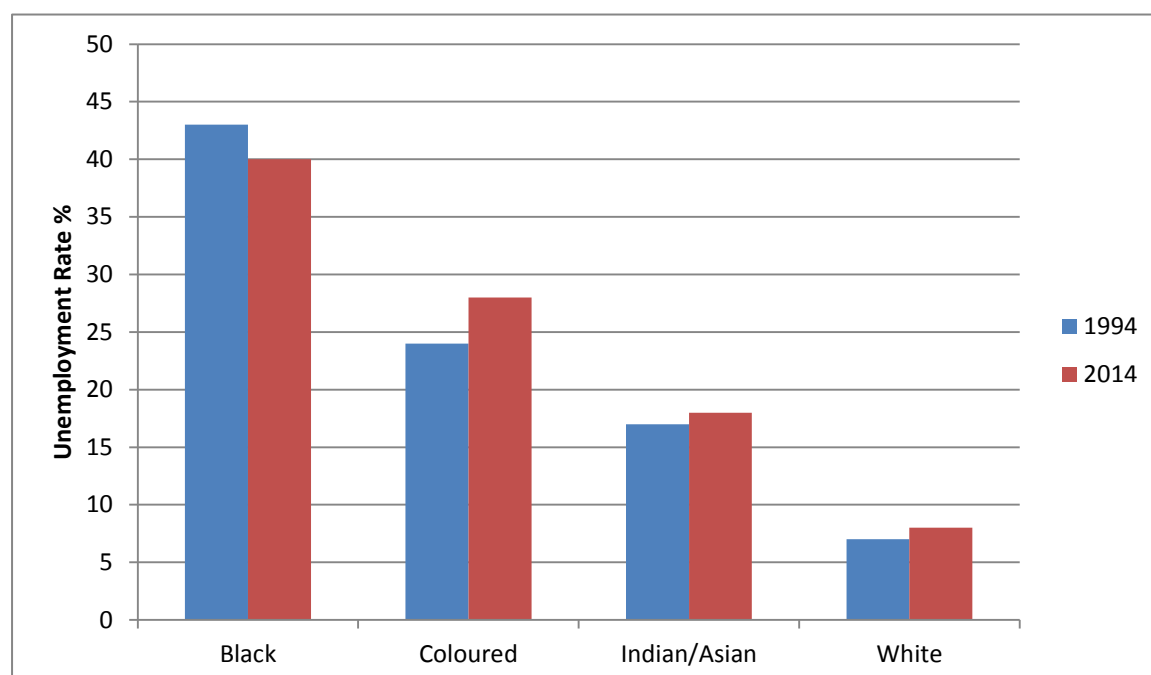
Source: Stats SA, 2014a

Although the Black unemployment rate has decreased by 3 percent since 1994, it is still more than five times higher than that of Whites, which in 2014 was just at 8 percent, followed by Indians at 18 percent and Coloureds at 28 percent. This supports the argument that some part of South Africa's unemployment is still significantly explained by race (CHEC, 2013:13; Seekings, 2003; Stats SA, 2014a:8). Banerjee *et al.* (2008:717) also argue that locations where these Blacks reside also play a significant role in their high unemployment. They emphasise that job search is often less effective for Blacks than it is for Whites.

The lack of financial resources in order to fully search for employment further contributes to the unemployment problem. Although the majority of graduates in the labour force are White, Altbeker and Storme (2013) argue that Black graduates will soon surpass them because of gradually improving employment prospects. The direction firms are taking in employment practices is now steering towards equality (Oluwajodu *et al.*, 2015).

3.4.2.3 Unemployment by age

Age plays a significant role in employment prospects. Young people, not only in South Africa, but across the world, face complex employment challenges (ILO, 2015b). Leibbrandt *et al.* (2010:5) argue that young South Africans entering the job market for the first time face difficulties in finding employment and gaining access into the labour market. In just two years, unemployment among young people (15-34 years) had increased by more than 4 percent from 32.7 in 2008 to 36.1 in 2011, compared to a 1 percent unemployment increase in adult unemployment in the same period. In 2014, youth unemployment for those aged 15-24 was more than 50 percent compared to the lower unemployment rate for those between the ages of 35 and 64 (WEF, 2014; Stats SA, 2015a). In the beginning of 2015, unemployment among those aged 15-34 years was at a high 36.9 percent, which was higher than that of the adults, namely 35-64 year olds at 17 percent (Stats SA, 2015b). In comparison to some of its BRICS counterparts, South Africa continues to underperform. See Figure 3.9.

Figure 3.9: Unemployment rate in selected BRICS countries, 2014
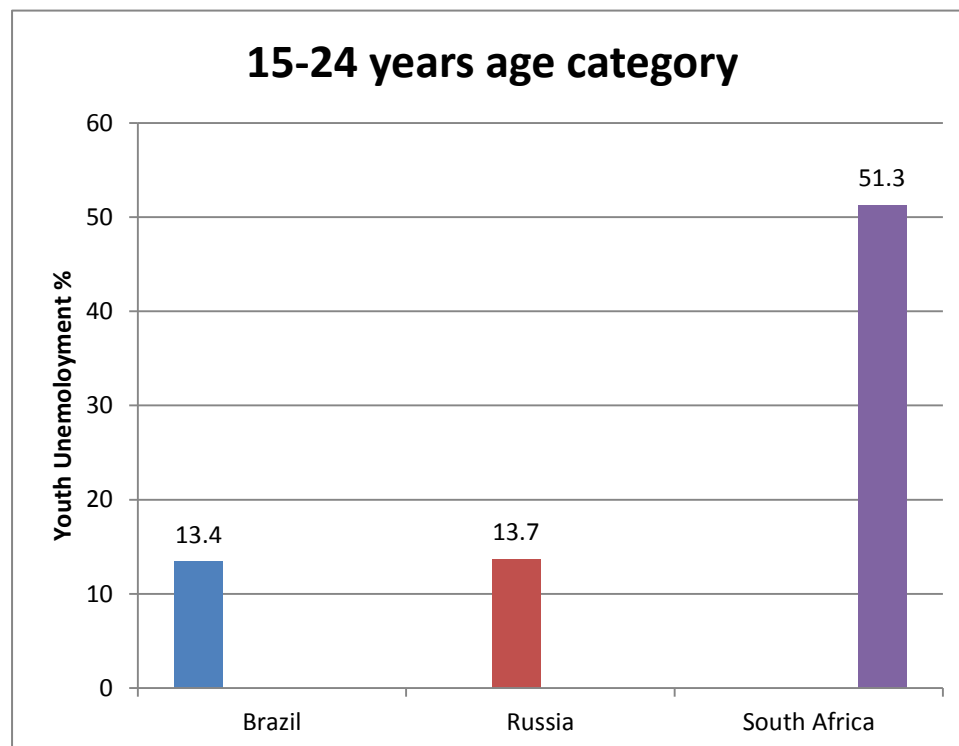
Source: ILO (2015); OECD (2014)

Figure 3.9 shows unemployment rates for selected BRICS countries in the 15-24 years age category, with the exclusion of China and India due to unavailability of data. South Africa has the highest incidence of unemployment among young people as compared to the rest of the world. Youth unemployment rate is twice as much as it is in the other BRICS countries at 51.3 percent. In the 25-34 years age category, the unemployment rate sits at 30.1 percent (Stats SA, 2015a).

The number of employed youth also declined by 467 000 to six million, while unemployed youth increased by 319 000 to 3.4 million (Stats SA, 2015a). According to Mayer *et al.* (2011:10) South Africa's youth labour market structure is also characterised by significant job discouragement, which often results in the incidence of long-term unemployment. According to Stats SA (2015a:8), long-term unemployment is highest among those aged between 25 and 34 years at 41.8 percent followed by those in the 15 to 24 years category at 24 percent. The incidence of long-term unemployment for the overall youth (15-34 years) in 2014 was at 65.8 percent (Stats SA, 2015a). Adult (35-64 years) long-term unemployment has since 2008 been slightly higher in comparison to that of the youth. In 2014, long-term unemployment for this age category was 66.3 percent.

Perhaps more importantly, the lack of education worsens the unemployment situation as the young are even more vulnerable to unemployment when they do not have any formal education as that increases their chance of remaining unemployed for a very long time (Kingdon & Knight, 2000b:15; Leibbrandt *et al.*, 2010:5). For instance, the percentage of young people aged 18-29 who are unemployed and not in education and training rose from 37 percent in 1994 to 44 percent in 2013 (The Presidency, 2014:92).

3.4.2.4   Unemployment by geographical location

Similarly, in South Africa, unemployment is also influenced by geographical location. There are often unequal employment opportunities among South Africa's provinces (Sekatane, 2004:20). Unemployment rates in the rural areas are higher than unemployment rates in urban areas mainly because of scarce employment opportunities. This is evidenced by the fact that in all South Africa's nine provinces, rural provinces like Mpumalanga have the highest percentage (74.4 percent) of unemployed youth aged 15 to 34 years followed by KwaZulu Natal and the Eastern

Cape at 74 percent and 73 percent respectively. The province with the lowest youth unemployment rate is Gauteng at 59.5 percent, as shown in Figure 3.10. As a result, the low youth unemployment rate can be attributed to the urban nature of the province as a lot of employers are situated in it, and the province is also the economic hub of the country, ultimately making it easier for job-seekers to access the labour market.

Figure 3.10: Provincial unemployment rate 2014
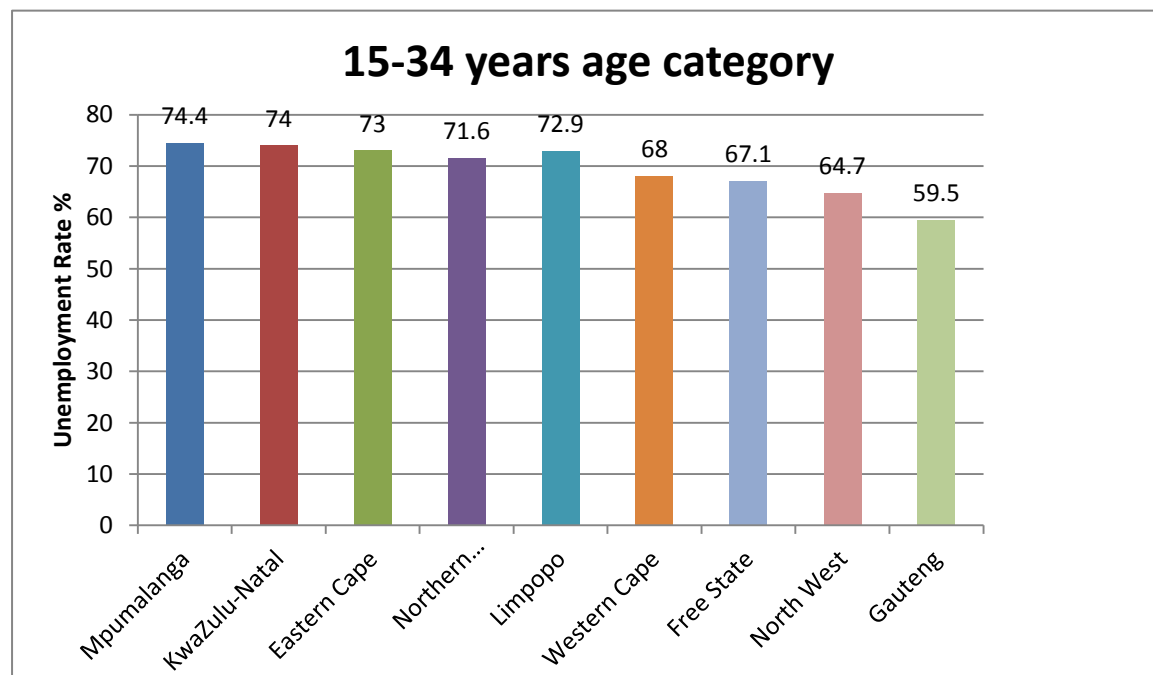
Source: Stats SA (2014a)

Even as far as graduate unemployment is concerned, a recent (2013) study by the Cape Higher Education Consortium found that very high unemployment rates exist among graduates from Limpopo (19 percent), North West (17 percent), Eastern Cape and Mpumalanga at 15 percent respectively (CHEC, 2013:18). According to Kingdon and Knight (2000b:4), low job-search intensities due to the inaccessibility of work centres is often regarded as one of the main reasons for the high probabilities of rural persons being unemployed. In other words, the more secluded a place is, the higher the costs of job search, and consequently the higher the chances of unemployment (Kingdon & Knight, 2000a). In South Africa this is true, especially considering the fact that a province like Eastern Cape, which is underdeveloped, has a lot of its population, young and old, who are unemployed.

3.4.2.5   Unemployment by educational attainment

The relationship between education and unemployment is said to be negative; that is to say, as an individual moves along the education continuum, the better their chance of getting employment. Specifically, people with higher education face lower unemployment rates than those with primary or secondary education (Kingdon & Knight, 2000b:3).

Figure 3.11: Unemployment rate by level of education (1994-2014)
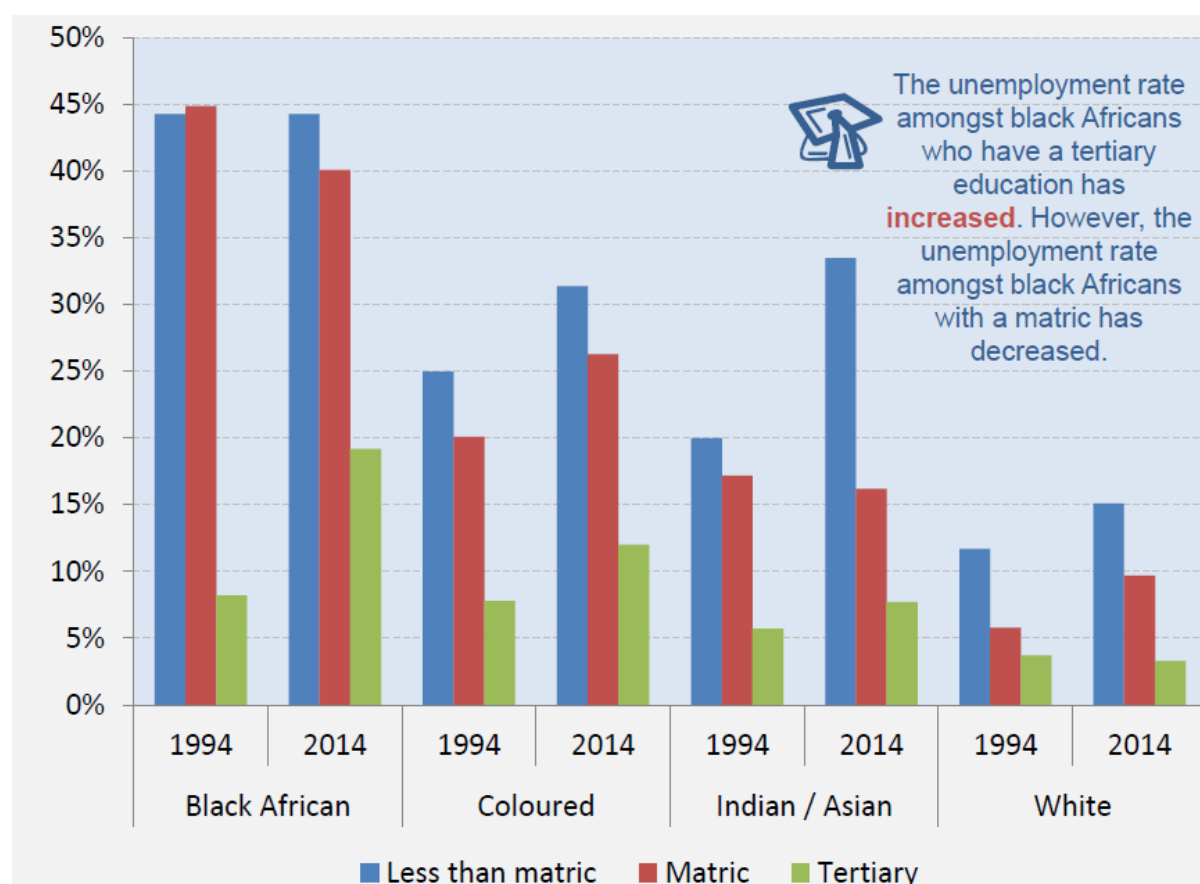
Source: Stats SA, 2014a

Figure 3.11 shows the unemployment rate by levels of education for the various race groups over the past decade and depicts a trend of increasing unemployment rate, irrespective of the qualification. While general unemployment rates among tertiary qualification holders decreased between 1994 and 2014, race continues to play a major role in the country's unemployment rates. In all race categories, only Whites experienced a decrease in the unemployment rate among tertiary education holders.

The unemployment rate for Blacks with tertiary qualifications increased from about 8 percent in 1994 to 18 percent in 2014. The same trend is also observed with Coloureds as unemployment among those with tertiary qualification increased by about 6 percent from 1994 to 14 percent in 2014. Although an increasing trend is also detected among Asian tertiary qualification holders, the change is very small.

According to Yu (2013:3) this high unemployment can be attributed to the fact that a lot of graduates are majoring in arts and humanities and as a result they end up struggling to find employment compared to those from the science and engineering fields, and in argument this is the case for Blacks with a post-secondary qualification (Pauw *et al.*, 2008). Due to the structural nature of the country's unemployment, it is doubtful that it will correct itself without policy interference (Banerjee *et al.*, 2008).

3.5   GRADUATE UNEMPLOYMENT

Higher education has expanded rapidly in the world in recent years, and the effect this has had is on the already increasing number of graduates entering the labour market. According to Machin and McNally (2007:3), this has an effect on the way in which employers use highly educated labour. Research shows that graduate unemployment has become a cause for serious concern in the world (Hanapi & Nordin, 2014:1056). In many middle-income countries, unemployment rates among the educated tend to be higher than in lower income countries (AEO, 2012). Many graduates lack the right education and skills, and even if they do get jobs, a lot of them remain underemployed in jobs they did not study for (Henley, 2013:4; Shierholz *et al.*, 2014:4). Even recently, finding candidates with the right skills for vacant jobs has become more difficult for many firms (AEO, 2012; Career Builder, 2014; Diamond, 2012).

The relationship between higher education and the labour market has been studied in depth, given the importance of human capital development on the growth of a country (Griesel & Parker, 2009:4). It is also a widely believed view that individuals with higher education qualifications have an added benefit in the labour market than those with just secondary education, or a lower education, because of better employment prospects. However, Moleke (2006:1) argues that most graduates mainly because of distinct situations and skills/job mismatches that exist in the labour market do not always enjoy such an advantage.

3.5.1 Defining and profiling young graduates

The definition of a young adult (i.e. youth) differs from country to country (Du Toit, 2003:4) and thus this changes with circumstances including changes in demographics and economic-cultural settings (UNESCO, 2014). Its controversial nature stems from the fact that its definition portrays different meanings to different segments of the population (South African Regional Poverty Networks (SARPN), 2008:2). However, it generally refers to people aged between 15 and 24 (United Nations, 2011; World Bank, 2008; Zuze, 2012:42). Youth in particular often is understood as a period of change from childhood to adulthood, thus age remains one of the simple ways of defining this age group (United Nations, 2011:1).

South Africa's national youth policy defines youth as "any persons between the age of 14 and 35 years" (National Youth Policy, 2015:10). This is a broader definition of youth and according to the South African Regional Poverty Network (2008:1), this specific South African definition of youth embraces different groups of youth that have been influenced by various socio-political historical conditions. A 35 year old in this regard is a person who lived during the period of sensitive political tensions while they were in school, whereas a 14 year old is growing up in the present day South Africa (National Youth Policy, 2009). This definition is also more or less guided by the African Youth Charter, which defines youth or young people as those falling within the age group of 15 and 35 (African Union, 2006:3), even though this definition excludes the 14 year olds.

Generally, a graduate can be defined as an individual with any post-secondary qualification. Van Der Berg and Van Broekhuizen (2012:2) define graduates as "individuals with at least a bachelor's degree or equivalent and higher educational qualifications, i.e. honours, Masters, and doctoral degrees". Typically, graduates would also be defined as those with a tertiary qualification. With recent worrying and increasing unemployment rates among young graduates, Van Der Berg and Van Broekhuizen (2012:9) maintain that often graduate unemployment is associated with quality of school education, university access and curricular, the nature of a country's economic structure, to name but a few. In this study, a graduate is defined as an individual with at least a diploma from any higher education institution. For the

purpose of this study, the focus will be on the employment status of these graduates, particularly factors affecting their employment status.

3.5.2 Graduate unemployment in South Africa

3.5.2.1 The nature of graduate unemployment

Undoubtedly, South Africa's unemployment rate is one of the highest in the world by the expanded definition (Stats SA, 2015b). The unemployment continues to reveal wide inconsistencies in the unemployment incidence as far as unemployment by race and education is concerned. To date, unemployment rates among educated young Black and Coloureds are far higher than any other race (Matsilele, 2015:4). For instance, Black graduates are still more vulnerable compared to their White and Indian counterparts where for every one employed Black graduate, there are four employed Indian graduates and five employed White graduates (Stats SA, 2015d).

An assertion is further made in the 2013 graduate destination survey published by CHEC on the pathways from university to work, which confirms that Black graduates still have the highest unemployment rate, at 19 percent. The survey further reports that only 35 percent of Black graduates are employed in the private sector compared to 61 percent of Whites and 58 percent of Indians. The study argues that South Africa's employment status continues to reveal the country's apartheid period forms of discriminations. Moleke (2006) and Bhorat (2004) in their studies also found that among different races, White graduates were the least affected by unemployment.

In its study, CHEC (2013:17) found that among unemployed White graduates, 68 percent were unemployed for a year after graduation, 28 percent were unemployed for two years and merely 9 percent experienced unemployment for just under three years. On the other hand, 34 percent of Black graduates were found to have been unemployed for just a year, with 43 percent experiencing unemployment only below two years and 23 percent having been unemployed for less than three years. This shows that getting out of unemployment is much slower for Black graduates than it is for White graduates.

Given the need for very skilled labour, individuals with advanced education have the least unemployment rates. On the demand side, employers in the country constantly recognise the insufficiency of skilled labourers as one of their most noteworthy

concerns and in sectors such as manufacturing, this skills shortage continued even throughout the recent global recession. On the supply side, those with higher educational levels have low unemployment rates and better job prospects than workers with low educational levels. These impacts are especially salient amongst university graduates whose unemployment rate is only one-third that of workers with higher education qualifications (Pauw *et al.,* 2008). Graduates with qualifications in the hard sciences such as chemistry or specialised qualifications have, moreover, very high chances of finding jobs (Spaull, 2013), while graduates with qualifications in the humanities and social sciences are more probable to encounter unemployment or lengthier job searches (Moleke, 2010).

3.5.2.2 Graduate unemployment trends in South Africa

As previously discussed, apartheid has had a substantial impact on the country's education system, and ultimately on the employment prospects of graduates. Figure 3.12 shows that between 1995 and 1999, there had been an overall slightly significant rise in the unemployment incidence among South Africans with higher education. In 1995, the unemployment rate was 3.5 percent and had increased by 5.1 percent to 8.6 percent in 1999. Again, the unemployment rate among individuals with higher education reflected great gender disparities where females had the highest unemployment rates in both 1995 and 1999, at 4 percent and 9.6 percent respectively

Figure 3.12: Official unemployment rate among individuals with higher education qualification, 1995 in comparison with 1999
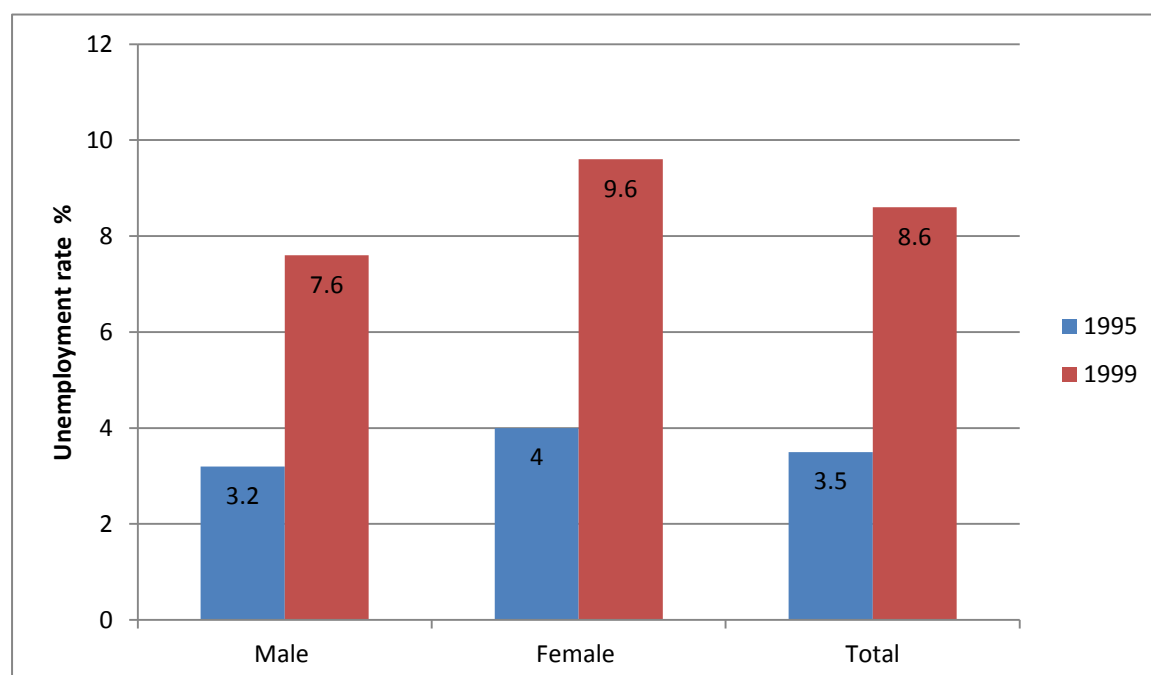
Source: Stats SA (2002:26)

Large variations in the unemployment rates are also seen among various racial groups. The unemployment rate among Blacks and Coloureds who had completed higher education was more than double that of Whites in both 1995 and 1999. The unemployment rate for Blacks in the higher education category was 6.1 percent in 1995 and had increased to 15.7 percent in 1999. Although unemployment rate for Whites also increased to 2 percent from 0.6 percent, the increase is very low compared to that of other racial groups (see Table 3.3). According to Kingdon and Knight (2000b:4), the increased unemployment was partly due to racial discrimination in employer's appointment practices. By 2003, unemployment among those with tertiary education had decreased to 5.5 percent, with the tertiary education category having high employment rates than those with just a matric qualification or less (Du Toit, 2003:10). The reason behind this decline was because of economic expansion between 2002 and 2007, which saw the creation of more jobs for these graduates (Altbeker & Storme, 2013:7).

Table 3.3: Unemployment rate by race and higher education 1995 compared with 1999

Year	Africans	Coloured	Indian	White
1995	6.1	5.3	2.4	0.6
1999	15.7	6.4	9.1	2.0

Source: Stats SA (2002)

Furthermore, the fact that other race groups, besides Whites, experienced significant unemployment during the period under observation advocates previous discrimination in the country's education structure whereby Blacks suffered poorer quality education (Kingdon & Knight, 2000a:9). The high unemployment among Blacks was explained by the low perceived quality and relevance of their higher education qualifications in the labour market (McCord & Bhorat, 2003:124). This is true, especially pertaining to the fact that many Blacks often further their higher education qualifications in fields of low labour demand such as humanities and arts. The same trend is also observed in periods after 1999 where unemployment among Black graduates has always been more than double that of White graduates. What is interesting in Figure 3.13 is that when Black graduate unemployment peaked, White graduate unemployment would decrease. For instance in 2000, unemployment among Black graduates increased to 16 percent from 1999 while that among White graduates decreased to 1 percent. The same trend is also observed between 2009 and 2010. Between 2010 and 2011, Black graduate unemployment rate decreased by 2 percent to 8 percent while in the same period, the unemployment rate among White graduates increased to only 2.5 percent from being 1 percent in 2010. Although from 2011 onwards unemployment rate among both these graduates increased, Black graduates still remained the most affected registering higher increases in unemployment rates than their White counterparts (Stats SA, 2015b), reflecting structural problems that exist in the country's labour market.

Figure 3.13: Expanded unemployment rates for Black and White graduates
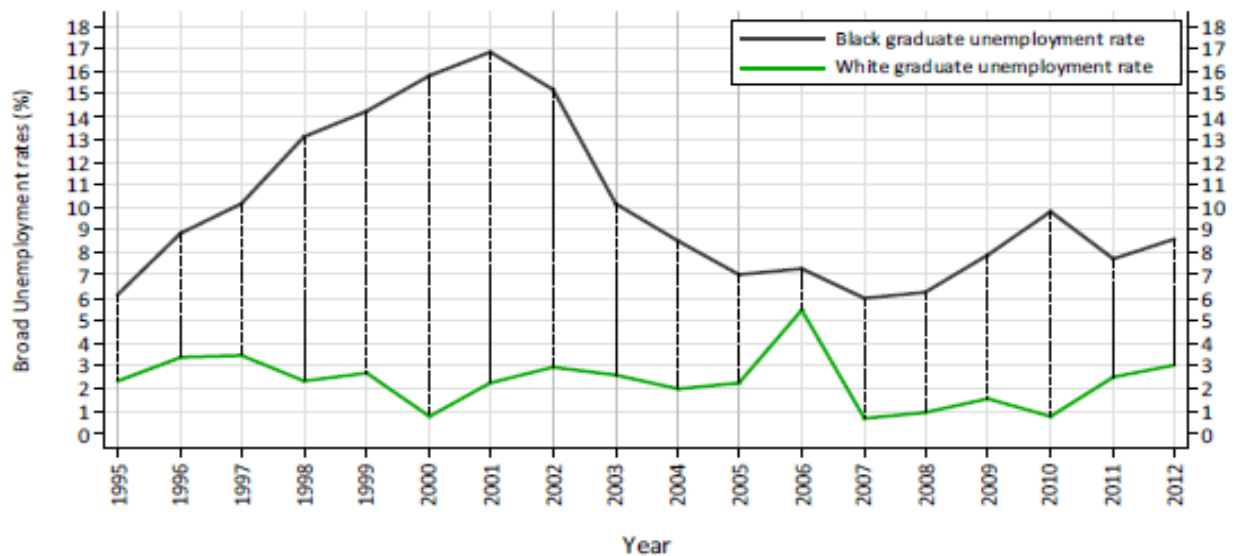
Source: Van Broekhuizen & Van Der Berg (2013)

In his study on descriptors and determinants of unemployment in South Africa, Bhorat (2009) found that only 200 000 of all graduates were unemployed. The unemployment rate had increased from 2 percent in 1995. Bhorat further found that only 18 percent of unemployed graduates had degrees, which clearly indicates that the problem lies with other higher education qualifications, namely diplomas and certificates - see Figure 3.14 (Banerjee *et al.*, 2008:720). Figure 3.14 affirms what is already known about the occurrence of unemployment in South Africa, in that it is unevenly high amongst Blacks/Africans, with diploma qualification having the highest number of unemployed graduates. Tregenna and Tsela (2008:65) also found that among those with higher education, the largest unemployment rate is found among those with diplomas/certificates at 4.4 percent. The National Treasury also found that among South Africans, about 45 percent of 18-29 year olds with tertiary education were unemployed in 2011 (National Treasury, 2011:5). The study further found that only one in eight young people under 25 years of age are working in comparison to the 40 percent in other emerging countries.

Figure 3.14: The composition of graduate unemployment among Blacks 2007
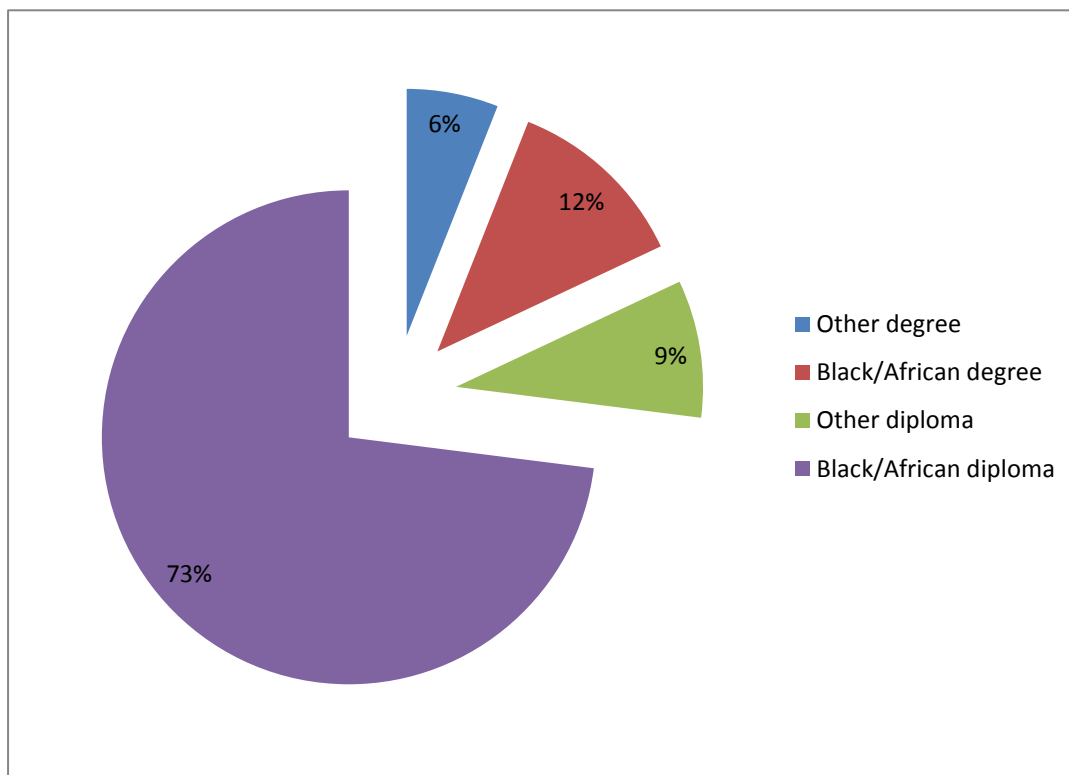
Source: Bhorat (2009) and Tregenna & Tsela (2008)

Since the aftermath of the great global recession of 2009, overall unemployment has significantly increased in many countries, considerably affecting more young people (73 million) than adults (ILO, 2015a; Lam, 2014:2). In South Africa, youth unemployment is very high, reaching almost 50 percent (Stats SA, 2014a). The rising unemployment among young people is a policy concern, and young graduates are not an exception (Nel & Neale-Shutte, 2013:438). In their study, Altbeker and Storme (2013:7) found that the great recession in 2009 saw total graduate unemployment increase by approximately 3 percent from an estimated 11 percent in 2008, see Figure 3.15.

Figure 3.15: Graduate unemployment rates 1995 – 2011
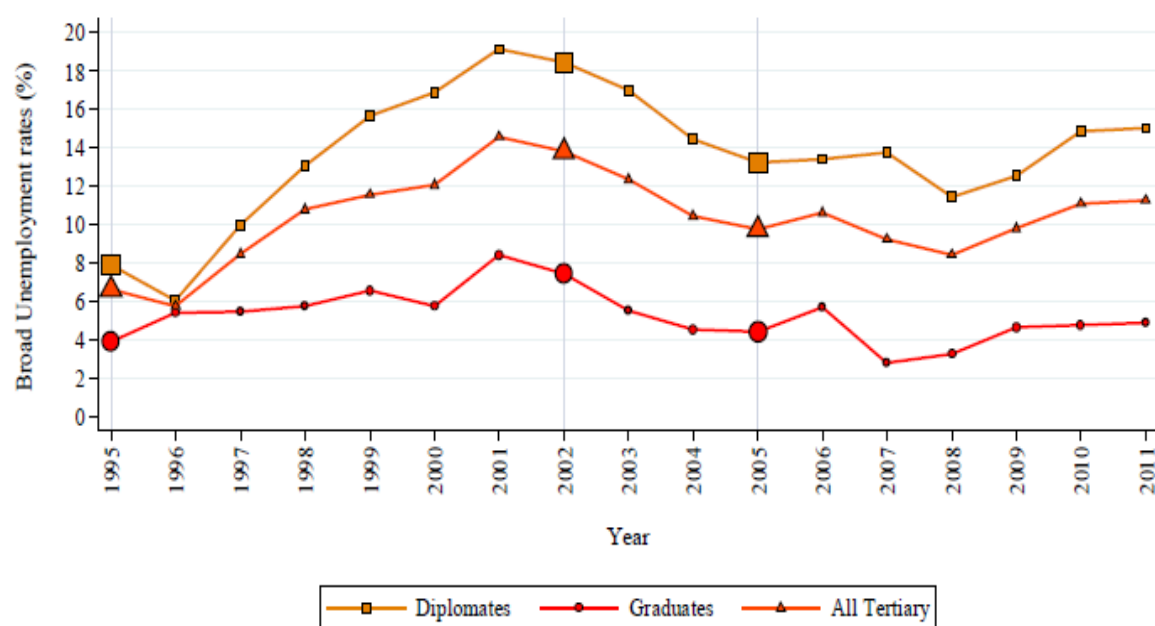
Source: Altbeker & Storme (2013)

In as far as categorising the total graduate unemployment rate, bachelor's degree holders experienced low unemployment rate since 1995 in comparison to diplomates. Between 2001 and 2007, unemployment rates for both diplomates and graduates decreased significantly mainly due to the economic expansion that South Africa experienced during that period. From 2008 an increasing trend was registered and that could be linked to the global recession that left many people without work and made it hard for graduates to secure jobs (ILO, 2015a; WEF, 2014). Based on the trend observed in Figure 3.15, it can, therefore, be concluded that university graduates face less difficulties in as far as finding employment is concerned in contrast to diploma holders (Altbeker & Storme, 2013:7). Although unemployment rates among people who completed their tertiary education have increased over the years, South Africa's labour market is still able to absorb people with tertiary education than with any other lower qualification. Even empirical research reports participation rates for tertiary education holders as way higher in comparison to participation rates of those with lower education levels. Graduates have a 30 percent probability of participating in the labour market than those with lower education levels, and they are also 20-25 percent more likely to find employment than those with matric (Altbeker & Storme, 2013:15). Absorption rate for people with tertiary qualification was higher in both 2008 and 2013, followed by secondary education,

with primary education at the lowest (see Figure 3.16). This highlights the important positive relationship between higher education and employment (Banerjee *et al.*, 2008; Bhorat, 2009; Fourie, 2012; McCord & Bhorat, 2003). Over the period 2008-2013, unemployment rate for people with tertiary education increased while the absorption rate decreased.

Figure 3.16: Absorption rate by education level, 2008-2013.
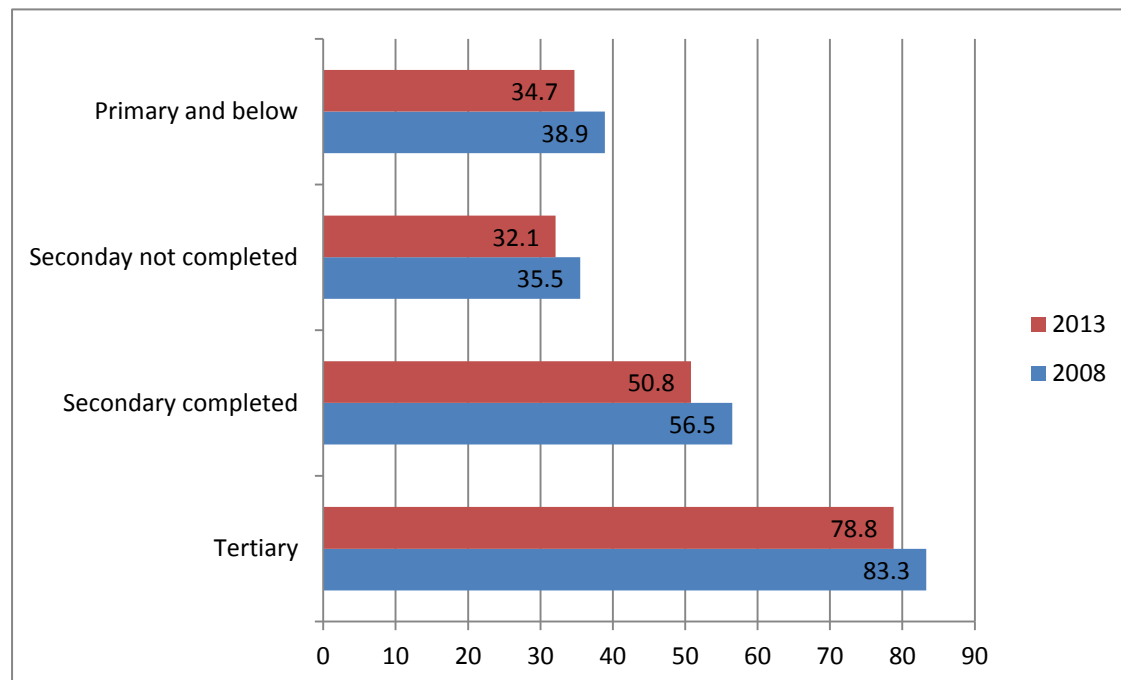
Source: Stats SA (2013)

Many companies were forced to close down due to financial difficulties, and several countries also suffered recessions, which saw many jobs being lost and economies failing to create jobs. With South Africa struck by significant skills shortages (Rasool & Botha, 2011), poor quality education system (Dinokeng Scenarios, 2007) and skills mismatches (Nel & Neale-Shutte, 2013), unemployment continued to increase. In 2013, the unemployment among the higher education category had increased by 2.3 percent from 2008 to 9.9 percent in 2013 (Stats SA, 2013:10). On the other hand, the age of graduates also plays a role in their employment prospects as since 1994, unemployment rate among graduates aged 20 to 29 has been higher than those in the 30-65 age cohort. Altbeker and Storme (2013:14) report the unemployment rate among younger graduates to have been higher by more than 8 percent compared to

the older one. One of the reasons that explain this occurrence is the fact that some employers become reluctant to employ young graduates because of experience and maturity issues (Oluwajodu *et al.*, 2015).

Figure 3.17: Unemployment rate for men and women with tertiary qualification, Q4: 2014
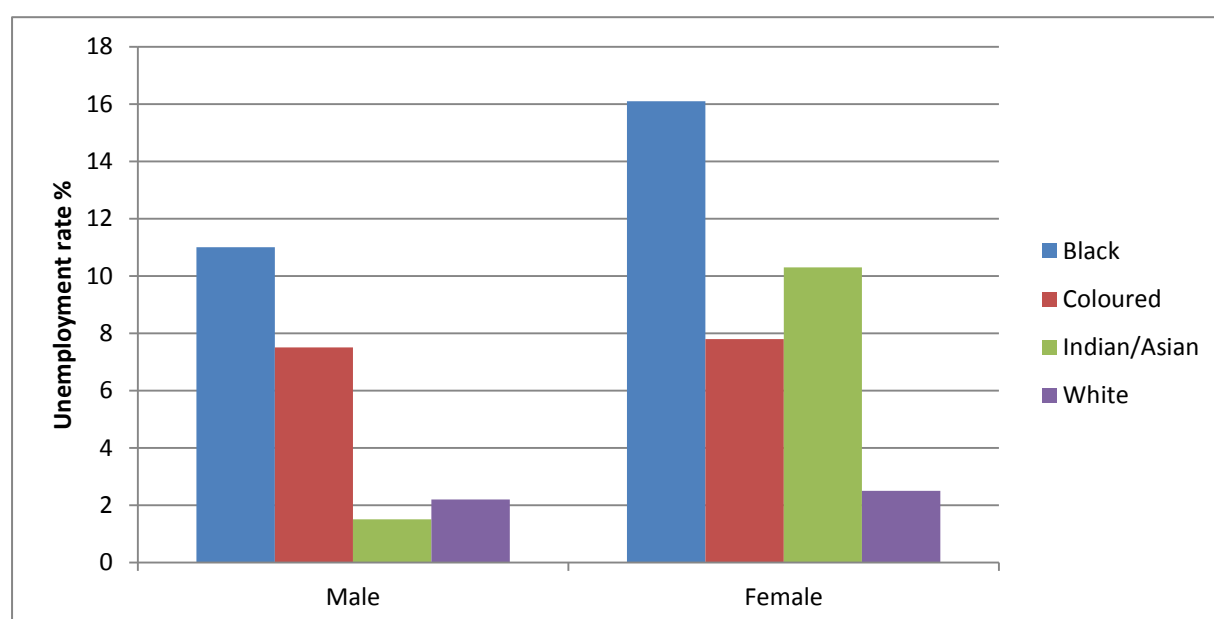
Source: Stats SA (2014c)

Figure 3.17 shows that Blacks continue to experience high unemployment rates than other race groups in the higher education category. The figure further highlights that the unemployment rate for men is significantly lower than the unemployment for women by a large margin irrespective of the race. The unemployment rate for women with tertiary qualifications ranged from 2.5 percent for White women to 16.1 percent for Black woman, while the unemployment rate for men ranged from being 1.8 percent for Asian men to 11 percent for Black men. The figure further shows that the unemployment rate among both Coloured men and woman was slightly equal at approximately 7.8 and 7.9 percent respectively.

Some of the employment challenges experienced by South African graduates can be attributed to the country's education system, basic education in particular. Education and training systems play a pivotal role in facilitating low levels of unemployment (O'Higgins, 2003:4). Research on the performance of South African learners over the

past decade has revealed that learners perform appallingly in most important subjects, such as literacy, numeracy, language and mathematics, affecting their employment prospects (Leader, 2011). As Spaull (2013:52) puts it: "Poor quality schooling at primary and secondary level in South Africa severely limit the youth's capacity to exploit training opportunities".

The country's deficient education system is also evidenced in the 2013-2014 Global Competitiveness Report, which ranked South Africa's quality of education system to be the worst in the world; while tertiary education gross enrolment to be one of the worst in the world, ranking 101 out of 140 countries (WEF, 2013:325). Even at an international scale, South Africa still ranks the lowest in terms of average pass rates, which can be a hindrance for finding jobs that will grow the economy (Spaull, 2013:4). The Department of Higher Education and Training reports that many university students fail to enrol on scarce skills; where in 2011, only 28 percent enrolled in Science, Engineering and Technology sectors, while over 40 percent of all university students enrolled in humanity programmes (Department of Higher Education and Training, 2013:3), at the same time graduates in the latter fields have much higher unemployment numbers (AEO, 2012).

3.5.3 Factors affecting graduate unemployment

This section looks at the different factors that are considered important in determining the employment status of graduates in South Africa.

3.5.3.1   Availability of jobs

Structural economic changes such as changes in demand, which make other sectors expand while others grow, has a significant impact on the demand for people with higher education qualifications (Moleke, 2006). As the skills needed for jobs become more intricate because of technological transformations, a large number of jobs requiring a graduate-entry education arise. In other words, improvements in different sectors in the economy cause a rise in the number of jobs requiring an entry graduate qualification, consequently a rise in the demand for people with higher education.

On the other hand, changes in aggregate demand can have greater impact on youth or the young graduates than adults. According to Du Toit (2003:5) during economic

recessions many companies stop recruitment, which greatly affects young entrants to the labour market, making them jobless. Furthermore, young people are more likely to experience job losses than adults mainly because of their lack of experience and their vulnerability to layoffs during low productivity periods (Rees, 1986:617). Moreover, due to the high mobility of young people, there is often a high risk of losing a graduate trainee to competitors soon after the training stage is completed (Pauw *et al.*, 2006:5). Also, young people are not likely to be unionised or even protected by the law, for this reason employers do not suffer a great loss when they fire young people (Mlatsheni, 2012:32). Furthermore, as the weak aggregate demand and uncertainty persists, employers choose to wait before hiring again (ILO, 2014:26). This means that many people will become unemployed, thus the decrease in demand is a cause for unemployment among graduates (Swanepoel & Van Zyl, 1999:264).

3.5.3.2   Economic circumstances

Job opportunities for young people are very sensitive to economic conditions as well as the economy's capacity to create and absorb them (Swanepoel & Van Zyl, 1999:264). In other countries like Uganda, the economy fails to create jobs for the increasing number of graduates as in 2014 there was a job deficit of 500 percent facing young graduates. Mwesigwa (2014:11) reports that about 40 000 graduates in Uganda are struggling to find work as the market can only provide 8 000 jobs annually. The situation is worsened by their lack of experience (Mlatsheni, 2012:43). The state is more precarious for uneducated young people and the longer the unemployment duration, the worse the consequences. According to the ILO (2014:25), as the unemployment spell prolongs, skills are lost and the chances of people finding employment further deteriorates.

3.5.3.3   Wage expectations

Youth wages compared to adult wages have an influence in the employment outcomes of young people (Mlatsheni, 2012:33). As Tan and French-Arnold (2012:3) state, "academic qualifications are essential, but the aptitudes and attitudes of job seekers are equally, if not more, important to employers". Many young job seekers (under the age of 35) often want jobs that will pay them a lot (Banerjee *et al.*, 2008:735). Often the reservation wages of young people are idealistically high where

they go above the market clearing wage for new entrants (Rankin & Roberts, 2011). A study by AEO (2012) also found that graduates often have higher expectations about a job than those with no higher education qualification. In their study on the employability of graduates in Malaysia, Sirat *et al.* (2012:34) found that many graduates had unrealistic expectations as far as salaries are concerned. This often results in many of these graduates refusing job offers, consequently waiting until their educational qualifications become obsolete.

3.5.3.4   Insufficient labour market information/discouragement from the labour market

At times, graduates are unemployed mainly because of insufficient information regarding prevailing job opportunities. Swanepoel and Van Zyl (1999:264) maintain that graduates are constantly not well informed about labour market information and are also not appropriately guided through the job application process, and as unemployment lengthens, often discouragement sets in. According to AEO (2012), unemployment and discouragement tends to be higher among young people than those in the older cohort. Mlatsheni (2012:35) argues that often this discouragement is self-sustaining, which is often caused by depression since many of the discouraged graduates have been searching for a job for a long time. The discouragement can even lead to more young people turning to crime, use of drugs and prostitution for survival (Maswanganyi, 2015:7). More often, some graduates even resort to low paying jobs, consequently becoming underemployed.

3.5.3.5   Skills/education mismatches and types of jobs available

Mismatches are divided into two categories, namely qualification mismatches and skills mismatches. Qualification mismatch occurs when the qualifications that graduates hold are different, *inter alia* either high or low compared to the ones required by employers; while skills-mismatches would result when an employee owns a higher or lower skill level than required to do his or her job (Berlingieri & Erdsiek, 2012). Farooq (2011:1) argues that sometimes the mismatch can be due to the field of study chosen by a graduate as well as the broader education mismatch. In particular, the profound rise of qualification mismatches in the labour market has resulted in the questioning of the role and effectiveness that higher education plays in producing graduates who are sufficiently skilled. Many graduates often struggle to

make ends meet due to the difficulty in finding jobs. Even if they do get jobs, a lot of them remain underemployed (Shierholz *et al.*, 2014:4).

A baseline study by Griesel and Parker (2009) on South African graduates from the perspective of employers found a gap between what employers get from graduates and what they expect. For instance, the gap in the written communication skills attribute was a high 1.34, followed by the problem solving attribute, which had a gap of 1.35, an indication that graduates were failing to meet the expectations of employers in those areas. As a result, the study concluded that higher education institutions are not aligned with employer's expectations. For instance, in South Africa about 600 000 university graduates were unemployed while the private sector was struggling to fill an estimated 800 000 vacancies (The Economist, 2012:5). Mlambo-Ngcuka (2006) argues that the root of the problem often lies with curriculum makers who fail to pay adequate attention to the relevance of the skills and competencies attained by graduates after graduation. Other findings point the reason to the lack of experience (Altbeker & Storme, 2013); irrelevant qualifications (Moleke, 2010); and preference over matured graduates than younger ones (CHEC, 2013; Oluwajodu *et al.*, 2015).

A study by Hanapi and Nordin (2014:1057) in Malaysia found that many employers believed graduates were lacking essential skills and qualifications, which are needed by industries, thus worsening employment prospects or rather making it difficult for graduates to obtain their desired jobs. Even a good academic record is no longer regarded as a guarantee that a graduate will get a job (Razak *et al.*, 2014). The longer job search often results in many of these graduates accepting any job for survival purposes (Accenture, 2013:5).

In most cases, first time entrants in the labour market often get a temporary job instead of a permanent one, and the situation is worsened by issues of underemployment where graduates get jobs that are not in their field of study. A study on the employment status of graduates in the United States of America (USA) by Accenture (2013:3) reports that about 41 percent of college graduates were underemployed, meaning that they were working in jobs which did not need their degrees or which were irrelevant. The ILO estimates that up to two thirds of young people in developing countries are underutilised, either not working or

underemployed (ILO, 2015). A study by Farooq (2011:2) on Pakistani graduates found that 11.3 percent of the surveyed graduates had irrelevant jobs to their studied disciplines, and the analysis further revealed that female graduates are most likely to be mismatched in their field of study than male graduates.

3.5.3.6   Degree choice

It is a general consensus that one of the chief reasons students further their studies after matric is the expectation that higher education qualifications will better their chances of getting employment that is better paying. This is true in the South African context especially considering the fact that labour demand is shifting to highly skilled workers (Moleke, 2006:1). Graduate outcomes and pathways are different for various fields of education, with some graduates from certain fields taking longer to find employment than other graduates (Coates & Edwards, 2009; Du Toit, 2003:10). Ryan (2013) found that graduates who had science and engineering qualifications had high percentages of permanent employment, in contrast to those in arts, humanities and languages. Ryan's study further revealed the average annual earnings of engineering ($91,714), physical sciences ($80,073), and social sciences ($70,197) to be higher than other fields of studies. Arts and education graduates earned the lowest income.

In South Africa, between 2009 and 2010, arts and social science graduates experienced a 24 percent unemployment rate and also a 10 percent unemployment rate in 2005-2006. These are high rates signifying more enduring challenges in entering the labour market with qualifications in these particular fields of study (ROA, 2012:2). The same trend is observed in a study by the Cape Higher Education Consortium (CHEC, 2013:21), which found that a large number (about 95 percent) of graduates with education degrees found themselves employed in contrast to 87 percent of those who studied science, engineering and technology, as well as 83 percent of those who studied humanities, business or commerce. However, Morrissey (2013:19) reminds us that students should not be pressured into pursuing certain degrees based on views of better employment prospects. She argues that it is always best for students to follow career fields they love, because they will probably be good in them.

3.5.3.7 Job search activities

According to Du Toit (2003:6), not having full information regarding available jobs, their requirements and inability or inexperience with job applications often bears a significant impact on a graduate's employment status. A college graduate employment study by Accenture (2013) found that about 57 percent of the surveyed graduates said they had difficulty in finding employment, while 7 percent have been unemployed for more than a year since their graduation.

According to Yate (2013) job searching skills such as verbal, listening, writing and technological skills are among skills that the professional world deem very important. Thus chances of a graduate being successful in their quest for a job become slimmer when they cannot demonstrate competency in such skills.

Banerjee *et al.* (2008:717) list job search as one of the factors that has kept unemployment high in South Africa. They argue that spatial separation between the labour market and where young people reside is one of the most significant factors affecting their employment status. According to Banerjee *et al.* (2008) job search affects unemployment in the following way:

- The high search costs such as the absence of reasonably priced public transportation perpetuates the unemployment problem as individuals, especially job seekers who struggle to make it to job centres situated far from where they live.

3.5.3.8 Higher education institution attended

The reduction of a number of higher education institutions (from 36 to 23) after 1994 saw the merger of former Black and White institutions. Baldry (2013:12) argues that these mergers brought about differing qualities, which are likely to have an impact of graduates' ability to secure employment in terms of the quality of education they receive as well as how these institutions are perceived by employers. Traditionally, Historically White Universities (HWUs) are perceived to be providing quality education than Historically Black Universities (HBUs) (Moleke, 2006). Oluwajodu *et al.* (2015) found that employers would not mind spending more resources on hiring graduates from certain universities due to the trust they have on the type of education they receive.

In his study investigating the employment experiences of South African graduates, Moleke (2006) found that graduates from HWUs had better employment prospects than graduates from HBUs. The study further found that the main reason for the majority of graduates from HBUs taking longer to find employment is due to the fact that a lot of them graduate in fields with lower employment prospects such as humanities and arts. In addition, Baldry (2013:13) suggests the root of the problem is the quality of education provided by HBUs. She argues that, at times, the quality of education offered at HBUs is very poor, resulting in graduate recruiters opting to hire graduates from other higher education institutions. Moleke (2009) confirms this argument. She found that graduates from HBUs (often Blacks) took longer to find employment after obtaining their degrees than those from HWUs (i.e. Whites).

Pauw *et al.* (2006:7) also found the same results as Moleke. They found the following reasons on why many firms do not approach HBUs for their recruitment initiatives:

- Quality of education at these institutions is generally lower and many of its graduates do not have good grades
- Many of graduates from the HBUs lack essential soft skills, consequently they are unable to handle the interview process in an appropriate manner
- Many of the HBUs do not provide courses in the fields of critical skills (e.g. engineering and sciences) and only provide those in humanities and arts, which are often not required by firms.

3.5.3.9   Race and gender

In a study conducted to determine the reasons why unemployment has risen in South Africa, Banerjee *et al.* (2008:733) found that job search is more effective for Indians and Whites than it is for Black and Coloured job seekers. They further found that out of all race groups, Black job seekers are more likely to move from actively seeking employment to either discouraged or not economically active category. Another study by the CHEC (2013:21) reported race to be the strongest predictor of employment of graduates. The study found that compared to 77 percent Black undergraduates and 91 percent Coloured undergraduates, 96 percent White and Indian undergraduates were employed.

Gender is also a factor which has a significant influence on employment outcomes, not just of graduates, but also of all persons of a working age. Job prospects for young women are more restricted than those for young men, resulting in higher unemployment rates for young women (Du Toit, 2003:6). In their study on graduate pathways after five years of graduation, Coates and Edwards (2009) found men were more likely to be working full time jobs than women; 84 percent of men had found full time jobs after five years compared with 69 percent of women. Ryan (2012:3) also found young female graduates to be earning far less than their male counterparts, irrespective of the field of degree.

3.6   SUMMARY AND CONCLUSIONS

In this chapter, empirical literature in as far as unemployment is concerned was given. This chapter had the objective to review empirical studies on the issue of unemployment from a global, regional and national perspective. It is with no doubt that the global financial crisis had devastating effects on the global economy and unemployment in particular. The International Labour Organisation has already forecasted even higher unemployment rates as the global economic growth fails to reach its pre-crisis level. As the number of unemployed people has been forecasted to be more than 215 million in 2018 where the youth will be more than 40 percent, there is an indication that enough jobs are not being created. Average unemployment duration has also increased for all economies.

On the other hand, the legacy of apartheid had a considerable impact on South Africa's unemployment rates. The official unemployment rate sits at 25.5 percent ranking the country at the 8th country with the highest unemployment rates in the world, with the broad unemployment rate at a high 34.5 percent. Youth unemployment rate also remain one of the highest in the world exceeding 50 percent. Already the economy is not growing to create enough jobs; the number of unemployed youth is expected to increase. Graduate unemployment, although not at severe levels, has also started becoming a cause for concern. Since 1994 unemployment among graduates has always been explained by race; Black graduates remain the most affected by unemployment than their White counterparts. Some studies point the cause as the fact that many Black students pursue qualifications with poor employment prospects like arts and humanities. Youth

unemployment is also a serious challenge not just in South Africa but the entire world. Sub-Saharan Africa's large youth cohort is not making the situation better as the region currently has the largest youth population in the world with a labour market that cannot fully absorb the entire youth. However, studies have also pointed out the future benefits of the large youth cohort.

The study went on to review some of the factors that affect graduate unemployment. For the purpose of this study, the youth were defined as young people between the ages of 15 and 35, while a graduate was defined as someone who has completed a diploma or degree at a higher education institution. While higher education provides individuals with an added advantage in the labour market, such benefits are not equally enjoyed by all graduates; many aspects play a role since education alone cannot guarantee employment. In particular, empirical literature argues factors such as economic circumstances and the availability of jobs as one of the factors that influence employment prospects of graduates. Majority of graduates find themselves unemployment because the economy is not creating enough jobs to cater for the number of graduates in the economy. In other instances graduates do not have the information regarding available jobs in the labour market. The type of higher education institution attended and race are also identified as factors that affect the employability of graduates especially considering the history of racial discrimination in South Africa. Skills mismatches have also been a cause for policy concern as many graduates possess education qualifications that are not of any relevance in the labour market, even when they do get employed, many of them remain underemployed where they get jobs that are not in their field of study. This has in essence highlighted the importance of making informed career decisions.

The conclusion is that unemployment, especially among young people with higher education qualifications is a problem as people have to watch their investment (i.e. education) failing to pay out, and consequently being negatively affected. It remains almost every government's main objective to ensure that unemployment is at its lowest level, particularly as far as structural unemployment is concerned. "Failure to employ the young not only lowers growth today, it also threatens tomorrow" (The Economist, 2013:9).

CHAPTER 4: EMPIRICAL RESEARCH METHODOLOGY

4.1 INTRODUCTION (RESEARCH PHILOSOPHIES)

Research is an important part of everyday life as it strives to get answers to questions that are often difficult to answer, or simply put, questions whose answers are not easy to get. According to Rajasekar *et al.* (2006), research aims to acquire knowledge about various topics, and such information can be obtained from sources like daily experiences of life, books and journals. For these reasons, research becomes an important part of everyday life that prevents inefficiency and ensures efficiency.

Research philosophy can be described as a process that seeks to explain the root of knowledge or research (Saunders *et al.*, 2007). A chosen research philosophy comprises significant assumptions about the way in which the researcher sees the world, and as a result, these assumptions will reinforce the research strategy and methods relating to the overall research (Saunders *et al.*, 2007:101). The absence or inadequate knowledge of various research methodologies can make the research process an overwhelming and complex experience. Knowledge of research philosophy is very fundamental, particularly to researchers, as it can encourage a comprehensive thinking and moreover, help in raising more questions to the research topic in question (Flowers, 2009). This argument is supported by Easterby-Smith *et al.* (cited by Crossan, 2003:47), who assert that an understanding of research philosophy can assist in the following:

- Assist the researcher to elucidate the research methodologies to be used for a study
- Allow and help the researcher to assess various methodologies and escape incorrect use and pointless work by identifying the boundaries of specific approaches at the initial stage
- Contributes to researcher creativity and innovativeness, which can strengthen the quality of the study.

The central focus in this study is on graduate unemployment in South Africa. In particular, the study seeks to investigate the determinants of the employment status of young graduates from a South African university. This chapter describes the methodological procedures that will be used in the study. As stated in the first

chapter, a quantitative research design was deemed suitable for this study. For this reason, this chapter will elaborate on the design, methods and procedures used in the research study.

4.2   AIMS OF THE STUDY

The main objective of the study is to look at the determinants of the employment status of young graduates from a South African university. The university was selected mainly because of its history and how it came about. For ethical purposes, the name of the University where graduates were sourced is not disclosed. In line with the main objective of the study, the following empirical objectives are formulated:

- Determine the average time it takes a graduate to find employment
- Assess if the employed graduates are employed in their field of study
- Establish the personal and social economic factors that determine the employment status of graduates in South Africa
- Determine if degree choice plays a significant role in graduates' employment prospects.

4.3   RESEARCH QUESTION

The central research question investigated the determinants of the employment status of young graduates with emphasis on graduates from a South African university. This question made an effort to try and understand the factors that play a role in graduates' employment status (i.e. employed or unemployed). The final section of the analysis looks at the perceived factors that graduates identified as playing a significant role in their employment status.

4.4.   RESEARCH APPROACH/PARADIGM

The word paradigm is rooted from the Greek term *paradeigma,* which was first used by Thomas Kuhn in the early 1960s. There are many definitions of a paradigm. In general, a paradigm is explained as "a world view underlying the theories and methodology of a particular scientific subject" (Oxford University Press English Dictionaries, 2006:736). Kuhn (1962:7) defines paradigms as "universally recognized scientific achievements that for a time provide model problems and solutions to a community of practitioners". In simple terms a paradigm would thus be seen as a conceptual lancet through which the researcher interprets the world (Bailey,

1987:24); and how the researcher views the world is guided by a number of factors including assumptions, concepts and biases of his or her paradigm.

Worldview is a hypothetical system that impacts the way in which learning is examined and translated (Mertens, as cited by Mackenzie & Knipe, 2006). Alternatively, Healy and Perry (2000) describe a paradigm according to three elements; ontology, epistemology and methodology. Ontological aspects – the science of how things are, which are essential features of a phenomenon – and epistemological aspects – which explain what can be known and how can it be known, which deals with gathering data (Van Der Walt & Potgieter, 2012). Research methodology refers to steps that a researcher takes in order to find answers to a research problem (Kothari, 2004). In this way, the researcher adopts a systematic approach to find a solution to the research problem.

However, every research needs to have some form of foundational layers which the researcher will follow in trying to answer his or her research questions, and these are referred to as paradigms (Creswell, 1994). In the same vein, Kuhn (1962:ix) writes that evidence comes from the history of biological and physical sciences, which also emphasises the importance of looking at the underlying factors on which the research problem is based. This view is supported by Van Der Walt and Potgieter (2012:605) who also note that research should be explained and validated by the philosophical foundations it is based on. These paradigms provide the direction the overall research will take in terms of the introduction, body and conclusion (Kuhn, 1962:42).

Jonker and Pennink (2010:23) explain the importance of these underlying philosophical foundations through what is stated as "research pyramid" or the "logical chain of research interconnectedness" (see Figure 4.1). At each and every step of the pyramid, choices need to be made, driven by the nature of the research question. Thus moving from top to bottom (i.e. beginning with describing the research paradigm) of the research pyramid will lead to a clear explanation of the research question (Jonker & Pennink, 2010:23). In this study, the same research structure was followed from choosing the research approach to research techniques.

Figure 4.1: The research pyramid
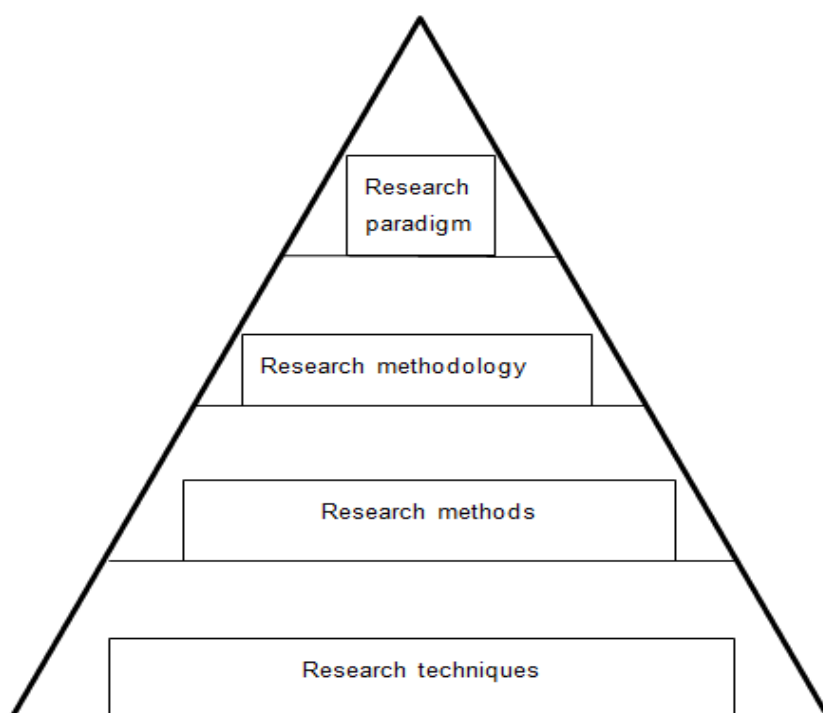
Source: Jonker & Pennink (2010)

4.4.1 Philosophical foundations adopted in this research study

Although there are many research paradigms in the world (Bailey, 1987:25), no research falls into one paradigm. The research study focuses on the determinants of employment status of young graduates with a focus on graduates from a South African university. The research question pushes itself towards a quantitative method approach of data collection and analysis. The world view that best fits this research type is post-positivism.

Post-positivism

According to Trochim (2006:5) post-positivism stemmed from the wholesale rejection of the dominant beliefs of positivism. While positivists exclude themselves from the world they are studying, thus strongly believing that they do not have to be part of the world in order to understand it (Healy & Perry, 2000:119), post-positivists believe that theory cannot be excluded from practice; it cannot be ignored for the sake of "just the facts" (Ryan, 2006:12). Ryan further identified the following characteristics of post-positivism:

- The researcher investigates his/her own epistemology – in this way, the researcher is in a position of understanding how people construct and maintain perceptions of the world

- The researcher takes up a learning rather than a testing role – a post-positivist conducts examination between individuals, learning with them, instead of directing exploration on them (Wolcott, 1990)

- Post-positivists do not just conduct interviews, but they strive to engage with the respondent by trying to understand how they view things

- Value problem-setting rather than problem-solving – in other words, post-positivists are not only in a quest to investigate causes (problem-setting) but they believe that research can also open up the nature of the problem by coming up with more questions (problem-setting)

- It is not looking for one universal solution/truth – life is a complex experience and as such, conclusions may change over time.

Furthermore, according to Henderson (2011:343) the value that post-positivism adds to research is evidenced by its ability to put emphasis on meaning while elucidating questions that bring about social change. Thus, the issues studied under post-positivism reveal the need to study causes that influence results or conclusions (Creswell, 2003:7).

To summarise the pre-theoretical foundations to which this research study bases itself, Creswell (2009); Easton (2010); Guba and Lincoln (1994) creates the following table for better understanding:

Table 4.1: Summary of philosophical foundation adopted in this study

Post-Positivism	**Ontological aspect:** There is a real, objective reality that is known. **Epistemological aspect:** The researcher can, and ought to stay away from any impact on the result; results are genuine just on the off chance that they have been done well. **Methodology:** Inclines toward measurement and controlled investigations.

Adapted from: Creswell (2009); Easton (2010) and Guba & Lincoln (1994)

4.5   RESEARCH DESIGN

Research typically is divided in different categories, which provide a clear direction of where the research is heading and how it is going to be conducted. Malhotra (2010:102) explains research design as a blueprint for conducting research, which clearly describes all processes that the researcher will have to take in order to get information that will assist in finding a solution or solving the research problem in question. That is to say, research design enunciates the required data, methods that are to be used to collect that data, ways the data will be analysed, and most importantly, how all of these procedures are going to answer the research problem in question (Van Wyk, 2012). What a research design does is to allow the researcher to solve the research question in a valid, objective, accurate and economic manner (Ditsa, 2004).

Research designs play an important role and as such they can help a researcher by providing a roadmap on how research can be undertaken taking into consideration the type of research in question, that is it could help in answering the research in question. According to Gray (2014:29) certain factors determine the researcher's choice of a research methodology and they are:

- Researchers' attitudes regarding the ways in which her or she thinks theory ought to be used in solving the research topic in question
- The belief that there is more on a topic out there that needs some further exploring
- The direction of the research in as far as various research designs (such as interpretivist and positivist) are concerned.

This study focuses on identifying the determinants of the employment status of young graduates from a South African university. As mentioned in Chapter 1, this study will make use of quantitative research design in trying to identify these determinants.

4.5.1 Quantitative phase in this study

In this study, the researcher made use of the survey type of research where data were collected by means of her own designed questionnaire, in particular a mail questionnaire. These are explained below.

4.5.1.1.2 Survey research

A survey research was used for the quantitative phase of the study. According to Leeuw *et al.* (2008:1) survey research involves selecting a group of people and collecting information from some of them in order to get an idea of what the entire group thinks or does. Creswell (1994:117) also states that a survey research provides a numeric description of some segment of the population, *inter alia* a sample through asking questions. The people's answers will then constitute the data that are going to be analysed. Surveys are intended to provide a picture of how things are at a specific time (Kelley *et al.*, 2003). Survey research is appropriate for descriptive research but it can also be utilised to research questions that require deeper explanation, explore aspects of a situation and provide data for hypothesis testing (Kelley *et al.*, 2003:261).

Survey studies are not only versatile but they are also efficient in that a large number of variables can be measured without any effect on the time or costs involved (Krosnick, 2010:160). However, the use of survey research has some disadvantages. There is a high probability of non-response, particularly if the survey research is done by any method other than face-to-face (Kelley *et al.*, 2003). This type of research can also raise further questions, particularly the why type of questions; and generalisation can also be risky unless the researcher takes precautions to avoid it (Singleton *et al.*, 1993:12).

4.6 SAMPLING STRATEGY

A sampling strategy is a framework that a researcher applies to ensure fair representation of the population from which the sample used in the research was

drawn (Landreneau, 2011), and in a quantitative study, representation is the most important factor used to assess sample quality. This section discusses in detail the various sampling strategies with emphasis on the ones applied in this research study.

4.6.1 Target population

Adams *et al.* (2007:140) describes target population as the population from which the researcher would like to generate his or her results. Neuman (2011:246) also defines a target population as the specific collection of elements that will be studied. Thus, in this research study, the target population encompasses all male and female graduates (35 years or less) that obtained their higher education qualification (i.e. at least a bachelor's degree or an equivalent higher educational qualification) at a South African university between 2004 and 2014. The time period was chosen based on the time the University in question was officially established.

4.6.2 Sampling Frame

According to Fowler (2014:15), in research, any sample procedure or technique will give some individuals a chance to be included in the sample while excluding others. Thus, individuals who have been included in the sample represent a sample frame. In simple terms, a sample frame refers to a list of elements from which the sample may be drawn (Adams *et al.*, 2007:88). In this research study, the sample frame comprised of graduates both employed and unemployed, disregarding where they live, who successfully completed their study at a South African university and are 35 years or less.

4.6.3 Sampling size

There are many debatable points relating to the selection of a sample size. This view is supported by Fowler (2014:39) who maintains that there is no conclusive answer regarding how large a sample size for any study should be, as either way sampling errors are still dependent on the sample size. In this research study, the sample size is 233 graduates. Because a sample size (n) greater than 30 is deemed sufficient for normal distribution (Swanepoel *et al.*, 2010:200), statistically the 233 sample size is large enough.

4.6.4 Sampling technique

There are at least two main types of sampling methods, that is, probability and non-probability sampling. The probability sampling method stems from the probability theory, which is based on random selection (Maree & Pietersen, 2012b:172). Non-probability sampling method is explained below.

4.6.4.1 Non-probability sampling

Non-probability sampling is a method of case selection other than random selection (Singleton *et al.*, 1993:159). According to Somkekh and Lewin (2011:224) this method is usually used to target a specific group of people and it is not seeking to generalise findings to the entire population. The four main types of non-probability sampling are convenience sampling, quota sampling, purposive sampling and snowball sampling. The use of all these approaches depends on the research topic, time and costs applicable.

For the purpose of this study, a purposive sampling method was deemed suitable as the researcher consciously targeted graduates who were 35 years or less and completed their degree qualification between 2004 and 2014. To avoid bias owing to the use of non-probability sampling, the university in question granted access into the alumni database where graduates were then chosen randomly, regardless of the course they studied however still within the set criterion.

How purposive sampling works is that the researcher will purposively choose a sample mainly because it meets specific characteristics (Somekh & Lewin, 2011). According to Swanepoel *et al.* (2010:14), although non-probability sampling methods utilise more subjective criteria is sample selection, these methods can save time and costs. While the main limitations of non-probability sampling may be the difficulty in calculating sampling errors (Singleton *et al.*, 1993:159), purposive sampling can be exceptionally valuable for circumstances where a researcher needs to reach a targeted sample quickly and where sampling for proportionality is not the key concern (Kelley *et al.*, 2003).

4.7 DATA COLLECTION METHODS

There are many methods used to collect data when it comes to research, and the choice of methodology depends on the research problem in question, and most

importantly the research philosophy or assumptions guiding the entire research process. According to Kerlinger (1986), the choice of a particular method is determined by availability of financial resources as well as circumstances underlying the research.

Following the adoption of the survey research method in this study, it should be noted that there are a wide range of methods that can assist the researcher in answering the research problem in question. According to Kelley *et al.* (2003) some of the most common survey methods of data collection include questionnaires, which can either be in the form of online or mail, face-to-face interviews, telephonic interviews. This study made use of the questionnaire data collection type (mail survey), and questionnaire ideas are adapted from CHEC (2013) and Moleke (2006) among others. The survey was conducted by means of a self-administered questionnaire, which was sent via email to graduates accessed from the university's alumni database. Self-administered questionnaires were used because it was not possible to personally interview graduates due to location and time constraints.

According to Ditsa (2004:764) there are many advantages associated with the use of mail surveys, which are far greater than its disadvantages. One of the advantages of this type of survey is that it is relatively cost efficient and no interviewer is present who may affect the respondent (Maree & Pieterson, 2012a:157), thus there is no interviewer bias (Bailey, 1987:148). An obvious drawback of the mail survey is attributed to its response rate, which can be quite low depending on the research topic and the population (Fowler, 2014:73; Neuman, 2011). This means that the questionnaire should be simple or easy to understand and respond to.

4.7.1 Questionnaire design

According to Fowler (2014:100) a good questionnaire is one that is clear and well-defined in terms of what is it trying to measure. In this study, the questionnaire was carefully designed in accordance with the empirical objectives of the study as stated in Chapter 1. The pre-test study also played a significant role in ensuring that the questionnaire was appropriate. The self-administered questionnaire also had no navigational issues as it was constructed by a qualified statistician who made sure that the respondents do not encounter problems when completing the questionnaire. Also, the questionnaire length was precise and short (2 pages and took 10 minutes

or less to complete). The questionnaire was also clear and self-explanatory, accompanied by instructions. As previously pointed out, the questionnaire link was sent via email with a cover letter, which accurately explained the purpose of the study, the length of the questionnaire, details of the researcher and how the results of the questionnaire will be used (refer to annexure).

4.7.2 Questionnaire format

Questionnaire ideas were adopted from CHEC (2013) and Moleke (2006) among others; however, they were adapted to fit the purpose of the study. One section of the questionnaire made use of the Likert scale, where respondents express their responses in terms of level categories. The aim of using this type of scale is to know the extent of certain factors. Similarly, Neuman (2011:222) asserts that the use of scales in a questionnaire is imperative as it can give the researcher more information about a variable and expand the quality of measurement. The rating scale measures used in the questionnaire were 1 = strongly agree, 2 = agree, 3 = neutral, 4 = disagree and 5 = strongly disagree.

According to Bertram (2007) some of the strengths and weaknesses of the Likert scale are listed below.

Table 4.2: Strengths and weaknesses of the Likert scale

Strengths	Weaknesses
- Easy construction - Produces a profoundly dependable scale - Simple to peruse and finish for respondents	- Central tendency bias - Social desirability bias - Absence of reproducibility - Legitimacy may be hard to illustrate

Source: Bertram (2007)

4.7.3 Questionnaire layout

The questionnaire used in the study contained three sections (refer to annexure). Section A covers demographic variables such as gender, race, age, religion and languages spoken. The aim of this section is to determine the influence (if any) these variables have on the employment status of graduates. Section B focuses on employment and education information of the respondent. The last section addresses the respondent's perception of the factors influencing unemployment of

graduates. In this section, participants were asked to indicate the extent to which they think a number of listed factors play a role in the unemployment of graduates. Table 4.3 indicates which questions were used to address each of the empirical objectives stated in the study.

Table 4.3: Questionnaire items answering the empirical objective

Empirical Research Objectives	Items
Determine the average time it takes a graduate to find employment.	B5
Assess if the employed graduates are employed in their field of study.	B1a-4; B7
Establish the personal and social economic factors that determine the employment status of graduates in South Africa.	A1-6a; B1-13; C1-13
Determine if degree choice plays a significant role in graduates' employment prospects.	B1a-3; B8; B12-13; C5

Adapted from: Sharp (2012)

4.7.4 Validity and reliability

In this study, a pilot study was conducted in order to determine which of the questions were ambiguous and not clear before the questionnaires were distributed. The pilot study involved thirty-seven people who pointed out mistakes in the question format, grammar and whether the questions address some of the objectives of the study. The pilot study was not statistically analysed as the aim was to clarify questions that were vague and confusing. The quantitative data collected by means of a questionnaire (online/mail survey by Survey Monkey) were analysed with a computer programme called SPSS. The results and analysis of the data are discussed in the next chapter.

4.7.5 Ethics

According to Kelley *et al.* (2003:266) it is very important for a research study to be conducted in an ethical way while at the same time upholding the best research practice. This is true, especially when the manner in which the data are collected involved asking individuals questions. Adams *et al.* (2007:35) also argues that in research there is always the need for the work to be carried out honestly and with integrity at all times. The researcher has the following ethical responsibilities:

- Informed consent – participants should be fully informed about the research, its aims as well as any other points, which may be necessary
- Confidentiality and anonymity – this means that the researcher should ensure the participants' information remains confidential and that their privacy is respected (Adams *et al.*, 2007; Fowler, 2014; Somekh & Lewin, 2011).

The study complied with ethical standards of academic research, which entails ensuring respondent's confidentiality and voluntary participation. Before proceeding to collect the data, the questionnaire was presented to the university's ethics committee and was approved in April 2015. The aims of the research were clearly described in the questionnaire cover letter and participants were assured of confidentiality (refer to annexure B-1 and B-2).

4.8   STATISTICAL ANALYSIS

The statistical software package (SPSS) was used to analyse the data. The statistical methods applied to the data are discussed below.

4.8.1 Descriptive statistics

Descriptive statistics methods are used to summarise characteristics from the data that will disclose some unknown traits of the data set (Swanepoel *et al.*, 2010:55). The methods includes tables, charts, diagrams etc. (Somekh & Lewin, 2011:221).In this study, descriptive statistics were used to analyse the data that was collected so as to give out a clear image of how things are.

4.8.2 Significance test

Significance testing involves testing whether the sample average is significantly different from the population average (Malhotra, 2010). Basically, the test of significance process compares the observed data with a hypothesis whose truth is

being assessed. The study therefore utilised significance tests in the analysis of the regression.

4.8.3 Analysis of variance (ANOVA)

ANOVA model is a regression model that may comprise dummy variables as the independent variables (Gujarati & Porter, 2010:179). At times, the dependent variable in a regression analysis is not always affected or influenced by variables, which are easily quantified, like income, but by other factors, which are said to be qualitative and categorical, such as gender. Thus, because of these complexities, ANOVA models usually are used to determine the influence variables, which are qualitative in nature, might have on the dependent variable.

4.8.4 Cross tabulation analysis

Because data has many categorical variables, a cross tabulation was used to compare responses on employment status and all the explanatory variables such as gender and age.

4.8.5 Regression analysis

In this study, an ordinary least squares (OLS) regression was used to assess which factors play a significant role in graduates' unemployment length or job waiting period.

4.8.5.1   The first OLS regression on unemployment length and personal and social economic factors

$$UNEMPL = \ \beta_0 \ + \ \sum_{n}^{i} \beta_i \, \chi_i \ + \ \sum_{n}^{i} \beta_j \, \mathcal{D}_j + \varepsilon \dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots. (4.1)$$

Where *UNEMPL* is the graduate unemployment length; a continuous variable measured in months, β_0 is the constant term that will capture average unemployment length. β_i is the constant term associated with X_i, which is age, β_j is the constant term associated with D_j, which are the categorical values that will be entered as dummies where the number of dummies will be *n – 1; n* being the number of categories. So where there are five categories, four dummies will be created and in

that case the fifth dummy becomes the benchmark or the reference point. The various categorical values and their dummy variables are briefly explained below.

Gender

DG is the dummy for gender and is defined as: 1 = females; 0 = males.

Use of the campus career centre

DG is the dummy for campus career centre and is defined as: 1 = Yes =; 0 = No

Race

DR is the dummy for race which includes Blacks, Asian, Coloured and White, which is defined as follows:
- *DR_1* is the dummy variable for Black where: 1 = Black; 0 = all other races
- *DR_2* is the dummy variable for Asia where: 1 = Asian; 0 = all other races
- *DR_3* is the dummy variable for Coloured where: 1 = Coloured; 0 = all other races.
- *DR_4* is the dummy variable for White where: 1 = White; 0 = all other races.

Marital status

DM is the dummy for marital status, where one is assigned if the respondent is married or living with a partner, zero if unmarried or not living with a partner.

Religion

DREL is the dummy variable for religion, where the dummy variables are defined as follows:
- $DREL_1$ is the dummy variable for no religion where: 1 = no religion; 0 = all else.
- $DREL_2$ is the dummy variable for Christian where: 1 = Christian; 0 = all else.
- $DREL_3$ is the dummy variable for Hindu where: 1 = Hindu; 0 = all else.
- $DREL_4$ is the dummy variable for Muslim where: 1 = Muslim; 0 = all else.

Job searching skills

Job searching skills were described as those that entail verbal, writing, listening and technological skills. Thus, for instance, when a graduate stated that they had excellent job searching skills, then that would mean they are good in all the categories of skills listed above,

DJOBS is the dummy variable for job searching skills, which is defined as follows:

- DJOBS1 is the dummy variable for excellent job searching skills where: 1 = Excellent; 0 = all else

- DJOBS2 is the dummy variable for good job searching skills where: 1 = Good; 0 = all else

- DJOBS3 is the dummy variable for neither excellent nor good job searching skills where: 1 = Okay; 0 = all else

- DJOBS4 is the dummy variable for poor job searching skills where: 1 = Poor; 0 = all else

4.8.5.2   Second OLS regression on unemployment length and field of study

To further determine if degree choice plays a significant role in graduate's employment prospects, the following model is estimated:

$$UNEMPL = \beta_0 + \beta_1 D_1 + \beta_2 D_2 + \beta_3 D_3 + \varepsilon \dotfill (4.2)$$

Where β_0 captures the average unemployment length for the benchmark or reference field of study. The independent variables include all the fields of studies or degrees where dummy variables were created, that is, Commerce is the reference point or constant, Science is D_1, Humanities is D_2, and Education is D_3.

4.8.5.3   Third OLS regression on unemployment length and modules that graduates majored in

To further determine if the major module or specialisation plays a significant role in graduate's employment prospects, the following model is estimated:

$$UNEMPL = \beta_0 + \sum_n^i \beta_i D_i + \beta_n D_n \dots + \cdots \varepsilon \dots\dots\dots\dots\dots\dots\dots\dots\dots\dots. (4.3)$$

Where $UNEMPL$ is the period in which the graduates were unemployed; a continuous variable measured in months. β_0 is the constant term that will capture the average unemployment length for the benchmark module category, in this case, Human resources and Labour relations studies (HRLS), holding all other variables

equal to zero, and β_1 is the coefficient associated with D_i, which is the dummy variable created for the modules the graduate majored or specialised in.

The dummy variables are defined as follows; human resources and labour relations studies (HRLS) is the reference point or constant, economics and risk management is D_1, accounting and financial management is D_2, marketing, business management and entrepreneurship is D_3, psychology and sociology is D_4, mathematics and statistics is D_5, languages and communication is D_6, law is D_7, computer sciences and information technology is D_8, public admin, public management and political studies is D_9, intermediate, senior and FET education is D_{10}, health and social work is D_{11}, art and history is D_{12}.

4.9   SUMMARY AND CONCLUSION

This chapter discussed the methodological procedures used in this study. The nature and scope of the empirical research methodology used was also discussed, which included the philosophical foundations adopted in the study. The use of questionnaire as a method of data collection justified a quantitative method research design.

In order to conduct this study, a survey method was selected and also described. This also included the methods used to collect the data, the questionnaire design, layout and format, and statistical procedures. In the following chapter, the findings of the empirical research undertaken are analysed and the results are discussed.

CHAPTER 5: ANALYSIS AND INTERPRETATION

5.1   INTRODUCTION

This chapter provides the findings of the data collected through a survey on the determinants of employment status of young graduates from a South African university. The first section of this chapter reports on the demographics of the surveyed graduates, and this is followed by a section that presents cross-tabulations, analysing the characteristics of the employment status and other social factors. Regression analyses and perceptions of graduate unemployment are presented in the last section of the chapter.

The primary objective set out in the first chapter was to identify the determinants of the employment status of young graduates from a South African university. The theoretical objectives were achieved in Chapter 2 and 3. The main empirical objectives formulated for the study were:

- Determine the average time it takes a graduate to find employment.
- Assess if the employed graduates are employed in their field of study.
- Establish the personal and social economic factors that determine the employment status of graduates in South Africa.
- Determine if degree choice plays a significant role in graduates' employment prospects.

5.2   DEMOGRAPHIC CHARACTERISTICS OF THE SURVEYED GRADUATES

The demographic profile presented in this sub-section includes gender, age, field of study, level of education, employment status, marital status, religion, race and other variables.

5.2.1 Gender distribution

Figure 5.1 presents the distribution for gender and reveals a higher percentage for female graduates (58%) relative to that of male graduates (42%). The results are somewhat consistent with the national figures that also show that there are more female graduates in South Africa than males (CHEC, 2013:5; Stats SA, 2014a).

Figure 5.1: Percentage distribution of gender
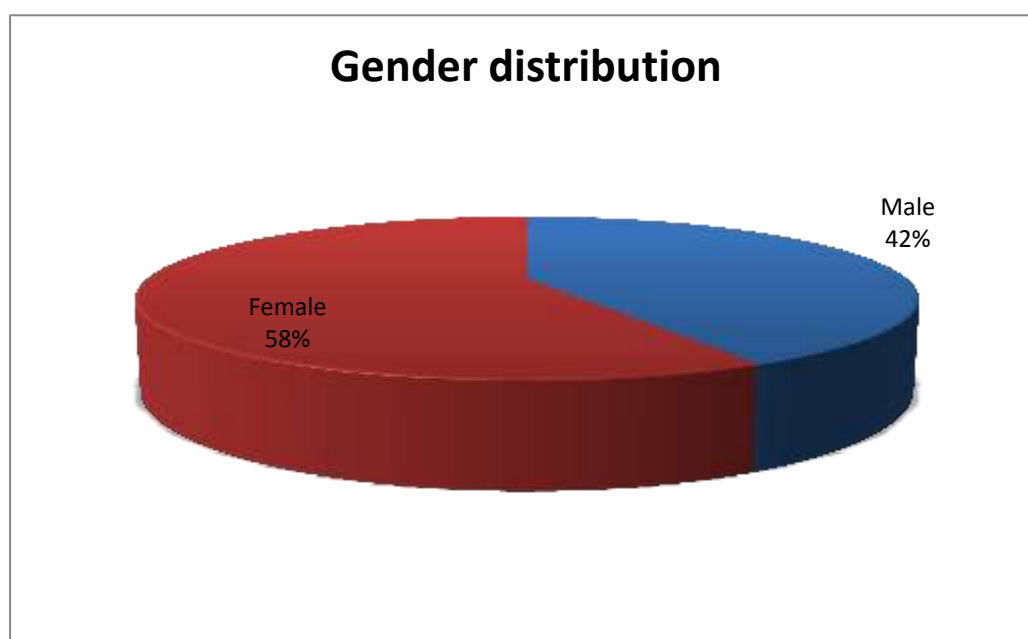
Source: Survey data (2015)

5.2.2 Age profile of respondents

In this study, age was measured continuously and not categorised. Table 5.1 presents the descriptive statistics on the age distribution and reveals that the average age of the surveyed graduates is 27 years. Median age in South Africa is 26.5 years (World FactBook, 2015). The youngest person in the survey was 21 years old, while the oldest, or the maximum age, was 35 years. Approximately 68 percent of the surveyed graduates were in the age the age category 21-29, see Table 5.1-1.

Table 5.1: Age distribution

	N	Minimum	Maximum	Mean	Std. Deviation
Age	233	21.00	35.00	27.7082	4.00116
Valid N (listwise)	233				

Source: Survey data (2015)

Table 5.1-1: Distribution per age category

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	**21-24 years**	83	35.6	35.6	35.6
	25-29 years	77	33.0	33.0	68.7
	30-35 years	73	31.3	31.3	100.0
	Total	233	100.0	100.0	

Source: Survey data (2015)

5.2.3 Race profile

Figure 5.2 illustrates the distribution of the surveyed graduates by race. The figure reveals that there were more Black graduates (58%). White graduates were the second largest at 40 percent, followed by Coloureds and Indians at 1.3 percent and 0.9 percent respectively. A comparison with a study by CHEC (2013:5) shows that Black graduates constitute the majority race in at least four major universities in the country, which is consistent with the survey results. Another study by the Department of Higher Education (2014) reported that by 2011, Black students made up 81 percent of the total student body of 938 200.

Figure 5.2: Percentage distribution of race
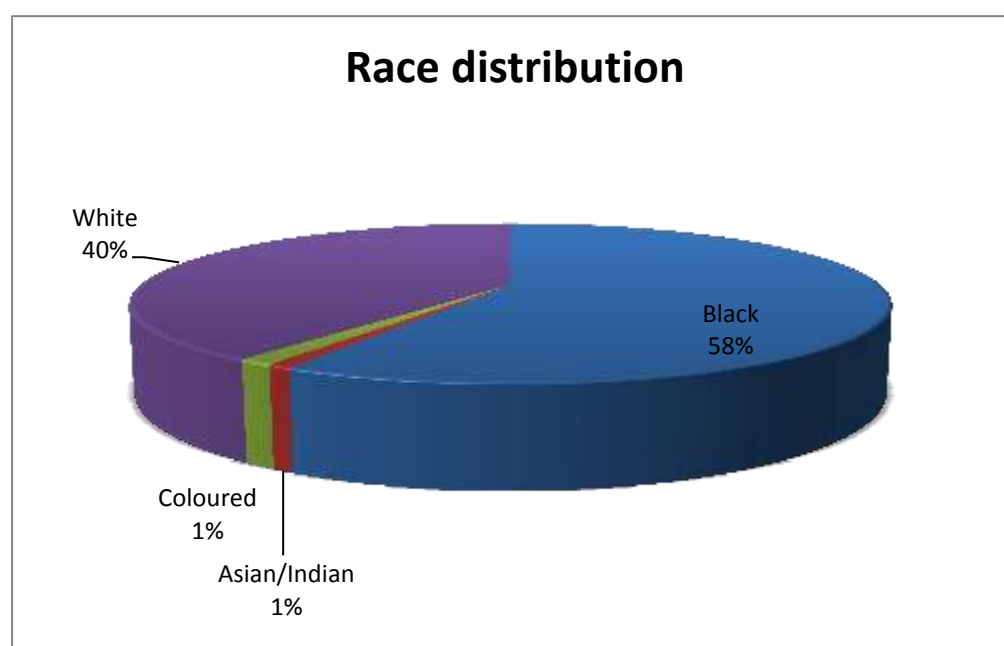
Source: Survey data (2015)

5.2.4 Marital status profile

Figure 5.3 shows the marital status of the sampled population. The figure shows that majority (59%) of the surveyed graduates are not married or living with any partners while about 40 percent of the participants are married or living with a partner. Of those that are married, 80 percent were employed on a full time basis, 9 percent were working part time, while 10 percent are unemployed. With regards to those who are not married, 72 percent were employed full time, while 17 percent were employed on a part time basis.

Figure 5.3: Percentage distribution of marital status
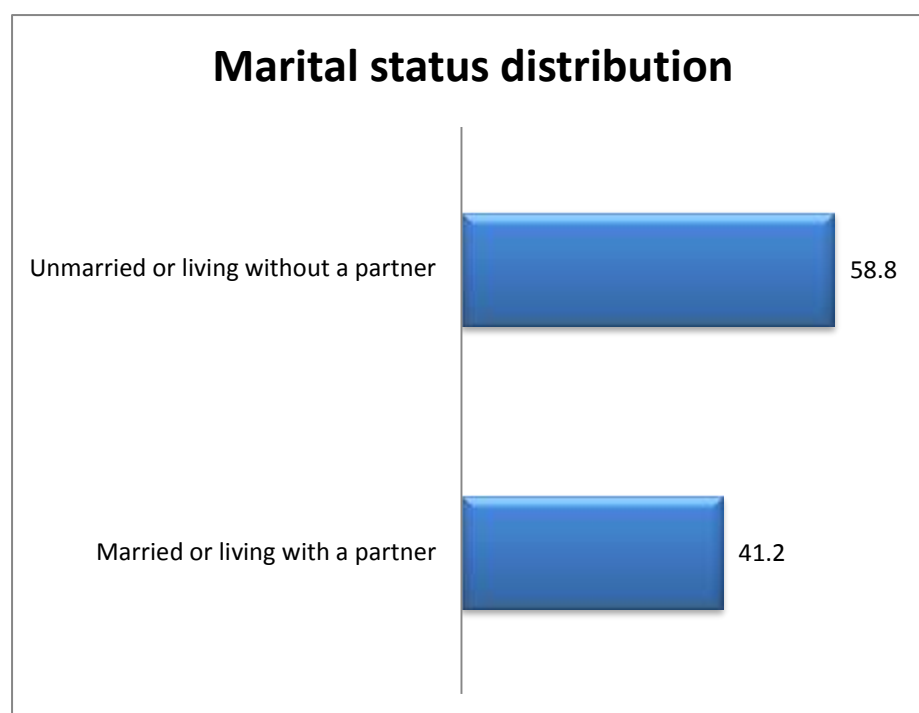
Source: Survey data (2015)

At times, the impact of marital status on employment status might depend on gender, particularly pertaining to the fact that men and women play different roles in marriage (Posel & Casale, 2013). Traditionally, the role of men was to work for the family while women stayed at home and looked after children. Cross tabulation analysis on employment status, marital status and gender (Annexure D) shows that out of those that are unemployed and married, 70 percent are females, while out of those that are unemployed but not married, 63 percent are females. This implies that more married

females are unemployed. It could be an individual choice for some men not to want their wives to go and work, especially if the husband can adequately provide for the family. Also, certain personal beliefs could be the cause of why more married female graduates were unemployed. Kulik (2001) also found that most married women were likely to reject jobs because of conflict with family responsibilities.

5.2.5 Religion profile of the sample population

Figure 5.4 provides the summary statistics for religion. From the figure it can be deduced that the majority of the sampled population are Christians (88%), while about 0.4 percent of the graduates are Hindus and 8.6 percent of the participants follow no religion, whereas 3 percent are Muslims.

Figure 5.4: Percentage distribution of religion
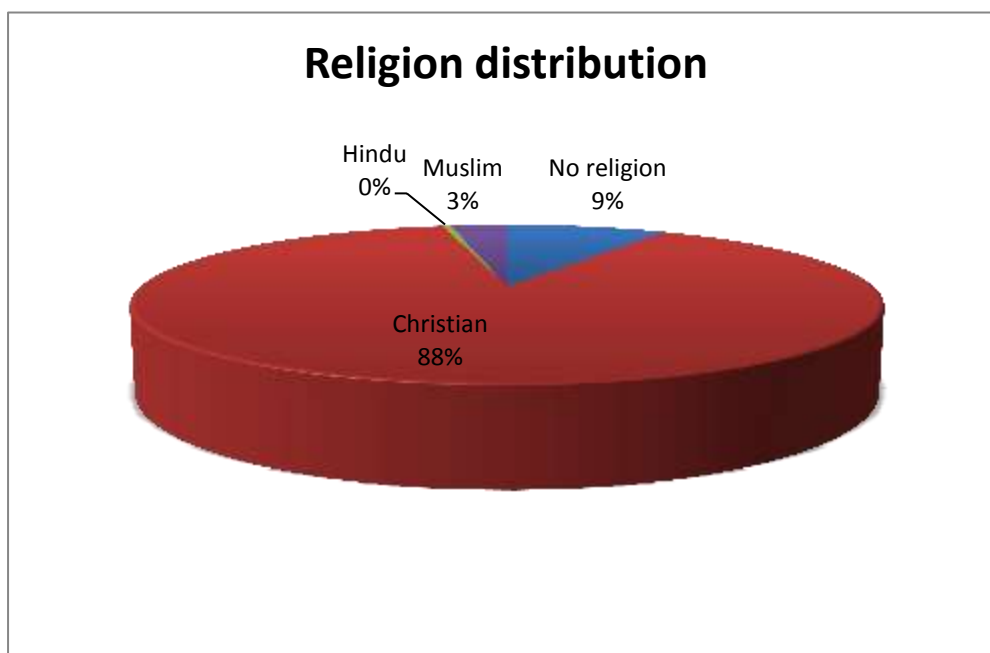
Source: Survey data (2015)

5.2.6 Language distribution

The survey data shows that the number of languages spoken was 3, while the highest number of languages spoken was 8. As can be seen in Figure 5.5, English, followed by Nguni languages and Sesotho are the most common languages, especially pertaining to the fact that majority of the respondents were Blacks.

According to the 2011 census, about 38.7 percent of South Africans spoke Zulu and Xhosa, Afrikaans at 13.5 percent, English at 9.6 percent and other languages at 5 percent (The New Growth Path, 2011). However, English remains the "language of power" in South Africa (Alexander, 2006:3) and this is evident in the sample. Other common languages in the sample population included Pedi and Xhosa.

Figure 5.5: Language distribution
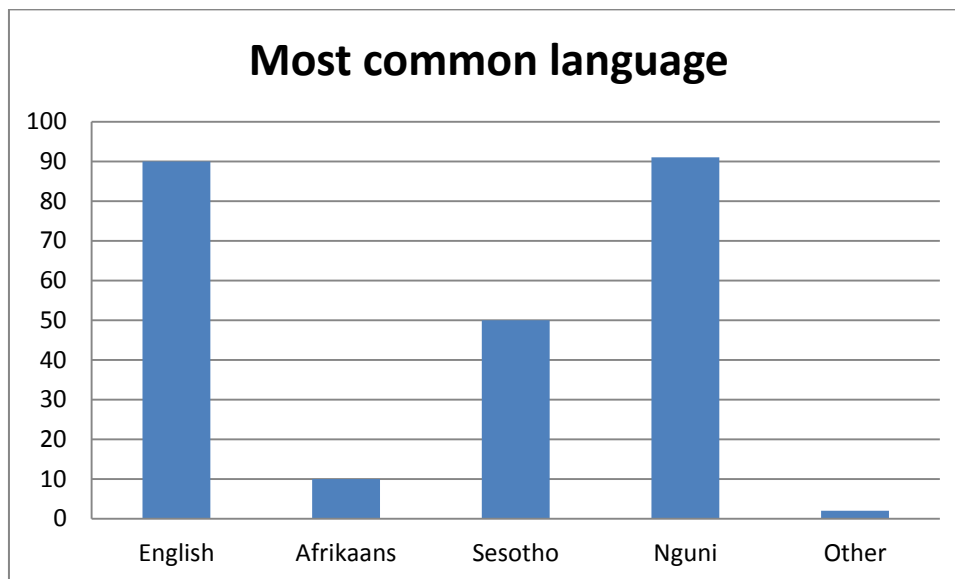
Source: Survey data (2015)

5.2.7 Qualifications of the population sample

Figure 5.6 illustrates the educational levels of the sample. A large number of the respondents possess an honours degree (43%), followed by a bachelor's degree (35%) and a master's degree (19%). Only 3 percent of the surveyed respondents have postgraduate diplomas.

Figure 5.6: Percentage distribution of educational level
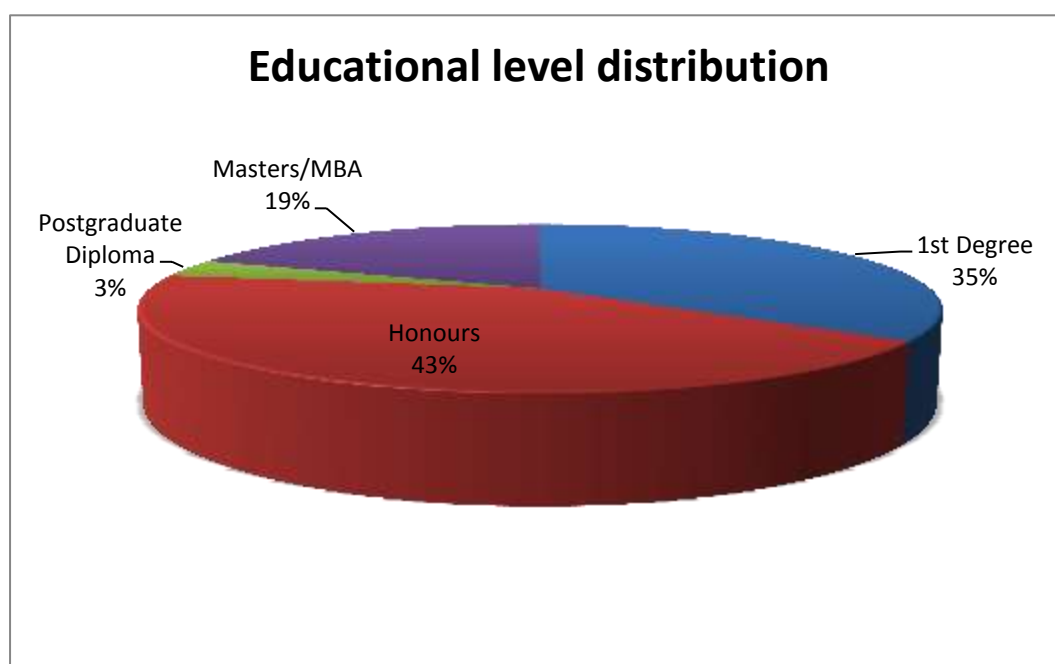
Source: Survey data (2015)

What is interesting in these results as shown in Figure 5.6, is that majority of the graduates in the survey possess at least a second degree, namely honours. Oluwajodu *et al.* (2015) also found more graduates were in possession of an honours qualification offering them a better chance of finding employment because a degree alone is not sufficient. Table 5.10 shows that many of those who are unemployed have just a degree compared to those who have higher levels of qualifications.

5.2.8 Field of study

The university in question has only the following fields of study; Education, Science, Commerce and Humanities. Figure 5.7 shows that over half of those surveyed had a qualification in Commerce (53%). The second field of study, which had the largest number of respondents, was Humanities at 25 percent, which was followed by Education and Science both at 11 percent.

Figure 5.7: Percentage distributions of study field
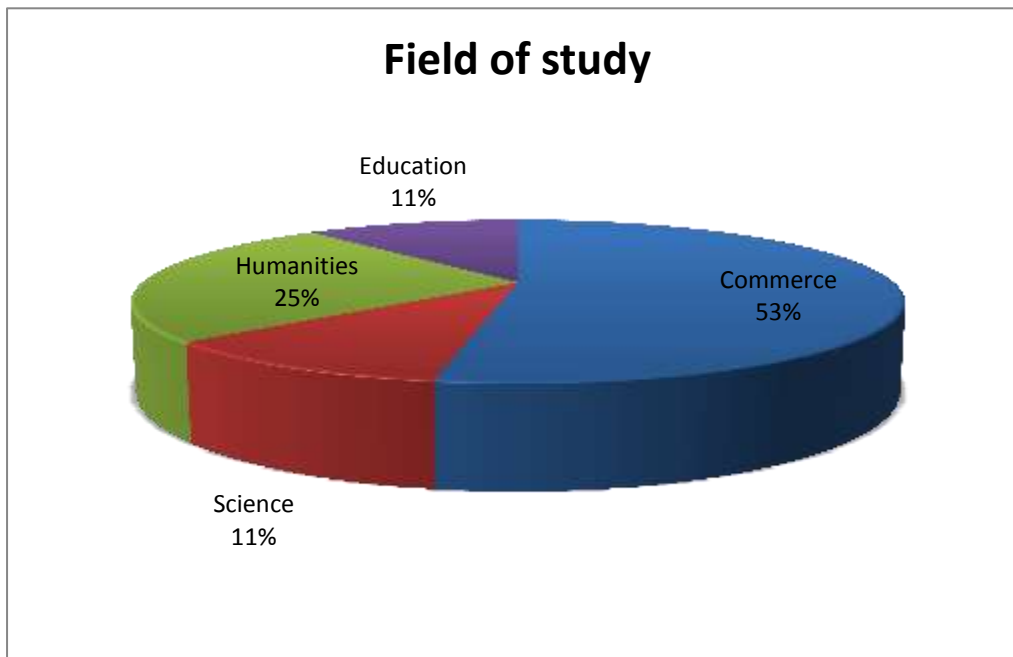
Source: Survey data (2015)

In this section, respondents were asked to indicate their main specialisation modules. These responses were grouped into themes or mainstreams as per the university's faculties. As can be seen from Figure 5.8, all the university's major modules are well represented, with the most popular specialisation majors being labour studies (19%), economics (19%) and accounting (16%). This is followed by marketing and business management at 10.3 percent. The major or specialisation with the least number of respondents is law and history, which can be because the subjects have only been on offer for 2 years. The results further show that 6.9 percent and 6 percent of the population sample majored in computer studies and communications respectively.

Figure 5.8: Percentage distributions of specialisation major
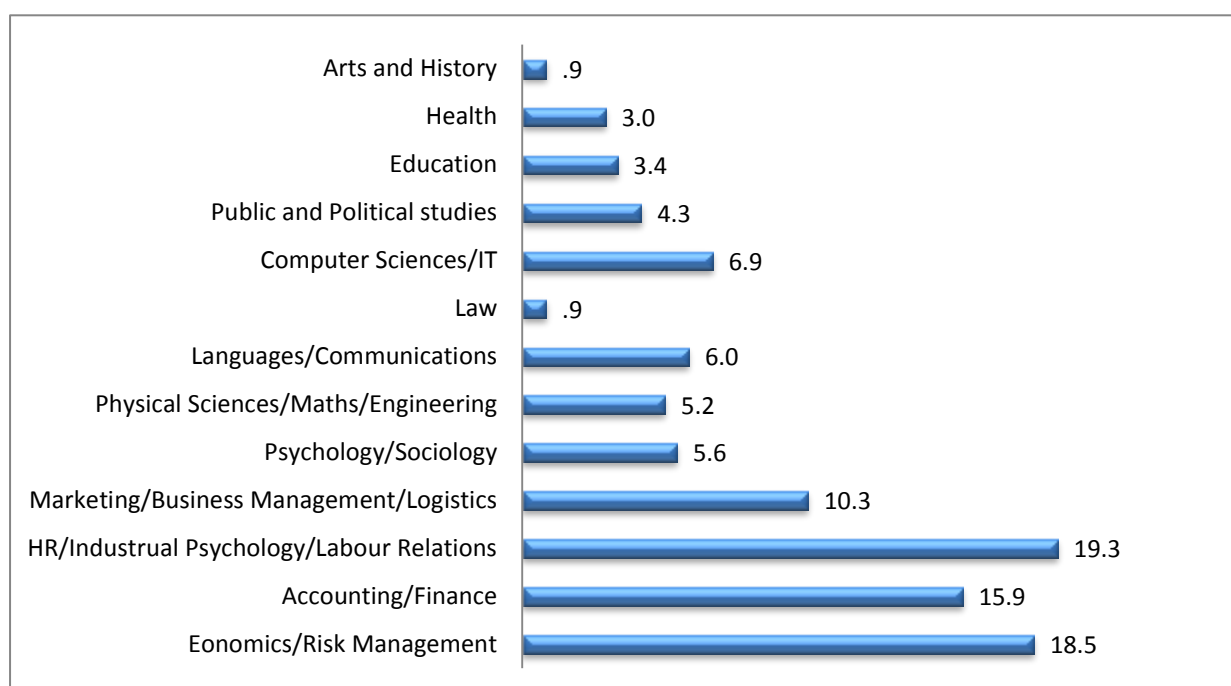
Source: Survey data (2015)

5.2.9 Employment status of the sample population

The employment status of the surveyed graduates is presented in Figure 5.8. As can be seen from the figure, the unemployment rate of the sampled population is 11.2 percent, while approximately 88 percent are employed (see Table 5.2). These results are contrary to the findings of Altbeker and Storme (2013) and Van Der Berg and Van Broekhuizen (2012) who found average graduate unemployment rate to be just 5 percent.

Table 5.2: Employment status distributions

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	**Employed**	207	88.8	88.8	88.8
	Unemployed	26	11.2	11.2	100
	Total	233	100	100	

Source: Survey data (2015)

Of the employed, three quarters are employed on a full-time basis while 13 percent work part-time. When asked whether they were employed in their field of study, 65 percent of the respondents reported that they were employed in their field of study while 27 percent were not employed in their respective fields of study. The most surprising aspect of the result is that the unemployment rate among the surveyed graduates was somewhat higher than the 5 to 7 percent average graduate unemployment rate found in several national studies (Altbeker & Storme, 2013; Van Broekhuizen, 2012; Van Der Berg & Van Broekhuizen, 2012). According to Hofmeyr and Nyoka (2014:21) the unemployment rate among tertiary education holders was 11 percent. Archer and Chetty (2013) also found a higher graduate unemployment rate of 13 percent. Hofmeyr and Nyoka's findings are therefore similar to the findings of this study.

Figure 5.9: Percentage distribution of employment status

Employment Status Distribution

	Employed Full Time	Employed Part time	Unemployed
■ Employment Status	75.1	13.7	11.2
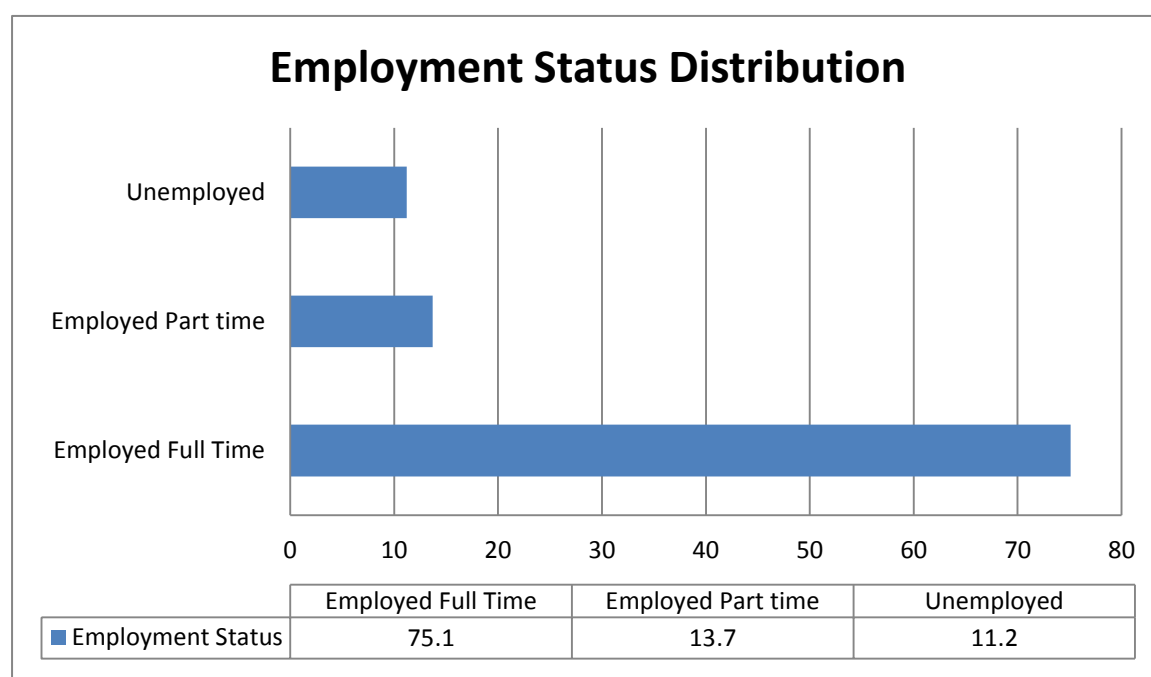
Source: Survey data (2015)

Of those that are unemployed, the average period they have been unemployed for is about two months. This is often seen as a normal waiting period, which is only temporal because some graduates do not get jobs immediately after graduation because of frictions that exist in the labour market such as lack of information. The Cape Town Higher Education Consortium (CHEC, 2013:15) maintains that with

regards to frictional unemployment, usually the unemployment spells are of a short term nature, which are temporary and usually associated with the timing of graduation, therefore, can be solved with time.

The highest length of unemployment is 36 months and this is worrying because it may indicate structural unemployment, where one of the reasons these graduates struggle for jobs is because they graduate with qualifications that are not needed by firms. As unused skills depreciate with time, what they graduated with three or four years ago may be irrelevant now. The longer one stays unemployed, the higher the chances of remaining in longer unemployment spell (Stats SA, 2015c).

5.2.9.1 Are the employed graduates employed in their field of study?

Results of the survey in Table 5.2 showed that 88.8 percent of the surveyed participants were employed, irrespective of the nature of employment, *inter alia* whether part time or full time. Further cross tabulation analysis in Table 5.3-1 shows that 72.9 percent of the respondents are employed in their field of study compared to only 27.1 percent that are not employed in their field of study. One of the reasons could be attributed to the availability of jobs, where, if graduates cannot find their desired jobs, they are forced to accept a job that is outside their field of study.

Table 5.3-1: Employment status and whether graduates are employed in their fields of study

			Is the participant employed in their field of study		Total
			Yes	No	
Employment status	Employed	Count	151	56	207
		% within New employment status	72.9%	27.1%	100%
		% within Is the participant employed in their field of study	100%	100%	88.8%

Source: Survey data (2015)

Respondents who were not employed in their field of study were further asked to indicate the state of their current job. As can be seen in Table 5.3-2, about 52 percent of graduates who are not employed in their field of study are in jobs below

their desired field. This is a problem as these graduates may be underemployed, and not utilising their skills to their full potential. According to Moleke (2006:6), the types of jobs that graduates receive are important indicators of whether their education is contributing towards repaying their investment. Just as getting employment is important, so is the type of employment received. This could lead to discouragement. A study by AEO (2012) found underemployment and discouragement to be very high among younger tertiary graduates.

Table 5.3-2: Job state of graduates not employed in their field of study

			Current Job state				Total
			Not applicable	Better	The same	Below	
Not employed in Field of Study	1.00	Count	0	15	12	29	56
		% within Not employed in field	0.0%	26.8%	21.4%	51.8%	100%
		% within Current Job state	0.0%	100%	100%	100%	24%
		% of Total	0.0%	6.4%	5.2%	12.4%	24%
Total		Count	177	15	12	29	233
		% within Not Employed in field	76.0%	6.4%	5.2%	12.4%	100%
		% within Current Job state	100%	100%	100%	100%	100%
		% of Total	76%	6.4%	5.2%	12.4%	100%

Source: Survey data (2015)

5.2.10 Job waiting period in months

Table 5.4 below presents the descriptive statistics for the period it took to get a first job. On average, it took seven months for a graduate to get a job. The minimum period it took to get employment was less than a month (two to three weeks). The results are consistent with the study by Altbeker and Storme (2013:14) and CHEC (2013:15), who found that most graduates were fractionally unemployed while waiting for jobs that they will eventually find. The maximum job waiting period, 84

months, could be attributed to individual characteristics or personal circumstances, since only one graduate in the sample waited that long before getting their first job.

Table 5.4: Descriptive statistics on employment waiting period in months

	N	Minimum	Maximum	Mean	Std. Deviation
How long it took the participant to get their first job	233	.40	84.00	6.8567	10.29338
Valid N (listwise)	233				

Source: Survey data (2015)

5.2.11 How graduates feel about their studied courses

In this section, respondents were asked to indicate whether they would change their courses should they be able to start again. Figure 5.10 shows that approximately 55 percent of the respondents said they would not change their course compared to about 41 percent who said they would change their course and choose a different one. Only 4.3 percent said they would never enter higher education institutions again.

Figure 5.10: Would you change your course if you would start again?
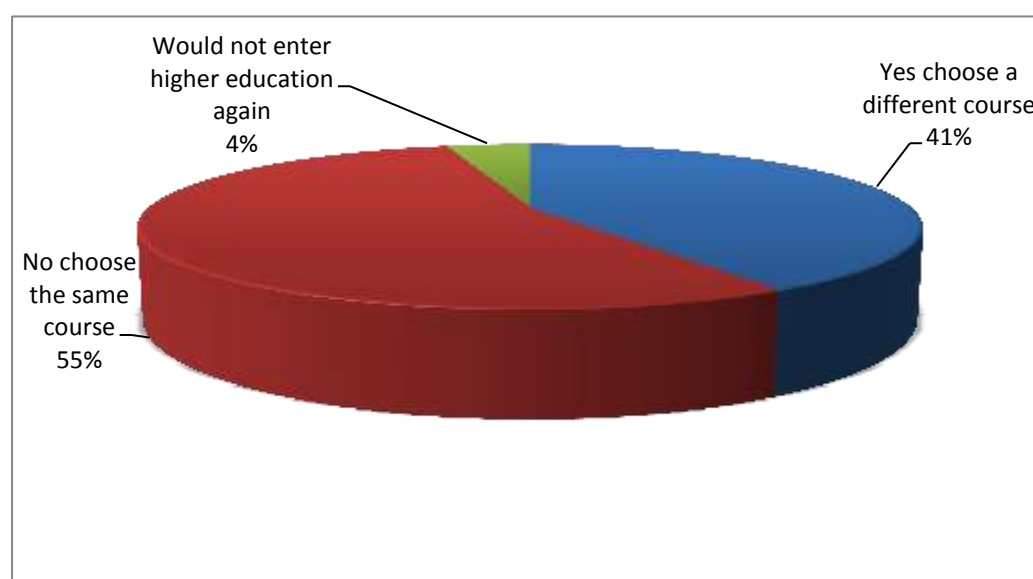
Source: Survey data (2015)

The most striking results to emerge from the data in Table 5.5 are that the majority of the employed respondents (56.5%) were the ones who said they would not change their course, that is, they would still do the same courses. About 58 percent of the unemployed graduates said they would change their courses and choose a different one if they would start again. The respondents were further asked to provide a reason for their choice and most of these unemployed graduates mentioned that they are discouraged. Secondly, they felt they are in possession of qualifications that are not in demand; hence, they feel the need to start again and choose different courses. Pauw *et al.* (2006) found that many unemployed graduates had graduated with qualifications not needed by firms and the students had really low grades, which can be argued to fuel their need to start again and choose a different course.

Table 5.5: Cross tabulation analysis on employment status and course change

			Would the participant change course if they would start again?			Total
			Yes choose a different course	No choose the same course	Would not enter higher education again	
Employment status	**Employed**	Count	81	117	9	207
		% within Employment status	39.1%	56.5%	4.3%	100%
			84.4%	92.1%	90.0%	88.8%
	Unemployed	Count	15	10	1	26
		% within Employment status	57.7%	38.5%	3.8%	100%
			15.6%	7.9%	10.0%	11.2%
Total		Count	96	127	10	233
		% within Employment status	41.2%	54.5%	4.3%	100%

Source: Survey data (2015)

5.3 THE RELATIONSHIP BETWEEN EMPLOYMENT STATUS AND OTHER VARIABLES

5.3.1 Race

Table 5.6 shows that Black graduates in the survey are more deprived than graduates of other races, in particular White graduates. The results of the survey indicate that 81 percent of Black graduates are unemployed compared to only 19 percent that are White. None of the graduates in other race categories are unemployed. Studies by Moleke (2006) and Baldry (2013) confirm these findings. Moleke (2006:3) argues that the lower employment and high unemployment rates among Black graduates is because many of them are concentrated in fields of lower employment prospects, while Baldry (2013:13) found that the quality of education provided by HBUs also plays a major role in the higher unemployment among Black graduates.

Table 5.6: Cross tabulation on race and employment status

			Employment status		Total
			Employed	Unemployed	
Race	Black	Count	114	21	135
		% within Race	84.4%	15.6%	100%
		% within Employment status	55.1%	80.8%	57.9%
		% of Total	48.9%	9.0%	57.9%
	Asian/Indian	Count	2	0	2
		% within Race	100%	0.0%	100%
		% within Employment status	1.0%	0.0%	0.9%
		% of Total	0.9%	0.0%	0.9%
	Coloured	Count	3	0	3
		% within Race	100%	0.0%	100%
		% within Employment status	1.4%	0.0%	1.3%
		% of Total	1.3%	0.0%	1.3%
	White	Count	88	5	93
		% within Race	94.6%	5.4%	100%
		% within Employment status	42.5%	19.2%	39.9%
		% of Total	37.8%	2.1%	39.9%
Total		Count	207	26	233
		% within Race	88.8%	11.2%	100%
		% within Employment status	100%	100%	100%
		% of Total	88.8%	11.2%	100%
Correlation is significant at the 0.05 level (2-tailed)					

Source: Survey data (2015)

Correlation between race and employment status is significant at the 0.05 significance (2-sided). Within those that are employed, 55 percent are Blacks, 43 percent are White, 1 percent Asian/Indian, and 1.4 percent are Coloured.

5.3.2 Gender

The results in Table 5.7 shows that 65 percent of female graduates in the sample are unemployed compared to only 35 percent males. These results are also in line with those found by AEO (2012) that unemployment rates are higher among young women than young men. Again, Stats SA (2015a:6) reports that young women are the hardest hit in as far as unemployment is concerned compared to males. However, in this study, the Pearson chi-square test was not significant between gender and employment status.

Table 5.7: Cross-tabulations on gender and employment status

			Employment status		Total
			Employed	Unemployed	
GENDER	Male	Count	89	9	98
		% within GENDER	90.8%	9.2%	100%
		% within Employment status	43.0%	34.6%	42.1%
		% of Total	38.2%	3.9%	42.1%
	Female	Count	118	17	135
		% within GENDER	87.4%	12.6%	100%
		% within Employment status	57.0%	65.4%	57.9%
		% of Total	50.6%	7.3%	57.9%
Total		Count	207	26	233
		% within GENDER	88.8%	11.2%	100%
		% within Employment status	100%	100%	100%
		% of Total	88.8%	11.2%	100%
Pearson chi-square = .415					

Source: Survey data (2015)

5.3.3 Age

The results of the survey reveal that the majority of respondents who are unemployed are between the ages of 23 and 29. More specifically, the analysis reveals that out of those that are unemployed, 46 percent are between the ages of 21 and 24, followed by 42 percent who are in the 25 to 29 years age category and 12

percent who are between 30 and 35 years old. Pearson chi-square (0.070) shows significant association between age and employment status. Correlation between age and employment status is also significant at the 0.05 level (2-tailed). This confirms Altbeker and Storme's 2013 findings that younger graduates are more likely to be unemployed than older ones. In other words, because young graduates are often first time entrants in the labour market, they lack experience and may struggle to handle the challenges in the world of work (Biavaschi *et al.*, 2013). In their study, Oluwajodu *et al.* (2015) also found that many companies in the banking industry had a preference for older graduates because of their maturity and experience.

Table 5.8: Cross-tabulations on age and employment status

			New employment status		Total
			Employed	Unemployed	
Age Category	21-24 years	Count	71	12	83
		% within Age category	85.5%	14.5%	100%
		% within employment status	34.3%	46.2%	35.6%
		% of Total	30.5%	5.2%	35.6%
	25-29 years	Count	66	11	77
		% within Age category	85.7%	14.3%	100%
		% within employment status	31.9%	42.3%	33.0%
		% of Total	28.3%	4.7%	33.0%
	30-35 years	Count	70	3	73
		% within age category	95.9%	4.1%	100%
		% within employment status	33.8%	11.5%	31.3%
		% of Total	30.0%	1.3%	31.3%
Total		Count	207	26	233
		% within age category	88.8%	11.2%	100%
		% within employment status	100%	100%	100%
		% of Total	88.8%	11.2%	100%
Pearson chi-square = 0.070					

Source: Survey data (2015)

5.3.4 Field of study

Table 5.9 shows that out of those that are unemployed, 42 percent of the respondents graduated with a Commerce degree, followed by 4 percent who graduated with a Science degree, 46 percent hold a Humanities degree while only 8 percent have an Education degree. These findings are also confirmed by Moleke (2006:15) who found that arts and humanities graduates have the highest proportion of unemployment compared to Commerce, Science and Education graduates. In this study, the Pearson chi-square (0.065) shows a significant association between field of study and employments status.

Table 5.9: Cross-tabulation on field of study and employment status

			Employment status		Total
			Employed	Unemployed	
FIELD OF STUDY	Commerce	Count	112	11	123
		% within FIELD OF STUDY	91.1%	8.9%	100%
		% within Employment status	54.1%	42.3%	52.8%
		% of Total	48.1%	4.7%	52.8%
	Science	Count	24	1	25
		% within FIELD OF STUDY	96.0%	4.0%	100%
		% within Employment status	11.6%	3.8%	10.7%
		% of Total	10.3%	0.4%	10.7%
	Humanities	Count	47	12	59
		% within FIELD OF STUDY	79.7%	20.3%	100%
		% within Employment status	22.7%	46.2%	25.3%
		% of Total	20.2%	5.2%	25.3%
	Education	Count	24	2	26
		% within FIELD OF STUDY	92.3%	7.7%	100%
		% within Employment status	11.6%	7.7%	11.2%
		% of Total	10.3%	0.9%	11.2%
Total		Count	207	26	233
		% within FIELD OF STUDY	88.8%	11.2%	100%
		% within Employment status	100.0%	100.0%	100%
		% of Total	88.8%	11.2%	100%
Pearson chi-square = 0.065					

Source: Survey data (2015)

Within the Commerce field, 91 percent are employed, while only 9 percent are unemployed. More than 95 percent of those who graduated with a Science degree are employed compared to only 4 percent who are unemployed. Of those that graduated with a Humanities degree, 80 percent found jobs while 20 percent are unemployed. In the Education field of study, 92 percent of respondents are employed compared to only 8 percent that do not have jobs. This again shows that graduates who are most likely to be unemployed are those with degrees in Humanities. Similar findings were also found by Stampini and Verdier-Chouchane (2011).

5.3.5 Level of education

Table 5.10 relates the level of education the sample population has and employment status. It shows that out of those that are unemployed, 42 percent have a first degree while 38 percent have an honours degree. And only 19.2 percent of the unemployed have a post-honours degree. Pearson chi-square shows no significant difference or association between level of education and employments status.

As reported above, many unemployed graduates hold only a first degree, and an interesting finding from further analysis on age category and level of education reveals that a lot of respondents who have bachelor's degrees (i.e. first degrees) are between the ages of 21 and 24 (39%), see Table 5.10-1. Much of their unemployed status can be because they are young, they may lack working experience and they are new entrants in the labour market. The results of the current study are in line with those of a study done by CHEC (2013:11), which found the unemployment rate for first time entrants, that is first time graduates, was higher (10%) than that of mature graduates, that is those a bit older (5%).

Table 5.10: Cross tabulation on employment status and level of education

			Employment status		Total
			Employed	Unemployed	
Level of education	1st Degree	Count	70	11	81
		% within LEVEL OF EDUCATION	86.4%	13.6%	100%
		% within Employment status	33.8%	42.3%	34.8%
		% of Total	30%	4.7%	34.8%
	Honours	Count	90	10	100
		% within LEVEL OF EDUCATION	90%	10%	100%
		% within Employment status	43.5%	38.5%	42.9%
		% of Total	38.6%	4.3%	42.9%
	Postgraduate Diploma	Count	8	0	8
		% within LEVEL OF EDUCATION	100%	0.0%	100%
		% within Employment status	3.9%	0.0%	3.4%
		% of Total	3.4%	0.0%	3.4%
	Masters/MBA	Count	39	5	44
		% within LEVEL OF EDUCATION	88.6%	11.4%	100%
		% within Employment status	18.8%	19.2%	18.9%
		% of Total	16.7%	2.1%	18.9%
Total		Count	207	26	233
		% within LEVEL OF EDUCATION	88.8%	11.2%	100%
		% within Employment status	100%	100%	100%
		% of Total	88.8%	11.2%	100%
Pearson chi-square = 0.655					

Source: Survey data (2015)

Table 5.10 also indicates that many of the employed graduates have postgraduate qualifications, that is, honours degree (44%), postgraduate diploma (100%) and a

masters or MBA (89%). One of the reasons for this is because many employers may regard postgraduate level rather than just a degree as the most important labour market entry tool; hence, preference could be given to graduates who have an honours degree or above. This confirms the findings of Oluwajodu *et al.* (2015) who found that graduates with advanced qualifications had a higher probability of being employed than those with lower qualifications.

Table 5.10-1: Cross tabulation analysis on age and level of education

			New age category			Total
			21-24 years	25-29 years	30-35 years	
Level of Education	1st Degree	Count	32	26	23	81
		% within LEVEL OF EDUCA	39.5%	32.1%	28.4%	100%
		% within age category	38.6%	33.8%	31.5%	34.8%
		% of Total	13.7%	11.2%	9.9%	34.8%
	Honours	Count	42	32	26	100
		% within LEVEL OF EDUCA	42%	32%	26%	100%
		% within New age category	50.6%	41.6%	35.6%	42.9%
		% of Total	18.0%	13.7%	11.2%	42.9%
	Postgraduate Diploma	Count	1	1	6	8
		% within LEVEL OF EDUCA	12.5%	12.5%	75%	100%
		% within New age category	1.2%	1.3%	8.2%	3.4%
		% of Total	0.4%	0.4%	2.6%	3.4%
	Masters/MBA	Count	8	18	18	44
		% within LEVEL OF EDUCA	18.2%	40.9%	40.9%	100%
		% within New age category	9.6%	23.4%	24.7%	18.9%
		% of Total	3.4%	7.7%	7.7%	18.9%
Total		Count	83	77	73	233
		% within LEVEL OF EDUCA	35.6%	33%	31.3%	100%
		% within New age category	100%	100%	100%	100%
		% of Total	35.6%	33%	31.3%	100%
Correlation significant at the 0.05 level (2-tailed)						

Source: Survey data (2015)

5.3.7 Career guidance

This section relates employment status with whether the graduates made use of the career guidance services offered by the university. Table 5.11 shows that 57.7 percent of the unemployed graduates did not make use of career guidance facilities compared to 42.3 percent that made use of these services. Of those that made use of career guidance facilities offered by the university, 20.4 percent were unemployed and in comparison to those that did not use these services, only 8.4 percent were unemployed. It should be noted that the university in question offers career guidance from first year until students graduate, however, it is up to the student to make use of such services. From Table 5.11, it seems that a high number of the users of these services are unemployed; perhaps this could imply that career guidance services offered by the university are not well tailored as they are failing to help some graduates find jobs. In their study Oluwajodu *et al.* (2015), found that one of the reasons why certain universities in South Africa had the highest number of unemployed graduates was because many companies felt that these universities do not carry regular career exhibitions or put effort into making students aware of careers and recruitment. The chi-square test also shows a significant (0.014) association between use of career guidance services and employment status.

Table 5.11: Cross tabulation on employment status and campus career centre

| | | | Employment status | | Total |
			Employed	Unemployed	
CAMPUS CAREER CENTRE	Yes	Count	43	11	54
		% within CAMPUS CAREER CENTRE	79.6%	20.4%	100%
		% within Employment status	20.8%	42.3%	23.2%
		% of Total	18.5%	4.7%	23.2%
	No	Count	164	15	179
		% within CAMPUS CAREER CENTRE	91.6%	8.4%	100%
		% within Employment status	79.2%	57.7%	76.8%
		% of Total	70.4%	6.4%	76.8%
Total		Count	207	26	233
		% within CAMPUS CAREER CENTRE	88.8%	11.2%	100%
		% within Employment status	100%	100%	100%
		% of Total	88.8%	11.2%	100%
Pearson chi-square = 0.014					

Source: Survey data (2015)

Some of the reasons that were indicated for not using the career services are reported in Figure 5.11. As many as 56 percent said they were not aware that career guidance services are being offered at campus while only 18 percent did not have time to attend such services. Similar results are confirmed by a study by CHEC (2013:8), that found a large number of students (67%) never make use of career guidance services offered by their universities compared to only 43 percent that did. A further 17 percent of the respondents as can be seen from Figure 5.11 reported poor services offered by the campus career centre as one of the reasons why they did not make use of the career guidance facilities. Other common reasons were too much focus on common fields of study and the lack of confidence in the career guidance office. From this analysis, it can be concluded that majority of students are not aware of career guidance facilities offered by their respective campus and, perhaps the university's career guidance centre is not servicing students as it should.

Therefore, it becomes the university's responsibility to improve such service packages and increase awareness.

Figure 5.11: Reasons for not making use of the campus career centre
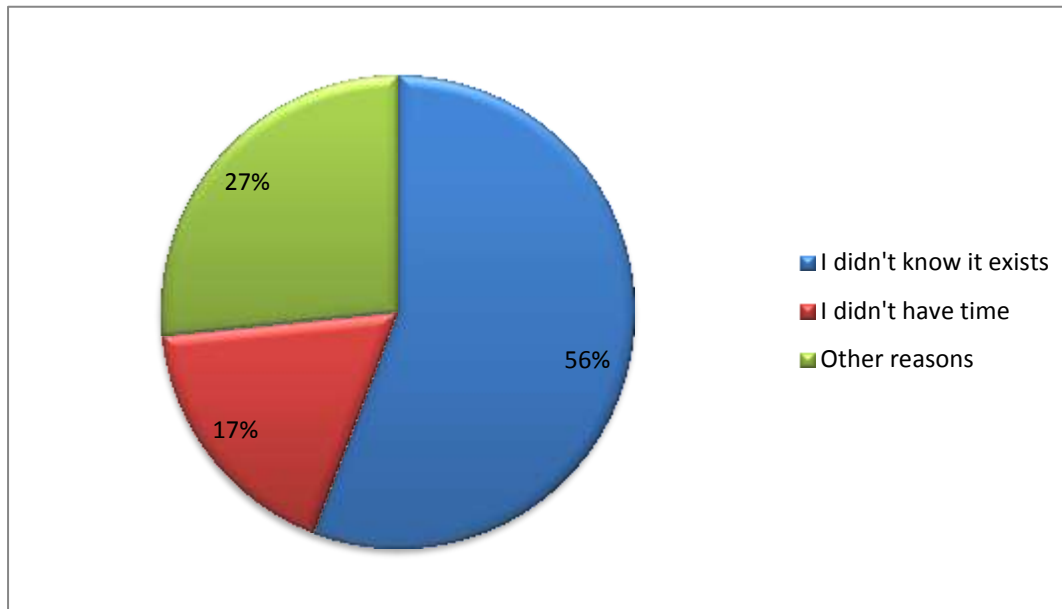
Source: Survey data (2015)

5.3.8 Major module and employment status

This section of the analysis aims to get a picture of which major modules have high unemployment and which ones have a lot of employed participants. As previously mentioned, the major modules were categorised into themes as per university faculties. The complete cross tabulation analysis table is attached (Annexure C). The analysis shows that the module specialisation category, which had the highest number of unemployed respondents (23%) is human resources, industrial psychology and labour relations. About 15 percent of the unemployed graduates majored in government and political studies. Another 15 percent majored in accounting and finance, followed by economics, psychology and sociology studies at 12 percent.

Both human resources and economics and risk management had the same number of employed graduates at 19% each. Comparing all major modules, results show that only 60 percent of respondents that majored in politics were employed. None of the 7 percent participants who majored in computer sciences were unemployed.

Approximately 88 percent of the respondents who majored in education were employed. In summary, these results show that the modules with the highest number of unemployed graduates include human resources, labour relations and politics, while more graduates who majored in economics and risk management, computer sciences, education and accounting were employed. In contrast, Altbeker and Storme (2013) found commerce and science graduates were most likely to be unemployed than other mainstream studies, while AEO (2012) also found unemployment rates to be higher among economics and management graduates. Correlation analysis between major module and employment status shows a Pearson correlation of 0.049. The different findings could mean that perhaps the discipline or field of study (e.g. Humanities or Commerce) in which graduates are in, plays a role in their job prospects. In many instances, graduates with hard sciences or specialised qualifications have higher job opportunities than those with humanities and social science qualifications (Spaull, 2013). This then shows that making wise career decisions is very important as certain academic disciplines can affect the employment prospects of graduates and ultimately their risk of being unemployed.

5.4 DETERMINANTS OF EMPLOYMENT STATUS OF GRADUATES (REGRESSION ANALYSIS)

In this section of the chapter the original regression model (Equation 4.1) has been divided into three sub-sets. Ordinary Least Squares (OLS) regressions were ran to assess which social and/or economic factors have substantial effect in graduate's unemployment length. Section 5.4.1 explains the results of the first OLS regression. The results of the second OLS regression are reported in Section 5.4.2 while those of the third OLS regression are explained in Section 5.4.3.

5.4.1 First OLS regression on unemployment length and personal and socio economic factors

The following subsection aims to establish personal and social economic factors that determine the employment status of young graduates. As previously mentioned, the sample population encompassed graduates who were 35 years or less, regardless of where they live, who studied at a South African university. Table 5.12 presents the results of the estimated regression. The model estimated is represented by Equation 4.1. The length of unemployment is the dependent variable with gender, marital

status, religion, age, job searching skills and use of campus career centre (career guidance) as the explanatory variables categorised into dummy variables as explained in Section 4.8.5.1 in Chapter 4. The model results are presented in Table 5.12 below.

Table 5.12: Regression analysis on the determinants of unemployment length

Coefficients[a]						
Model		Unstandardised Coefficients		Standardised Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-12.712	7.411		-1.715	.088
	AGE	.741	.197	.288	3.760	.000
	GENDER	1.992	1.336	.096	1.491	.137
	CAMPUS CAREER CENTRE	-1.564	1.563	-.064	-1.000	.318
	BLACK	6.257	1.463	.301	4.278	.000
	ASIAN	-8.852	10.707	-.080	-.827	.409
	COLOURED	.589	5.926	.006	.099	.921
	MARITAL STATUS	-.940	1.630	-.045	-.577	.565
	NO RELIGION	-8.414	4.683	-.229	-1.797	.074
	CHRISTIAN	-5.750	4.200	-.182	-1.369	.172
	HINDU	3.550	13.943	.023	.255	.799
	GOOD SKILLS	3.940	1.822	.192	2.162	.032
	ADEQUATE	3.653	2.034	.159	1.796	.074
	POOR SKILLS	4.863	3.650	.091	1.332	.184
a. Dependent Variable: UNEMPLOYMENT LENGTH						
b. ANOVA Sig = 0.000						
c. F-statistics = 3.010						
d. Adjusted R^2 = 0.101						

Source: Survey data (2015)

The results, as shown in Table 5.12, indicate that there is a positive relationship (0.741) between the age of a graduate and the length of unemployment. This means that the older the graduate the longer the waiting period with a unit change in age leading to a 0.741 increase in the waiting length. The p-value of 0.00 is statistically significant at the 1 percent level of significance to reject the null hypothesis, and for this reason, age is a significant predictor of graduate unemployment length. This study's findings differ from the findings of Altbeker and Storme (2013), the National

Treasury (2011) and Leibbrandt (2010) which found that older graduates have better employment prospects than their younger counterparts. The fact that as a graduate becomes older their chances of remaining in unemployment increases could mean a number of things. First, although work experience may count against them, sometimes companies may be looking for young graduates mainly because of continuity. What this means is that if you are young then the company is in a position to groom you and keep you for some time. Secondly, companies may prefer these young graduates for innovation purposes because young people are vibrant and full of ideas. Lastly, although employers may prefer older employees because of experience, they also see them as expensive (Munnell *et al.*, 2006:4).

The coefficient for gender is 1.992 and because females were assigned 1 and males 0, the length of unemployment will be higher by 1.992 for females as compared to males, while all other things remain constant. However, the p-value of 0.137 is not statistically significant in the model. Gender as suggested by Moleke (2006) does not influence or impact on employment prospects of graduates.

As explained in section 5.3.7, respondents were asked to state whether or not they made use career guidance services offered by their campus career centre, and as such a dummy variable was created with yes = 1; no = 0. The results of the regression analysis as presented in Table 5.12 shows that making use of campus career guidance facilities reduces a graduate's length of unemployment by 1.564 months compared to when they do not make use of the services, *ceteris paribus*. However, the p value of 0.318 is not statistically significant in the model.

In as far as the race category is concerned, White is the reference point or the constant that other races were compared to. The findings show that the coefficient for Black is 6.257, which implies that, while the unemployment length decreases by 12.712 if a graduate is White, the length of unemployment for Black graduates only decreases by 6.544, *ceteris paribus*. In other words, it still takes a Black graduate more time to find employment. The p-value of 0.00 is statistically significant at the 1 percent level of significance to reject the null hypothesis; and for this reason, the Black race category is a significant predictor of graduate unemployment in this model. These results are in line with studies done by Kingdon and Knight (2001); Bhorat (2004); Pauw *et al.* (2008); Branson *et al.* (2009); and Altbeker and Storme

(2013) which found that among all graduates, Blacks graduates endure longer spells of unemployment.

The results show that the coefficient for Asian is 8.852. This means that while the average job waiting period declines by 12.712 months if a graduate is White; the waiting period decreases even further by 21.564 months if a graduate is Asian, *ceteris paribus*. However, the p-value of 0.409 is not statistically significant. The coefficient for Coloured is 0.589, which implies that the unemployment length for a Coloured graduate will decrease by 12.123 months compared to that of White graduates. The p-value (0.921) for this race category is also not statistically significant. This implies that both Asian and Coloured races do not help in predicting graduate unemployment length in this model.

In the analysis, a married graduate was assigned 1 while an unmarried graduate was coded 0. The regression analysis results in Table 5.12 show a negative coefficient (0.940) implying that the unemployment length decreases by 0.940 if a graduate is married, *ceteris paribus*. However, the p-value of 0.565 is not statistically significant; therefore the null hypothesis that marital status does not explain graduate length of unemployment is accepted.

In the religion category, dummy variables were created and Muslim is the benchmark or the constant. The coefficient for no religion is (-8.414), which means that compared to Muslim graduates, the unemployment length will decline by 21.126 months if a graduate follows no religion, *ceteris paribus*. This implies that graduates with no religion take less time to find employment compared to Muslim graduates. The p-value of 0.074 is statistically significant at the 1 percent level of significance to reject the null hypothesis, implying that following no religion helps in predicting graduate unemployment length in this model. Collectively, Christianity and Hindu are not significant at either the 1 percent, 5 percent or 10 percent significance level. Thus the null hypothesis is accepted that whether a graduate is Christian or Hindu does not help in predicting unemployment length.

Again, with regards to job searching skills, dummy variables were created where excellent job searching skills is the benchmark point. The coefficient for good job searching skills is 3.940. This implies that compared to graduates with excellent job searching skills, the job waiting period will only decrease by 8.772 months, *ceteris*

paribus. The p-value of 0.032 is statistically significant at the 5 percent significance level to reject the null hypothesis. Adequate job searching skills has a coefficient of 3.653, which means that in comparison to graduates with excellent job searching skills, the job waiting period will only decrease by 9.059 months, holding other things constant. The p-value of 0.074 is statistically significant at the 10 percent significance level to reject the null hypothesis. The p-value (0.184) for poor job searching skills is not statistically significant in the model, and therefore this job searching skill category does not help in explaining graduate unemployment length.

5.4.2 Second OLS regression on unemployment length and field of study

To further determine if degree choice plays a significant role in graduate's employment prospects, an OLS regression was again used to assess which degree field has the lowest length of unemployment. The same model is adopted, where the dependent variable is the graduate unemployment length and the independent variables include all the fields of studies or degrees where dummy variables were created, that is, Commerce is the reference point or constant, Science is D_1, Humanities is D_2, and Education is D_3. Therefore, the model to be estimated is as follows:

$$UNEMPL = \beta_0 + \beta_1 D_1 + \beta_2 D_2 + \beta_3 D_3 + \varepsilon \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (5.1)$$

Table 5.13: Regression analysis on field of study and unemployment length

Coefficients[a]					
Model	Unstandardised Coefficients		Standardised Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	5.579	.901		6.191	.000
Science	-.579	2.193	-.017	-.264	.792
Humanities	5.872	1.583	.249	3.710	.000
Education	-1.317	2.157	-.040	-.611	.542

a. Dependent Variable: UNEMPLOYMENT LENGTH

b. ANOVA Sig = 0.001

c. F-statistics = 5.698

c. Adjusted R^2 = 0.057

Source: Survey data (2015)

As can be seen from Table 5.13, the coefficient for Science suggests a negative relationship between this field of study and unemployment length. While all things remain constant, the average job waiting period for graduates who have studied Science is 0.579 less as compared to those who studied towards a Commerce degree (5.579). This implies that Science graduates wait for about five months before getting a job compared to Commerce graduates who wait for about 5.579 months. However, the p-value of 0.792 is not statistically significant. Therefore, Science as a field of study does not help predict the length of unemployment in this model.

The positive coefficient (5.872) for Humanities suggests that the unemployment length or job waiting period for graduates who studied towards this field is 5.572 more than that of those who graduated with a Commerce degree. What this means is that, holding other things constant, compared to Commerce graduates, Humanities graduates wait for about 11 months before getting a job after graduation. These findings are also in line with those found in Table 5.14 where major modules found under Humanities like politics and public management had one of the highest unemployment lengths compared to other majors. The p-value of 0.000 is statistically significant at the 1 percent level of significance to reject the null hypothesis, suggesting that the Humanities field of study has significant predictive capabilities in this model. These findings are consistent with those of Ryan (2013) and Coates and Edwards (2009) who found that graduates in the arts and humanity field of studies take longer to find employment than graduates in other fields of a more professional focus like Commerce.

The relationship between the Education field of study and unemployment length suggests that, while holding other things fixed, the average job waiting period for Education graduates is 1.317 less than that of Commerce graduates. In other words, compared to Commerce graduates who wait for about 5.579 months after graduation before finding employment, Education graduates wait for an estimated four months before getting a job. However, the p-value of 0.542 is not statistically significant, thus this field of study does not help predict unemployment length in this model.

The adjusted R^2 of 0.057 implies that about 6 percent of the total variability in graduate's unemployment length is explained by field of study. Again, unemployment length can be attributed to many factors and not just field of study.

5.4.3 Third OLS regression on unemployment and modules that graduates majored in

$$UNEMPL = \beta_0 + \sum_{n}^{i} \beta_i D_i + \beta_n D_n \dots + \cdots \varepsilon \dots \dots \dots \dots \dots \dots \dots \dots \dots (5.2)$$

Where $UNEMPL$ is the period in which the graduates were unemployed; a continuous variable measured in months. β_0 is the constant term that will capture the average unemployment length for the benchmark module category, in this case, human resources and labour relations studies (HRLS), holding all other variables equal to zero, and β_1 is the coefficient associated with D_i, which is the dummy variable created for the modules the graduate majored or specialised in. Hence the model is estimated as follows:

$$UNEMPL = \beta_0 + \beta_1 D_1 + \beta_2 D_2 + \beta_3 D_3 + \beta_4 D_4 + \beta_5 D_5 + \beta_6 D_6 + \beta_7 D_7 + \beta_8 D_8 + \beta_9 D_9$$
$$+ \beta_{10} D_{10} + \beta_{11} D_{11} + \beta_{12} D_{12} + \varepsilon \dots \dots \dots \dots \dots \dots \dots \dots \dots (5.3)$$

Where the dummy variables are defined as follows: human resources and labour relations studies (HRLS) is the reference point or constant, economics and risk management is D_1, accounting and financial management is D_2, marketing, business management and entrepreneurship is D_3, psychology and sociology is D_4, mathematics and statistics is D_5, languages and communication is D_6, law is D_7, computer sciences and information technology is D_8, public admin, public management and political studies is D_9, intermediate, senior and FET education is D_{10}, health and social work is D_{11}, art and history is D_{12}.

Table 5.14: Regression analysis on major module and unemployment length

Coefficients[a]						
Model		Unstandardised Coefficients		Standardised Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	10.462	1.449		7.220	.000
	ECON AND RISK	-3.723	2.073	-.141	-1.796	.074
	ACCOUNTING FINM	-7.570	2.157	-.269	-3.509	.001
	MARKETING BMAN	-4.312	2.457	-.128	-1.755	.081
	SOCIO & PSYCH	.922	3.061	.021	.301	.763
	MATHS ENGINEER	-7.229	3.158	-.156	-2.289	.023
	LANGUAGE COMM	-7.291	2.975	-.169	-2.451	.015
	LAW	-2.962	7.024	-.027	-.422	.674
	COMP SCIENCES & IT	-4.962	2.829	-.122	-1.754	.081
	PUBLIC MAN POLITICS	9.438	3.398	.186	2.777	.006
	EDUCATION	-7.412	3.730	-.131	-1.987	.048
	HEALTH	-7.405	3.949	-.123	-1.875	.062
	ART HISTORY	-8.762	7.024	-.079	-1.247	.214
a. Dependent Variable: UNEMPLOYMENT LENGTH						
b, ANOVA Sig = 0.000						
c. F-statistics = 3.347						
d. Adjusted R^2 = 0.108						

Source: Survey data (2015)

As presented in Table 5.14, economics and risk management has a negative coefficient (3.723). What this implies is that while other things remain unchanged, the unemployment length for a graduate who majored in economics or risk management is 3.7 or four months less compared to the 10.5 months unemployment length for graduates who majored in human resources and labour studies. The p-value is 0.074 is statistically significant at the 10 percent significance level. Therefore, economics and risk management is a significant explanatory variable in the model.

The p-value of 0.001 for accounting and financial management (AFM) is statistically significant at the 1 percent level of significance to reject the null hypothesis. AFM has significant predictive capabilities in the presence of other modules. Average unemployment length for graduates who majored in accounting and financial management decreases by 7.570 months compared to the unemployment length of human resources and labour study graduates. This implies that accounting and

financial management graduates wait for about three months after graduation before they get jobs compared to HRLS graduates who wait for about 10.46 months. Similar results are also confirmed in a study by Moleke (2006:2), which found that graduates in fields with a more professional focus found employment more rapidly than those who qualified with fields of a more general nature.

Marketing and business management has a p-value of 0.081, which is statistically significant to reject the null hypothesis, and for this reason, this major is a significant predictor of unemployment length in this model. The coefficient suggest that the length of unemployment for a student who majored in marketing and business management decreases by 4.312 months, *ceteris paribus*, compared to the job waiting period for HRLS graduates.

The length of unemployment for sociology and psychology majors is 0.922 months more than for HRLS graduates. In other words, if a graduate majored in sociology and psychology, the time it takes them to get a job is about 11 months, while all things remain unchanged. However, the p-value of 0.763 is not statistically significant. Therefore, sociology and psychology as majors do not help in predicting unemployment length in this model.

Just like the graduates who majored in accounting and financial management, if a graduate majored in mathematics, statistics and engineering, their job waiting period decreases by 7.229 compared to the average waiting period for HRLS graduates, all things being equal. The p-value of 0.023 is statistically significant at the 5 percent significance level, thus it can be concluded that maths and engineering majors are significant predictors of the graduates' unemployment length. A study by the AEO (2012) also found that the unemployment rate for engineering majors is always lower. Ryan (2013) also reported high percentages of employment for these graduates. In its study on graduate unemployment, the Indiana Business Research Center (2012) found that engineering majors had a 44 percent likelihood of being in short term unemployment, i.e. waiting for about four month or less before getting a job.

The average job waiting period for language and communication majors is about 7 months less than that of HRLS majors. *Ceteris paribus*, graduates who majored in language and communication wait for an average of three months compared to

HRLS graduates who wait for about 10.5 months before getting employed. The p-value of 0.015 is statistically significant at the 5 percent significance level to reject the null hypothesis. In contrast to the findings of this study, the IBRC (2012) found communication majors had the highest probability of longer job search periods, and ultimately being in longer spells of unemployment.

Graduates who majored in law wait for about seven months while art and history majors wait about 1.3 months compared to those who majored in HRLS. However, the p-values for both law (0.674) and art/history (0.214) are not statistically significant in the model. Collectively, these modules do not help predict unemployment length.

The length of unemployment for computer sciences and information technology graduates is 4.96 less than that of HRLS graduates, *ceteris paribus*. The p-value of 0.081 is statistically significant at the 10 percent level of significance to reject the null hypothesis. This suggests that these modules are significant predictors of length of unemployment in this model.

There is a positive relationship between public management and political studies and length of unemployment. Holding other things constant, a graduate who majored in these modules increases their job waiting period or length of unemployment by 9.438 months. Looking at significance testing, these modules have a p-value of 0.006, which is statistically significant at the 1 percent level of significance. In other words, these modules significantly explain graduate length of unemployment in this model. Similar findings are confirmed by the IBRC (2012) which found that public policy majors had about 51 percent chance of taking 5 to 26 weeks before finding employment.

The coefficient for education is -7.412, which implies that the length of unemployment for an education graduate will decrease by 7.412 in comparison to the job waiting period of graduates who majored in HRLM. In other words, graduates who majored in education are likely to wait for about 3 months before getting employed, *ceteris paribus* compared to HRLS graduates who wait for approximately 10.46 months. The p-value for education as a major is 0.048, which is statistically significant at the 5 percent significance level. This implies that this module significantly predicts length of unemployment in this model. Likewise, the job waiting

period for a graduate who majored in health will be 7.405 months less than the average length of unemployment of HRLS graduates. The p-value of 0.062 is statistically significant at the 10 percent level of significance to reject the null hypothesis. A study by CHEC (2013) found that the fields of health and education produce the most graduates as professionals and thus, the low unemployment rates for education and health graduates is mainly because of the critical role played by the public sector in employing these graduates after they graduate. The Indiana Business Research Center (2012) also found health and education majors to be unemployed for a short period of time, a month or less before finding employment.

The adjusted R-square measures the total variability of the dependent variable as explained by the explanatory variables. In the model, the adjusted R^2 is 0.108, which means that about 11 percent of the total variability in graduate's unemployment length is explained by major modules. This could be because many factors like field of study, level of education and gender, not just modules majored in, have an influence on the job waiting period or length of unemployment. From the above methodological interpretation it can, therefore, be concluded that human resources, labour relations, sociology, psychology, public management/administrations and political studies have the highest length of unemployment, while accounting, financial management, mathematics, engineering, language and communication, education and health have the lowest job waiting period.

5.5   PERCEPTIONS OF GRADUATE UNEMPLOYMENT

This section of the survey analysed the perceptions of graduate unemployment. In other words, the extent to which graduates thought certain factors were the causes of unemployment among graduates. The response options were on a Likert scale form, namely strongly agree, agree, disagree and strongly disagree as discussed in Chapter 4. However, in the analysis stage, the various responses were grouped into two, i.e. agree and disagree only.

Table 5.15: Perceptions of graduate unemployment

Reasons why graduates are unemployed	Agrees	Disagree
Lack off job market information	74.3%	25.7%
Lack of job searching skills	75%	25.4%
No professional networks	82.4%	17.6%
No formal working experience	89.7%	10.3%
Mismatch between qualifications attained and available jobs	73.8%	26.2%
Higher education institution attended	43.8%	56.3%
Age	37.4%	62.7%
Race	53.2%	46.8%
High cost of job search	53.2%	46.8%
Geographical area one lives in	78.1%	21.9%
Lack of self-esteem or confidence	76%	24.1%
No political or personal connections	86%	14%

Source: Survey data (2015)

5.5.1 Labour market information

When asked whether they thought a lack of information on the labour market contributed to graduate unemployment, 74.3 percent agreed with the statement, while only 25.7 percent believed that not knowing about the labour market was not the case. Graduates often do not have information about the labour market and the jobs they are applying for and this bears negative effects on their employment prospects (Du Toit, 2003; Swanepoel & Van Zyl, 1999).

5.5.2 Job searching skills and high cost of job search

Table 5.15 again shows that majority (74.6%) of the respondents also perceived the lack of job searching skills as one of the factors that result in unemployment among graduates in contrast to 25.4 percent that did not agree. Du Toit (2003) argues that not having any experience regarding job application processes can negatively affect job search of graduates. This can be the case for first time graduates who are also new entrants in the labour market. A study by Msimanga (2013) also found that many of the unemployed females in Bophelong perceived the lack of curriculum vitae writing skills, interview skills and access to computers as the obstacles to finding jobs. On the other hand, about 53.2 percent compared to 46.8 percent of the surveyed graduates agreed that the high cost of searching for jobs can hinder job search and ultimately leave graduates unemployed. Many graduates often live in places far from job market centres, which means that they need to spend more financial resources to get there (Kingdon & Knight, 2000:13).

5.5.3 Professional networks and connections

Over 80 percent of those surveyed reported that they believed not having the right people by your side can often affect a graduate's job prospects. Approximately 18 percent did not think a lack of professional networks can negatively influence a graduate's chance of finding employment. At times, knowing the right people can open doors of opportunities and it is through referrals that certain people are hired. On the other hand, more than four fifth (86%) of the sample population strongly felt the lack of connections as one of the perceived causes of graduate unemployment in contrast to 14 percent that did not. These findings are confirmed in a study by Msimanga (2013:87) who found that about 5.8 percent of women perceived a lack of connections as one of the obstacles to entry in the labour market.

5.5.4 Formal working experience

Results show that about 90 percent of the sample population agreed that the lack of formal working experience is one of the causes of graduate unemployment compared to 10 percent who did not agree. The World Youth Report (2012) also argues that in many cases employers are doubtful about employing new labour

market entrants especially those with no job expertise. Hence, preference is given to adults who have work experience and thus can handle job pressures.

5.5.5 Skills mismatches

Table 5.15 further shows over two thirds of the surveyed graduates perceived skills mismatches as one of the factors contributing to graduate unemployment, contrary to only 24.5 percent who did not. Indeed, a study by AEO (2012) found that the strong link between higher education qualifications and unemployment rate among the youth in many African countries including South Africa points to a mismatch between qualifications of graduates and jobs available in the economy. Often many of these graduates graduate with qualifications that are not sought by employers, thus worsening their chances of remaining in unemployment.

5.5.6 Higher education institution attended

Of the surveyed graduates, over 50 percent of the respondents felt that the university a graduate attended does not have an influence on their employment prospects, while about 44 percent perceived the university attended to be one of the causes of unemployment among graduates. According to Baldry (2013) the merging of both White and Black universities in South Africa brought about many differing effects on graduate's ability to secure employment, the quality of education they receive from these institutions and the perceptions of employers about these universities. Contrary to the results of the study, Moleke (2009) found that the unemployment length for students who graduated from HBUs seemed to be longer compared to those who attended HWUs.

5.5.7 Age

The majority, that is over 60 percent of those who responded to this item felt that age does not affect employment prospects of graduates, as long as a graduate is qualified, employers overlook age. Only 37 percent perceived age to be one of the factors affecting graduate unemployment. Contrary to the findings of this study, in 2014, Stats SA reported the incidence of unemployment to be twice higher among the youth at an estimated 36 percent than adult (Stats SA, 2014a:5). This is also reflected by the absorption rates, which were more than 20 percent lower than that of adults each year since 2008.

5.5.8 Race

Results in Table 5.15 show that of the 233 graduates who completed the questionnaire just slightly over half (53.2%) perceived race to be one of the factors influencing unemployment among graduates while about 47.8 percent felt that race does not affect graduate employment prospects. Many studies (Banerjee *et al.*, 2008; Bhorat, 2004; CHEC, 2013; Kingdon & Knight, 2005; Moleke, 2009; Pauw *et al.*, 2006; Stats SA, 2015 among others) found that graduates from previously disadvantaged races like Blacks and Coloureds are more vulnerable in the labour market, consequently taking longer periods to find jobs than their White counterparts.

5.5.9 Lack of self-esteem in ones capabilities

Close to 80 percent of the surveyed participants perceived lack of confidence as one of the factors that can negatively affect the ability of a graduate to get employment compared to approximately 20 percent that did not think so. Often, discouraged job-seekers end up in a mode of not believing in their qualifications or themselves. AEO (2012) found that a lot of the discouraged youth had given up job search mainly because they were excluded from the labour market since they did not have what potential employers were looking for. Often these young people do not see the point of looking for employment if there are little chances of success.

5.5.10 Other reasons

Respondents were further asked to indicate other reasons they feel contribute or cause unemployment among graduates. Majority of the respondents seem to think high expectations regarding their first jobs often make many graduates reluctant to take up a job. Graduates are often of the view that their first jobs will be a high paying with a good position, only to find that many entry level jobs do not even come close to their expectations. Sirat and Shuib (2012) also found high wage expectations as one of the reasons some graduates struggle to find jobs. However, Oluwajodu *et al.* (2015) found that expectations of graduates were not that different from what employers offered in South Africa's banking sector.

5.6   SUMMARY AND CONCLUSION

The main aim of this chapter was to analyse the various empirical objectives which were set in the beginning chapter. The study had an objective to determine the average time it takes a graduate to find employment. The survey results show that the average time it took graduates in the sample to find employment after graduation was approximately seven months. About 11.2 percent of the sampled graduates are unemployed. These findings are higher than anticipated particularly taking into consideration the findings in the literature which anticipated graduate unemployment to be at 5 percent or slightly above. Furthermore, female graduates remain the most vulnerable as the survey results show that of those that are unemployed in the study, females make up 65.4 percent compared to only 34.6 percent males. Moreover, in the employed status category, more graduates with an honours degree are employed compared to graduates in other levels of study. On the contrary, first degree has the highest number of unemployed graduates compared to other educational levels, suggesting that the higher an individual moves in the educational level continuum, the better their chances of finding employment.

The study also ventured to assess if the employed graduates were employed in their fields of study. This was addressed using cross-tabulation analysis. The results showed that more than 75 percent of the surveyed graduates were employed in their field of study. Of those not employed in their field of study, the majority of them were in jobs below their field of study, perhaps pointing to issues of underemployment. About 41 percent of the surveyed sample reported that if they could start again they would change their courses and cross tabulation analysis revealed that respondents who said that were the unemployed ones.

Another empirical objective of the study was to establish the personal and social economic factors that determine employment stats of graduates in South Africa. To achieve this, the study used regression analysis with unemployment length as the dependent variable and a number of social related variables which were categorical as independent variables. The study found that out of all the independent variables, only age, race, and job searching skills were significant. In particular, when it comes to age, the findings suggested that as a graduate becomes older, their chances of remaining in unemployment increases. This finding was contrary to several studies in

the literature which argues that older graduates had better employment prospects that younger graduate because of maturity and experience. Munnel *et al.* (2006:4) looked at the employer attributes towards older employees and found that although employers may prefer older employees because of experience, they also see them as expensive. This could be one of the reasons why the study found older graduates to wait longer before getting employed.

In the race category, only Blacks and Whites were significant predictors in the model. The findings found that while the unemployment length decreases by 12.7 months if a graduate is White, it only declines by 6.257 months if a graduate is Black; confirming findings in the literature that it still takes Black graduates more time to find employment than their White counterparts. In the job searching skills category only poor searching skills were not significant. The results indicated that unemployment length decreases when a graduate has good job searching skills proposing that good job searching skills play an important role in job search success. In the religion category, only "no-religion" was a significant predictor showing that the length of unemployment for graduates who associated themselves with no religion was much less than those who did. Gender was also not a significant predictor of unemployment length in the model as suggested by some of the literature in chapter 3.

The study also had an objective to determine if degree choice plays an important role in the employment prospects of graduates. A regression was used to address this objective and only Commerce and Humanities were significant in the model. It was found that the graduates who hold degrees in Humanities take longer (about 11 months) to find employment after graduation than Commerce graduates who wait for approximately 6 months. Indeed some of the findings in the literature argue that graduates with degrees of a more professional focus tend to have better employment prospects than those with art or humanity degrees. Further analysis showed that although the field of study is important for determining job success, the mainstream or major module is equally, if not more, important.

In the category of majors held by graduates, the results show that human resources, industrial psychology, labour relations management, public administration, public management and politics remain the most popular majors yet many graduates in

these mainstreams wait for a long time before getting jobs. In particular, the job waiting period was found to be longer for graduates who majored in public management; public administration and politics at approximately 19 months whereas the job waiting period for graduates who majored in human resources, industrial psychology and labour relations management was 10.5 months. Graduates with accounting, economics, risk management, maths, physical sciences, statistics, education, health, language, and communication majors had the shortest average job waiting period of less than four months. Business management, marketing, entrepreneurship, computer sciences and information technology majors wait for slightly above six months before getting a job. Sociology, psychology, art and history as majors were not found to be significant predictors in the model.

The study went on to analyse how the surveyed graduates perceived the causes of graduate unemployment in South Africa. The results reveal that graduates believe that graduate unemployment is influenced by not having working experience, mismatches in qualifications attained and those demanded in the labour market, lack of financial resources, being secluded from the job market and not being fully informed about what is happening in the job market. Contrary to the findings of several published studies, the respondents believed that age and race does not influence graduate unemployment.

CHAPTER 6: SUMMARIES, CONCLUSIONS AND RECOMMENDATIONS

6.1 INTRODUCTION

It is with no doubt that unemployment, especially among the youth, remains one of the most contentious issues confronting South Africa. The country's poor education system makes the situation worse as many young people struggle to find employment. Although many students are encouraged to pursue higher education for improved employment opportunities, a better life and other benefits, these benefits are not equally enjoyed by all, perhaps pointing to other rooted structural issues. The current study made attempts to identify some of the determinants of employment status among young graduates from a South African university. The focus on graduates is important, given the considerable resources that are often invested in their education.

This chapter concludes the study by summarising the theoretical foundations as discussed in Chapter 2, the profile of unemployment from a global, regional and national perspective, the methodology and estimated models, the results of the analysis and implications thereof, before touching on its limitations. Since unemployment among South African graduates has been found to be lower, if not slightly above 5 percent (Altbeker & Storme, 2013:1; Pauw *et al.*, 2006; Van Broekhuizen, 2012:9; Van Der Berg & Van Broekhuizen, 2012:2), the expectation was that the results of the current study could confirm similar findings, namely very low unemployment rates and to have a thorough understanding of some of the factors that could be the source of many graduates failing to secure employment after graduation. In addition, since research on the status of graduate unemployment is not clear, the study aimed to understand the dynamics surrounding graduate unemployment. Hence, some of the theoretical objectives were formulated to define unemployment, a graduate, and graduate unemployment, as concepts. In order to thoroughly understand the phenomenon of unemployment it was very important to provide literature on the theories of unemployment. To clearly understand that the issue of unemployment, in particular unemployment among young people and its effects differ from country to country, another objective was to provide a review of the empirical literature on youth unemployment from a global, regional and South African perspective. This was done to show that the unemployment situation in

South Africa is unique. Because the concentration of the study is on South African graduates, it was important to provide the trend of graduate unemployment thereof. Finally, another objective was to provide a review on the factors that affect graduate unemployment in South Africa.

In as far as the empirical objectives are concerned, the study was intended to pursue the following objectives: establish some of the personal and social economic factors that determine the employment status of graduates, evaluate if the employed graduates were employed in their fields of discipline, determine the average time it takes a graduate to find employment and whether degree choice plays a significant role in the employment prospects of graduates.

The rest of the chapter is organised as follows: Section 6.2 provides a summary on the theoretical foundations of the study. Summaries and conclusions on the profile of youth unemployment in the world, region and South Africa will be provided in section 6.3. Section 6.4 will conclude on the methodological foundations that the study was based on. Section 6.5 will provide a conclusion on the empirical findings of the study. Section 6.6 will conclude the overall study. Recommendations and limitations of the study including areas for further study are presented in Section 6.7 and 6.8 respectively.

6.2   SUMMARY (THEORETICAL BACKGROUND)

Unemployment is regarded as one of the social issues interconnected to many societal challenges. It is a situation where an individual wants to work but cannot find any work. Above all, unemployment can be the cause of persistent poverty, inequality, crime and unfulfilled economic potential and in most cases these distressing effects are not only experienced by the affected persons but also the society at large. As noted in Chapter 2, many efforts of dealing with unemployment have been discussed by the global community and one of the most important ones is education. Education plays a significant role in improving employment prospects and guaranteeing future earning potential of an economy. However, the continually rising unemployment rates in the world have proven that education alone cannot guarantee employment success, perhaps pointing to other issues.

Unemployment is an important economic indicator as it is a cornerstone of economic and social development. Many controversies surround the definition of unemployment, since in some countries certain persons are not included in the labour force while in other countries they are, while issues of underemployment fuel the difficulty. Much of the problem lies in actually deciding whom to include in the labour force and clearly describing an unemployed person. Against that background, unemployment as stated by the ILO is based on three criterions, namely without work, currently available for work, and actively seeking for work. What these criteria mean as explained in chapter 2 is that a person will be considered unemployed if they currently do not have a job, are available should they find one, and must have been searching for a job in the last seven days. In other words, the unemployed individual must have either responded to a newspaper job opening, attended an interview, anything, as long as they are actively seeking employment. This is referred to as the narrow definition of unemployment. The other definition of unemployment is the broad or expanded, which basically omits the last criterion of the narrow definition. As long as an individual is without work but desires to work, he/she will be regarded as unemployed according to the expanded definition.

Many arguments have surfaced surrounding the use of either definition. Critics opposing the use of the strict or narrow definition first, argue that this unemployment definition undermines the real situation of unemployment, as in most cases the narrow unemployment rate will be low. Secondly, they argue that factors such as a lack of financial resources, residing far from where jobs are situated and poverty in the developing world often prevent people from actively seeking employment. On the contrary, some of the arguments surrounding the expanded or broad unemployment definition is that it tends to overstate unemployment as you will find that expanded unemployment rates are usually at high levels and that even individuals who do not want to work will be counted as unemployed. Despite these arguments, the narrow unemployment definition is internationally accepted and used by more than 80 percent of countries in the world, and many countries still publish data on expanded unemployment, often using it for policy-making purposes.

Nevertheless, unemployment can be explained in various ways and as such the different types of unemployment were discussed. Seasonal unemployment, as defined in Chapter 2, occurs because some jobs will require workers during certain

times of the year. Majority of people who are seasonally unemployed are often found in the agricultural industry. On the other hand, frictional unemployment occurs because it takes time for labour to move from one job to another or for employers to fill in job positions. At some point, not all vacant positions in the economy will have been filled. Some graduates are often referred to as being frictionally unemployed, that is, they are temporarily unemployed as it is assumed that they are in line for jobs, hence this type of unemployment is not a cause for serious concern. Cyclical unemployment occurs as a result of an economic recession that raises unemployment because of a lack of demand that is often seen as time-based or temporal. When there is a slump in the economy, there is always a decline in economic activity, as a result some workers lose their jobs due to reduced demand in the products they produce. However, when economic activity increases again unemployment will decline. The rate of unemployment alone cannot provide a comprehensive picture of unemployment, what must also be considered is the length of unemployment, hence the importance attached to structural unemployment. As stated in Chapter 2, structural unemployment is more complex as it can be caused by several factors including skills scarcity, illiteracy, job mismatches, change in consumer preference, changes in technology and other structural changes in the economy. This type of unemployment arises involuntarily and because some skills are not transferable from sector to sector, nor will they be needed anymore, retrenchments become inevitable. In addition, the longer an individual remains unemployed, the fewer the chances of finding employment and the more devastating the effects are. Thus, structural unemployment remains the most persistent type of unemployment.

The difficulty surrounding unemployment does not just lie with defining it but also measuring it, and for this reason, measurements differ from country to country. Generally, the unemployment rate is expressed as the total number of unemployed people divided by the total labour force. The three main types of measurement include the census method, registration method, and survey method. The census method, which is conducted every five years, has attracted criticism over the years where critics have argued against the significant time lag before the data are published, pointing out that a person's employment status can change within that period. The second method is one where unemployed persons register with the

labour department for unemployment benefits and because only those who qualify for these benefits apply, this measure is not that important. The survey method simply involves an analysis of households to determine their economic status. From the household data, unemployment rates can be determined. This is usually the most widely used measure.

6.3   THE PROFILE OF YOUTH UNEMPLOYMENT IN A GLOBAL, REGIONAL AND SOUTH AFRICAN CONTEXT

Over recent years, global unemployment rates have been on an upward rise with young people being the most affected, consequently facing considerable employment challenges. This chapter provided a global, Sub-Saharan region and South African picture of unemployment among young people. From a global perspective, unemployment is a serious cause for concern especially among the youth. In 2013, about 1.2 billion people were classified as youth and from that, an estimated 358 million were neither in education no training and the number is believed to be higher currently. More than 73 million young people between the ages of 15-24 are unemployed in the world and research predicts that over the next decade at least 600 million young people in the world will compete for 200 million jobs. Unemployment rates are even higher in the Europe region. Graduate unemployment on the other hand is higher in the MENA region exacerbating the already evident gender gaps as female graduates have a higher chance of not finding employment than male graduates.

The situation of unemployment is even more worrisome in the Sub-Saharan region. Low employment levels and productivity have become a trend, often reflecting the region's social and human development challenges. The region's large youth cohort further fuels youth unemployment since the region is not able to create adequate employment opportunities to cater for the growing number of young people. In countries such as Mozambique, Malawi and Ethiopia young people often wait for an average of five to seven years before finding employment. Again, young women remain the most vulnerable compared to males as some of them often find themselves working for no pay. Weak educational structures, skills mismatches and scarcity of jobs are among the factors perpetuating youth unemployment in the Sub-Saharan region. However, analysts argue that the large number of young people,

which is expected to grow even further, is going to be beneficial for the region in decades to come as that will see the region exporting some of its young labour to regions in need such as aging Asia.

Unemployment in South Africa is also a serious economic challenge often influenced by age, gender, race, geographical location, and education, among others. Youth unemployment rates are among the highest in the world. Several studies argue that the country's unemployment rate is caused by the decline in the demand for the less educated and a rise in the supply of low levels of education. The economy's low growth performance and its inability to create employment have worsened the situation. Young women are mostly unemployed, regardless of their age. Unemployment rates are also the highest among Blacks than any other race. Unemployment among graduates also reflects the country's discrimination patterns with Black graduates being the most affected. Although higher educational levels improve employment prospects, this benefit is not enjoyed by all graduates as factors such as the type of degree one graduates with, age, and job experience among others matters. Several studies report that graduates with social science and humanities experience higher unemployment rates than those from other fields such as Commerce.

6.4 THE METHODOLOGY

The research question of this study pushed itself towards a quantitative method approach of data collection and analysis. The world view that best fitted this research type is post-positivism. A survey questionnaire was used to identify factors that determine the employment status of young graduates from a South African university. For ethical purposes, the name of the university in question was not disclosed.

The study made use of non-probability sampling, in particular the purposive sampling technique. The chosen method is the only feasible option given the circumstances of the study. To avoid bias owing to the use of non-probability sampling, the university in question granted access to the alumni database where graduates were chosen indiscriminately, regardless of the course they studied and still within the specified criterion. The data were analysed using the statistical software package (SPSS). The questionnaire also included the socio demographic section (see annexure A). Tests

of significance, that is chi-square, were also run on cross tabulation analysis. In order to achieve some empirical objectives, the analysis of variance (ANOVA) model was used owing to the categorical nature of the data. This model was used to determine the influence variables, which are qualitative in nature (e.g. race) might have on the dependent variable (e.g. unemployment length). Three regressions were used to assess which factors play a significant role in graduates' unemployment length. Cross tabulation analysis was also included in the analysis (see Chapter 5).

6.5   FINDINGS OF THE STUDY

The results of the sampled population showed that about 11.2 percent of the sampled graduates are unemployed and majority are females. Of those that are unemployed, the average length of period they have been unemployed for is about 2 months, which can be argued to be frictional unemployment, that is temporary transitory process while in line for jobs, whereas the highest length of unemployment is 36 months, which can be argued to be structural and long-term unemployment. The average job waiting period was found to be seven months, suggesting that graduates in the sample were mostly frictionally unemployed.

The findings indicated that majority of the unemployed graduates in the study are between the ages of 21 and 24 (46.2%), and these results are consistent with several studies in Chapter 3, that unemployment is higher among younger graduates than their older counterparts. Furthermore, the chi-square showed a significant association between age and employment status.

In the employed status category, more graduates with an honours degree are employed compared to graduates in other levels of study. On the contrary, first degrees (i.e. Bachelor's degrees) have the highest number of unemployed graduates compared to other educational levels. This suggests that the higher an individual moves in the educational level continuum, the better their chances of finding employment as results show that unemployment is lower for postgraduate qualification holders. In addition, more than 75 percent of the surveyed graduates were employed in their field of study. Of those that are not employed in their field of study, majority of them were in jobs below their field of study, perhaps pointing to issues of underemployment or the irrelevancy of their qualifications. Correlation between race and employment status was significant at the 0.05 level. Further cross

tabulation analysis revealed that more female graduates in the sample population are unemployed than males, however, the Pearson chi-square was not significant, suggesting no significant difference between gender and employment status. The association as shown by the chi-square was also not significant between level of education and employments status; however, it was significant between field of study, career guidance services and employment status.

The findings also suggested that human resources, industrial psychology, labour relations management, public management and politics remain the most popular courses yet many graduates in these mainstreams wait for a long time before getting jobs. In particular, the job waiting period is longer for graduates who majored in public management; public administration and politics at approximately 19 months compared to that of graduates who majored in human resources, industrial psychology and labour relations at 10.5 months. Accounting, maths, education, heath graduates have the shortest average job waiting period of less than 7 months.

In as far as the field of study is concerned; Humanities and Commerce had the highest number of unemployed graduates. The field of study with the least number of unemployed graduates is Education. The findings indicated that although the average unemployment length for Science and Education graduates is less compared to that of Commerce graduates, both these fields of study were not significant in the model. However, both Humanities and Commerce fields of study were significant at the 0.01 level of significance.

The results also showed that in the category of race, only Blacks and Whites were significant predictors in the model. More Black graduates were unemployed compared to graduates of other races. The length of unemployment for graduates who associated themselves with no religion was much less than for those who did. Gender was not a significant predictor of length of unemployment, which is contrary to the findings of Moleke (2006). Marital status and religion were also not significant in the model. The findings further indicated that job searching skills play an important role in job search success.

About 41 percent of the surveyed sample reported that if they could start again, they would change their courses. Cross tabulation analysis revealed that respondents who said so were the unemployed ones. Perhaps this suggests that they hold

qualifications that are not in demand or it could also be personal preferences such as wanting to be in a different field. This is expected as often unemployment and longer job search periods lead to introspection regarding career choice decisions.

In short, the study found that race, gender, marital status, level of education, campus career guidance centres were not significant predictors of unemployment length or job waiting period. However, there were significant associations between age, race (being a Black or White graduate), the field of study, use of career guidance facilities, job searching skills (having excellent, good and adequate skills only), major module and graduate unemployment length; suggesting that these factors helped in predicting unemployment length or average job waiting period in this study.

In addition, under the perceptions of graduate unemployment, the study found that:

- Lack of job market information, poor job searching skills, not knowing people in the world of work, lacking job experience, holding irrelevant qualifications to those needed by employers, not having political connections and living far from where jobs are situated, were the factors that graduates perceived to be contributing to graduate unemployment.
- Graduates' perceived age, race, not believing in ones' abilities, higher education institution attended as factors which do not influence graduate unemployment.

6.6   CONCLUSION

The main aim of the study was to investigate the determinants of employment status of young graduates from a South African university. The study found that only age, race, field of study and modules majored in influence employment prospects of graduates. In particular, since the racial element cannot be excluded in the analysis of unemployment in South Africa, the results of this study also confirmed that Black graduates seemed to take more time to find employment after graduation than graduates of any other race.

The study had an objective to determine the average time it takes a graduate to find employment and further assess if graduates were employed in their desired fields of study; it was found that majority of the surveyed graduates took an average of seven months to find a job, which can be seen as more frictional since graduates are looking for employment which they will find eventually. Further analysis revealed that

out of the graduates that were employed, more than 70 percent were employed in their fields of study.

In meeting the set objective which was to determine if degree choice plays a role in the employment prospects of graduates, an ANOVA model was adopted, and only Humanities and Commerce field of studies were significant predictors of unemployment length. Further analysis revealed that majors such as human resources, industrial psychology, labour relations management, public management, public administration and politics remain the most popular majors yet many graduates in these mainstreams wait for a long time before getting jobs, approximately over ten months compared to graduates of other majors. It can therefore be concluded that career choice factors such as the disciplines students choose to enrol for seem to be more prevalent in the labour market and can therefore affect their future employment status as well as the duration they will take to find employment.

6.7 RECOMMENDATIONS

Based on the above findings, it is with no doubt that the challenge of unemployment is somehow influenced by the country's structure and the lack of knowledge that exists among students regarding academic disciplines with better employment prospects. The following sections attempts to provide recommendations that could assist towards reducing unemployment among graduates.

6.7.1 Improving the education system

The consensus is that graduate unemployment can only be solved if the country focuses more on improving its educational system. The study found that there are gaps that often exist in the labour market particularly due to the insufficient information between employers and higher education institutions. In particular to graduate unemployment, curriculum designers need to pay careful attention to the contents of university courses by making sure that they are as practical as possible in order to help graduates once they are in the job market and consequently make the transition from higher education institutions to work an easier one. This is important particularly owing to the fact that education should be relevant to labour market needs.

6.7.2 Exposure to career guidance

Quite a large number of the surveyed graduates had qualifications with low job opportunities such as those in the arts and humanity fields, thus much should be done to expose students to career guidance and universities should hold regular career exhibitions just to bridge the gap that exists between the demand and supply in the labour market, and to make students fully informed on the relevancy of courses, including employment opportunities. And because the study also found that quite a number of the surveyed graduates (about 40 percent) would change their courses if they were to start over, this on its own shows that graduates are not fully informed about career choices hence the regrets.

6.7.3 Government intervention

Furthermore, the government should make it easier and beneficial for employers to hire young people by introducing training and wage subsidies. This entails successfully implementing policies that will help in lowering unemployment and help contribute towards the country's growth. Such policies can be the provision of favourable tax rates to firms employing majority of graduates This provides an opportunity for higher education institutions to partner with the government and private sector to not only identify areas of need but also to come up with solutions to the issue of unemployment among young graduates.

6.7.4 Provision of training or work experience

Because the unemployment situation in South Africa is more structural in nature, ways of addressing it also include training and retraining people who are unemployed so that their skills are in line with skills demanded by firms. Graduates should also be more exposed to vocational training. In particular, universities can adopt the same approach used by technikons where students will only graduate once they have successfully completed vocational training. The introductions of vocational training will not only give graduates the opportunity to gain formal work experience but it will also improve their chances of finding employment after graduation.

6.7.5 Wage expectations

There is also another dimension where graduates are often misinformed about the pace of success in the workplace. Wage expectations of young people should be lowered considering the realisation that market clearing wages are often below reservation wages. Thus, graduates should realise the value of hard work, commitment and have realistic opinions in as far as employment success is concerned for new labour market entrants.

6.8   LIMITATIONS AND AREAS FOR FURTHER STUDY

The time constraints made it impossible to do a comparison between HWUs and HBUs especially owing to previous research findings that graduates from these universities experience different employment prospects. It would have been interesting to see the job search differences (if any) that may exists between graduates from both historically Black universities and historically White universities.

Areas for further research could be a comparative study with higher education institutions locally. Further analysis can also be done on a broader scale by increasing the sample size.

REFERENCES

Accenture. 2013. College graduate employment survey: key findings. http://www.accenture.com/sitecollectiondocuments/pdf/accenture-2013-college-graduate-employment-survey.pdf Date of access: 15 Apr. 2015.

Acquah, A. 2009. Tertiary graduates: earnings and employment prospects in the South African labour market. *Southern African Review of Education*, 15(2):27-44.

Adams, J., Khan, H.T.A., Raeside, R. & White, D.I. 2007. Research methods for graduate business and social science students. London: Sage Publications.

Adcorp. 2014. Marginal growth in SA job market. http://www.adcorp.co.za/NEws/Pages/MarginalgrowthinSAjobmarket.aspx Date of access: 14 May. 2015.

AEO (African Economic Outlook). 2012. Promoting youth unemployment. http://www.africaneconomicoutlook.org/fileadmin/uploads/PAGES-%20Pocket%20Edition%20AEO2012-EN.pdf Date of access: 13 Dec. 2014.

AEO (African Economic Outlook). 2013. Employment outlook for youth. http://www.africaneconomicoutlook.org/en/in-depth/youth_employment/employment-outlook-for-youth/. Date of access: 25 Jan. 2016.

AEO (African Economic Outlook). 2015. South Africa – 2015. Retrieved from www.africaneconomic outlook.org Date of access: 20 Oct. 2015.

AERC (African Economic Research Consortium). 2013. Youth and unemployment in Sub-Saharan African. AERC Senior Policy Seminar XV, Kigali, Rwanda March 21–22, 2013.

African Development Bank. 2014. Regional integration for inclusive growth. African Development Bank, Côte d'Ivoire.

African Union. 2006. African youth charter. Addis Ababa, Ethiopia.

Aghion, P. & Howitt, P. 1994. Growth and unemployment. *The Review of Economic Studies*, 61(3):477-494.

Ahmed, S. 2009. Methods in sample surveys: cluster sampling. http://ocw.jhsph.edu/courses/statmethodsforsamplesurveys/PDFs/Lecture5.pdf Date of access: 03 Jul. 2015.

Alexander, N. 2006. Language, class and power in post-apartheid South Africa. www.yale.edu/macmillan/apartheid/apartheid_part1/alexander.pdf Date of access: 12 Aug. 2015.

Alexander, A. 2014. The UK graduate unemployment scourge: why today's graduates will find themselves in the toughest jobs market in living memory. Oxford Royale Academy, 2 Apr. https://www.oxford-royale.co.uk/articles/graduate-unemployment.html Date of access: 29 Jun. 2015.

Al-Habees, A. & Rumman, M.A. 2012. The relationship between unemployment and economic growth in Jordan and some Arab countries. *World Applied Sciences Journal*, 18(5):673-680.

Altbeker, A. & Storme, E. 2013. Graduate unemployment in South Africa: a much exaggerated problem. Centre for Development and Enterprise Insight.

Amare, T. 2014. Africa's high youth unemployment: is population to blame? *The guardian*, 11 Jul. http://www.theguardian.com/global-development-professionals-network/2014/jul/11/africa-youth-unemployment-population-growth Date of access: 11 Dec. 2014.

Archer, E. & Chetty, Y. 2013. Graduate employability: Conceptualisation and findings from the University of South Africa. *Progressio*, 35(1):136-167.

Arora, V. & Ricci, L.A. 2006. Unemployment and the labour market. (*In* Nowak, M. & Ricci, L.A., *ed.* Post-Apartheid South Africa: the first ten years. IMF, Washington, DC. p. 23-47).

Azeng, T.F. & Yogo, T.U. (2013). Youth unemployment and political instability in selected developing countries. Working Paper, 171. African Development Bank, Ethiopia.

Bachmann, R. & Sinning, M. 2012. Decomposing the Ins and Outs of Cyclical Unemployment. Discussion paper, 6362. Institute for the Study of Labor, Germany.

Badat, S. 2010. The challenges of transformation in Higher Education and Training Institutions in South Africa. DBSA, Pretoria.

Bailey, K.D. 1987. Methods of social research. 3rd ed. London: Macmillan.

Baldry, K. 2013. Graduate unemployment in South Africa: prevalence, characteristics and perceived causes. Johannesburg: University of the Witwatersrand. (Dissertation-MA).

Bangane, T.W. 1999. The unemployment problem in South Africa with specific reference to the Lekoa Vaal Triangle Metropolitan Area (LVTMA). The Rand Afrikaans University. (Dissertation-MA).

Barker, F. 2007. The South African labour market: theory and practice. 5th ed. Pretoria: Van Schaik. The Rand Afrikaans University. (Dissertation: MA).

Banerjee, A., Galianit, S., Levinsohn, J., Mclaren, Z. & Woolard, I. 2008. Why has unemployment risen in the New South Africa? *Economics of Transition*, 16(4):715-740.

Bartlett, J.E., Kotrlik, J.W. & Higgins, C.C. 2001. Organizational research: determining appropriate sample size in survey research. *Information Technology, Learning, and Performance Journal*, 19(1):43-50.

Beatty, C., Fothergill, S., Gore, T. 2012. The real level of unemployment 2012. http://www.shu.ac.uk/_assets/pdf/the-real-level-of-unemployment-2012.pdf Date of access: 22 Apr. 2015.

Bell, D.N.F. & Blanchflower, D.G. 2010. Youth unemployment: deja Vu? Stirling Economics Discussion Paper 4. University of Sterling.

Berlingieri, F. & Erdsiek, D. 2012. How relevant is job mismatch for German graduates? Discussion Paper, 12-075. http://ftp.zew.de/pub/zew-docs/dp/dp12075.pdf Date of access: 12 Aug. 2015.

Bertram, D. 2007. Likert Scales… are the meaning of life: *University of Calagary, Department of Computer Science*, pages.cpsc.ucalgary.ca/~saul/wiki/uploads/CPSC681/. Date of access: 10 May. 2015.

Bhorat, H. 2004. Labour market challenges in the post-apartheid South Africa. *South African Journal of Economics*, 72(5):940-977.

Bhorat, H. 2009. Unemployment in South Africa: descriptors & determinants. Paper presented at the Fourth IZA/World Bank Conference on Employment and Development, Bonn, 4-5 May.

Biavaschi, C., Eichhorst, W., Giulietti, C., Kendzia, M.J., Muravyev, A., Pieters, P. et al. 2013. Youth Unemployment and Vocational Training. Background paper for the World Development Report 2013. Washington, DC: World Bank.

Biernacki, P., & Waldorf, D. 1981. Snowball sampling: problems and techniques of chain referral sampling. *Sociological Methods & Research*, 10(2):141-163.

Borjas, G.J. 2010. Labour economics. 5th ed. Boston: McGraw-Hill.

British Council. 2015. Can higher education solve Africa's job crisis? Understanding graduate employability in Sub-Saharan Africa. www.britishcouncil.org/education/ihe Date of access: 24 Jan. 2016.

Burger, R. & Von Fintel, D. 2009. Determining the causes of the rising South African unemployment rate: an age, period and generational analysis. Working Paper 158. University of Stellenbosch.

Business Tech. 2015. South Africa unemployment: 1994 – 2015. http://businesstech.co.za/news/international/77737/south-africa-unemployment-1994-2015/ Date of access: 8 Mar. 2015.

Career Builder. 2014. The shocking truth about the skills gap. http://www.careerbuildercommunications.com/pdf/skills-gap-2014.pdf Date of access: 25 Feb. 2015.

Central Statistics of Botswana. 2015. Labour statistics report 2011.
http://www.cso.gov.bw/images/labreport2011.pdf Date of access: 6 Aug. 2015.

CHEC (Cape Higher Education Consortium). 2013. Pathways from university to
work: a graduate destination survey of the 2010 cohort of graduates from the
Western Cape Universities. CHEC, South Africa, Cape Town.

Coates, H. & Edwards, D. 2009. The 2008 Graduate Pathways Survey: graduates'
education and employment outcomes five years after completion of a bachelor
degree at an Australian university. ACER, Camberwell, Australia.

Creswell, J.W. 1994. Research design: qualitative and quantitative approaches.
London: Sage.

Creswell, J. W. 2003. Chapter One, "A Framework for Design." *Research Design
Qualitative Quantitative and Mixed Methods Approaches*, 3–26.
doi:10.3109/08941939.2012.723954

Creswell, J. 2009. Research design: qualitative, quantitative, and mixed methods
approaches. London and Thousand Oaks: Sage Publications.

Crossan, F. 2003. Research philosophy: towards an understanding.
http://nurseresearcher.rcnpublishing.co.uk/archive/article-research-philosophy-
towards-an-understanding Date of access: 13 May. 2015.

Crowley, L., Jones, K., Cominetti, N. & Gulliford, J. 2013. International Lessons:
youth unemployment in the global context.
http://www.theworkfoundation.com/DownloadPublication/Report/329_International%
20Lessons.pdf Date of access: 14 Mar. 2015.

Daniel, H. 2013. What Are The Causes Of Unemployment In Africa?
http://www.hope-project.org/development/what-are-the-causes-of-unemployment-in-
africa/ Date of access: 6 Aug. 2015.

Departments *see* South Africa.

Devlin, K. 2013. Reducing youth unemployment in Sub-Saharan Africa. http://www.prb.org/Publications/Articles/2013/youth-unemployment-africa.aspx Date of access: 4 Aug. 2015.

Diamond, P.A. 1981. Mobility costs, frictional unemployment and efficiency. *Journal of Political Economy,* 89(4):798-812.

Diamond, P. 2012. Cyclical unemployment, structural unemployment. 13th Jacques Polak Annual Research Conference, November 8-9, 2012. https://www.imf.org/external/np/res/seminars/2012/arc/pdf/PD2.pdf Date of access: 15 Dec. 2014.

Dias, R. & Posel, D. 2007. Unemployment, education and skills constraints in post-apartheid South Africa. Working Paper 07/120. University of Cape Town, Development Policy Research Unit.

Dinokeng Scenarios. 2007. 3 Futures for South Africa. www.dinokengscenarios.co.za/pdfs/summary_booklet.pdf Date of access: 15 Dec. 2014.

Ditsa, G. 2004. A eesearch design and a methodological approach to an explanatory user behavior testing : lessons learnt, 762–768.

Dornbusch, R., Fischer, S. & Startz, R. 2011. Macroeconomics. 11th ed. New York: McGraw-Hill.

Dubihlela, D. 2010. Socio-economic challenges and the survival mechanisms for the female-headed households in the Bophelong Township. NWU. (Dissertation-MCom).

Du Toit, R. 2003. Unemployed youth in South Africa: the distressed generation? Paper presented at the Minnesota International Counselling Institute (MICI), 27 July – 1 August 2003.

Easton, G. 2010. Critical realism in case study research. *Industrial Marketing Management,* 39(1),118–128. doi:10.1016/j.indmarman.2008.06.004 Date of access: 14 Apr. 2015

Farooq, S. 2011. Mismatches between education and occupation: a caste study of Pakistani gradiates. http://www.pide.org.pk/psde/pdf/AGM27/Shujaat%20Farooq.pdf Date of access: 15 Aug. 2015.

Fields, G.S. 2011. Poverty and low earnings in the developing world. Working Paper, 7. Conrnell University, ILR School. http://digitalcommons.ilr.cornell.edu/workingpapers/152 Date of access: 4 Mar. 2015.

Filmer, D., Fox, L. & Brooks, K. 2014. Youth employment in Sub-Saharan Africa. International Bank for Reconstruction and Development, The World Bank.

Fisher, G. & Scott, I. (2011). Closing the skills and technology gap in South Africa. Background paper 3: The role pf higher education in closing the skills gap in South Africa. World Bank.

Forstater, M. 2005. Unemployment in capitalist economies: a history of thought for thinking about policy. http://www.cfeps.org/pubs/wp-pdf/WP16-Forstater.pdf Date of access: 08 Jan. 2015.

Fowler, F.J. 2014. Survey research methods. 5th ed. Boston: Sage Publications.

Flowers, P. 2009. Research Philosophies: importance and relevance. http://www.networkedcranfield.com/cell/Assigment%20Submissions/research%20philosophy%20-%20issue%201%20-%20final.pdf Date of access: 14 May. 2015.

Fourie, C.V. & Burger, P. 2010. How to think and reason in macroeconomics. 3rd ed. Claremont: Juta.

Fourie, F.C.v.N. 2012. The South African unemployment debate: three worlds, three discourses? SALDRU Working Paper 63 of June 2011 (revised).

Freeman, R.B. 1979. Foundations of modern economic series: labour economics. 2nd ed. Edited by Eckstein, O. New Jersey: Prentice-Hall Inc.

Garcia, M. & Fares, J. 2008. Why is it important for Africa to invest in its youth. (*In* Garcia, M. & Fares, J., *ed.* Youth in Africa's labour market. World Bank, Washington, DC. p. 3-14).

Garcia, M. & Fares, J. 2008. Working in bad jobs or not working at all. (*In* Garcia, M. & Fares, J., *ed.* Youth in Africa's labour market. World Bank, Washington, DC. p. 49-65).

Garg, S. 2015. Enterprising youth: Sub-Saharan Africa's uncashed dividend. http://dukespace.lib.duke.edu/dspace/bitstream/handle/10161/8597/Sukanya%20Garg%20Masters%20Project%20.pdf?sequence=1 Date of access: 25 Jan. 2016.

GCE (Global Campaign for Education). 2010. The worst places in the world to be a school child in 2010. http://www.campaignforeducation.org/docs/reports/1goal/1Goal%20School%20Report.pdf Date of access: 10 Jan. 2015.

Giuliano, P. & Tsibouris, G. 2001. Unemployment characteristics and persistence in South Africa. IMF, Washington. (Unpublished).

Goodman, L. 1961. Snowball Sampling. *Annals of Mathematical Statistics*, *32*(1),148–170.

Gorlich, D., Stepanok, I. Al-Hussami, F. 2012. Tackling youth unemployment: background paper. https://www.global-economic-symposium.org/knowledgebase/the-global-society/tackling-youth-unemployment/background-paper/tackling-youth-unemployment/at_download/file Date of access: 14 March. 2015.

Gray, D. E. 2014. Theoreteical perspectives and research methodologies. *Doing Research in the Real World*, 752. Retrieved from http://www.uk.sagepub.com/books/Book239646#tabview=toc Date of access: 26 May. 2015.

Griesel, H. & Parker, B. 2009. Graduate attributes: a baseline study on South African graduates from the perspective of employers. Higher Education South Africa & The South African Qualifications Authority. Retrieved from http://www.saqa.org.za/docs/genpubs/2009/graduate_attributes.pdf Date of access: 15 July. 2015.

Gronau, R. 1971. Information and frictional unemployment. *The American Economic Review*, 61(3):290-309.

Guba, E.G. and Lincoln, Y.S. 1994. Competing paradigms in qualitative research. Handbook of qualitative research, N.K. Denzin and Y.S. Lincoln (eds.), Sage, Thousand Oaks, pp. 105-117).

Gujarati, D.N. & Porter, D.C. 2010. Essentials of econometrics. 4th ed. Boston: McGraw-Hill.

Gul, A., Zaman, K., Khan, M.M., & Ahmad, M. 2012. Measuring unemployment costs on socio-economic life of urban Pakistan. *Journal of American Science*, 8(5):703-714.

Hanapi, Z. & Nordin, M.S. 2014. Unemployment among Malaysia graduates: graduates' attributes lecturers' competency and quality of education. *Procedia Social and Behavioural Sciences*, 112:1056-1063.\

Haouas, I., Sayre, E. & Yagoubi, M. 2012. Youth unemployment in Tunisia: characteristics and policy responses. *Topics in Middle Eastern and African Economies*, 14.

Harris, R. & Sabot, R. 1982. Urban unemployment in LDCs: Towards a more general search model. (*In* Sabot, R. *ed.*, Migration and labour market in developing countries. Boulder, Colorado: Westview Press).

Harvey, L. 2000. New realities: the relationship between higher education and employment. http://qualityresearchinternational.com/esecttools/relatedpubs/New%20Realities.pdf Date of access: 27 Mar. 2015.

Healy, M., & Perry, C. 2000. Comprehensive criteria to judge validity and reliability of qualitative research within the realism paradigm. *Qualitative Market Research: An International Journal, 3*(3),118–126. doi:10.1108/13522750010333861

Henderson, K. A. 2011. Post-Positivism and the pragmatics of leisure research. *Leisure Sciences*, *33*(4),341–346. doi:10.1080/01490400.2011.583166 Date of access: 5 May. 2015.

Henley, J. 2013. Young, qualified and jobless: plight of Europe's best-educated generation. *The guardian*, 1 Jul. http://www.theguardian.com/world/2013/jul/01/jobless-europe-young-qualified Date of access: 4 Jan. 2014.

Herman, E. 2011. The impact of economic growth process in employment in European Union countries. *The Romanian Economic Journal*, 14(42):49-67.

Hofmeyr, J. 2014. Youth unemployment in South Africa: impacts on longer term political stability. Konrad-Adenauer-Stiftung, South Africa.

Hofmeyr, J. & Nyoka, A. 2014. Breaking the mould: prospects for radical socio-economic transformation. Institute for Justice and Reconciliation, Cape Town.

Huang, J., H. Zhi, Z. Huang, S. Rozelle and J. Giles. 2011b. The impact of the global financial crisis on offfarm employment and earning in rural China. *World Development,* 39 (5):797–807.

Hussain, T. M., Siddiqi, W & Iqbal, A. 2010. A coherent relationship between economic growth and unemployment: empirical evidence from Pakistan. *International Journal of Human and Social Sciences,* 5(5).

IBRC (Indian Business Research Center). 2012. Major unemployment: how academic programs of study affect hoosier unemployment patterns. Indiana University Kelley School of Business, Indiana. http://iwis.iupui.edu/documents/MajorUnemployment_2012.pdf Date of access: 11 Nov. 2015.

IDC (Industrial Development Corporation). 2013. South African: an overview of key trends since 1994. Retrieved from www.idc.co.za Date of access: 20 Jun. 2015.

IDC (Industrial Development Corporation). 2014. Economic Trends: key trends in the South African economy. Retrieved from www.idc.co.za Date of access: 25 June. 2015.

ILO (International Labour Organisation). 2005. Comparable annual employment and unemployment estimates. ILO, Geneva, Switzerland.

ILO (International Labour Organisation). 2013. Global employment youth trends: recovering from a second jobs dips. ILO, Geneva, Switzerland.

ILO (International Labour Organisation). 2014. Global employment trends. ILO, Geneva.

ILO (International Labour Organisation). 2014a. Global employment trends: risk of a jobless recovery? Switzerland, Geneva

ILO (International Labour Organisation). 2014b. Key indicators in the labour market. 8th ed. Switzerland, Geneva.

ILO (International Labour Organisation). 2015a. World employment and social outlook.   ILO, Geneva.

ILO (International Labour Organisation). 2015b. Global employment trends for youth. ILO, Geneva.

IMF (International Monetary Fund). 2013. World economic outlook: hopes, realities, risks. IMF, Washington DC.

IMF (International Monetary Fund). 2014. World economic outlook: recovery strengthens, remains uneven. IMF, Washington DC.

IMF (International Monetary Fund). 2015. World economic outlook: uneven growth, short- and long-term factors. IMF, Washington DC.

ITRISA (International Trade Institute of Southern Africa). 2015. International trade relations. North-West University, NWU.

JA Worldwide. 2011. Generation jobless: the challenge of global youth unemployment. Retrieved from www,.jaworldwide.org   Date of access: 15 May. 2015.

Janoski, T., Luke, D. & Oliver, C. 2014. The causes of structural unemployment: four factors that keep people from the jobs they deserve. Cambridge: Polity Press.

Jones, S.R.G. & Riddell, W.C. 1999. The measurement of unemployment: an empirical approach. *Econometrica*, 67(1):147-162.

Jones, S. 2015. Youth unemployment "a timebomb" in developing countries. *The guardian*, Mar 24. http://www.theguardian.com/global-development/2015/mar/24/youth-unemployment-timebomb-developing-countries-committee Date of access: 2 Apr. 2015.

Jonker, J. & Pennink, B. 2010. The essence of research methodology: a concise guide for Master and PhD students in management sciences. London: Springer.

Junankar, P. N. (Raja). 2011. The global economic crisis: long-term unemployment in the OECD, (6057),3–86.

Kane-Berman, J. 2015. There's no disguising SA's youth unemployment problem. *Business Day live*, 26 Jan. http://www.bdlive.co.za/opinion/columnists/2015/01/26/theres-no-disguising-sas-youth-unemployment-problem Date of access: 15 Mar. 2015

Kane-Berman, J., Dimant, T., Lebone, K. 2015. Born free but still in chains: South Africa's post-apartheid generation. http://irr.org.za/reports-and-publications/occasional-reports/files/irr-report-2013-born-free-but-still-in-chains-april-2015.pdf Date of access: 15 May. 2015.

Kaufman, B. E. & Hotchkiss, J. L. 2006. The economics of the labour market. 7th ed. Ohio: Thompson Higher Education.

Kelley, K., Clark, B., Brown, V., & Sitzia, J. 2003. Good practice in the conduct and reporting of survey research. *International Journal for Quality in Health Care*, *15*(3),261–266. doi:10.1093/intqhc/mzg031

Kerlinger, F.N. 1986. Foundations of behavioral research. 3rd ed. Fort Worth: Winston.

Keynes, J.M. 1973. The general theory of employment, interest and money. 13th ed. Cambridge: Cambridge University Press.

Kirk, D. 2011. The primary cause of structural unemployment in South Africa: poor education standards and policy. http://twentythirdfloor.co.za/2011/06/11/structural-unemployment-and-education/ Date of access: 25 Feb. 2015.

Kingdon, G. & Knight, J. 2000a. The incidence of unemployment in South Africa. http://www.tips.org.za/files/384.pdf Date of access: 25 Jan. 2015.

Kingdon, G. & Knight, J. 2000b. Unemployment in South Africa: the nature of the beast. http://www.tips.org.za/files/395.pdf Date of access: 20 Jan. 2015.

Kingdon, G. & Knight, J. 2001. Why high open unemployment and small informal sector in South Africa? http://www.csae.ox.ac.uk/resprogs/usam/why%20small%20informal%20sector.pdf Date of access: 20 Jan. 2015.

Kingdon, G. & Knight, J. 2005. How flexible are wages in response to local unemployment in South Africa? http://www.gprg.org/pubs/workingpapers/pdfs/gprg-wps-015.pdf Date of access: 18 Jan. 2015.

Kingdon, G. & Knight, J. 2007. Unemployment in South Africa, 1995-2003: causes, problems and policies. *Journal of African Economies*, 16(5):813-848.

Kothari, C. R. 2004. Research methodology: methods and techniques. Retrieved from http://books.google.com/books?id=8c6gkbKi-F4C&pgis=1 Date of access: 25 Apr. 2015.

Krosnick, J. A. 2010. Survey research. *Research design and data collection*, 159–185.

Kuhn, T. S. 1962. *The structure of scientific revolutions* (Vol. II). London: The University of Chicago Press.

Kulik, L. 2001. The impact of gender and marital status on attitudes and responses to unemployment. *Journal of Clinical and Applied Sociology*, 3(1)/.

Lam, D. 2014. Youth bulges and youth unemployment: youth bulges are not a major factor explaining current levels of youth unemployment. Institute for Study of Labor, Germany

Landreneau, K. J. 2011. Sampling strategies. *Qualitative Research*, *4*(1),3–4.

Leader. 2011. 9 major problems facing South Africa - and how to fix them. http://www.leader.co.za/article.aspx?s=1&f=1&a=2893 Date of access: 2 Jan. 2015.

Leeuw, E. D. De, Hox, J. J., & Dillman, D. A. 2008. *International Handbook of Survey Methodology*, 558. doi:10.4324/9780203843123

Lehohla, P. 2004. No Conspiracy behind Stats SA'a jobless figures. http://www.statssa.gov.za/news_archive/14oct2004_1.asp Date of access: 8 Jan. 2015.

Leibbrandt, M. Woolard, I. McEwen, H. & Koep, C. 2010. Employment and inequality outcomes in South Africa. OECD, Paris.

Leonard, J.S. 1987. Technological change and the extent of frictional and structural unemployment. http://escholarship.org/uc/item/9538f3v2 Date of access: 5 Jul. 2015.

Lesotho Bureau of Statistics. 2011. 2008 Lesotho integrated labour force survey. Available [www.bos.gov.ls].

Lester, B.Y & McCain, R.A. 2001. An equity-based redefinition of underemployment and unemployment and some measurements. *Review of Social Economy*, 59(2):133-159.

Levine, L. 2013. The increase in unemployment since 2007: is it cyclical or structural? fas.org/sgp/crs/misc/R41785.pdf Date of access: 28 Nov. 2014.

Lewin, C. 2011. Understanding and describing quantitative data. (*In* Somekh, B. & Lewin, C., *ed.* Theory and methods in social research. London: Sage. p. 220-230).

Lilien, D.M. 1982. Sectoral shifts and cyclical unemployment. *Journal of Political Economy*, 90(4):777-793.

Lincoln, Y.S. & Guba, E.G. (1985). Naturalistic inquiry. Beverly Hills: Sage.

Lindbeck, A. 2015. Unemployment: structural. *International Encyclopedia of the Social & Behavioral Sciences*, 23:738-743.

Longhi, S. and Taylor, M. 2012. Occupational change and mobility among employed and unemployed job seekers. *Scottish Journal of Political Economy* (forthcoming).

Longhi, S. & Taylor, M. 2013. Employed and unemployed job seekers and the business cycle. University of Essex, Institute for Social and Economic Research.

Lovati, J. M. 1976. The unemployment rate as an economic indicator. *Review, Federal Reserve Bank of St Louis*, *58*(9),2–9.

MacGregor, K. 2007. South Africa: joblessness amid skills shortage. *University World News*, 4 November. http://www.universityworldnews.com/article.php?story=20071101145653965 Date of access: 02 Jan. 2015.

Machin, S. & McNally, S. 2007. Tertiary education systems and labour markets. http://www.oecd.org/edu/innovation-education/38006954.pdf Date of access: 18 Aug. 2015.

Mackenzie, N. & Knipe, S. 2006. Research dilemmas: paradigms, methods and methodology. *Issues in Educational Research*, 16(2):193-205.

Mahadea, D. & Simson, R. 2010. The challenge of "low employment growth" in South Africa: 1994 – 2008. *SAJEMS*, 13(4):391-406.

Makoni, M. 2014. Higher education could help solve the job crisis – Report. University World News, Issue No 319.

Malhotra, N.K. 2010. Marketing research: an applied orientation. Boston: Pearson.

Maree, J. 1978. The dimensions and causes of unemployment and underemployment in South Africa. *South African Labour Bulletin*, 4(4).

Maree, K. & Pietersen, J. 2012a. Survey and the use of questionnaires. (*In* Maree, K., *ed.* First steps in research. Pretoria: Van Schaik. p. 154-170).

Maree, K. & Pietersen, J. 2012b. Sampling. (*In* Maree, K., *ed.* First steps in research. Pretoria: Van Schaik. p. 171-181).

Maswanganyi, N. 2015. Discouraged young work seekers at 1.5 million. *Business Day Live*, 30 Jun. http://www.bdlive.co.za/economy/2015/06/30/discouraged-young-work-seekers-at-1.5-million Date of access: 30 Sep. 2015.

Mathy, G. 2003. Cyclical unemployment becomes structural unemployment: unemployment persistence in the Great Depression and today. https://www.american.edu/cas/economics/news/upload/12-4-Mathy-Abstract.pdf Date of access: 14 May. 2015.

Matsilele, T. 2015. South Africa is a bomb waiting to explode. *CNBC Africa*, 24 Apr. http://www.cnbcafrica.com/news/southern-africa/2015/04/24/moeletsi-mbeki-south-africa-unemployment/ Date of access: 4 May. 2015.

Marx, K. 1867. Capital: a critique of political economy. Volume I, the process of production of capital. Translated from the German by Samuel Moore and Edward Aveling, Moscow: Progress Publishers.

Mauro, L. & Carmeci, G. 2003. Long run growth and investment in education: does unemployment matter? *Journal of Macroeconomics*, 25:123-137.

Mayer, M.J, Gordhan, S., Manxeba, R., Hughes, C., Foley, P., Maroc, C., Lolwana, P. & Nell, M. 2011. Towards a youth employment strategy for South Africa. Working Paper Series 28. Development Planning Division.

McClelland, A. & Macdonald, F. 1998. The social consequences of unemployment. http://www.bsl.org.au/pdfs/social.pdf Date of access: 12 Feb. 2015.

McConnell, C.R., Brue, S.L. & Macpherson, D.A. 2009. Contemporary labour economics. 8th ed. NY: McGraw-Hill.

McCord, A. & Bhorat, H. 2003. Chapter 5: employment and labour market trends. http//hrdreview.hsrc.ac.za Date of access: 29 Apr. 2015.

McMillan, M.S & Rodrik, D. 2011. Globalization, structural change and productivity growth. Working Paper, 17143. NBER, Cambridge.

MIA (Marxists Internet Archive). 2007. Marx and Keynes on Unemployment. https://www.marxists.org/archive/hardcastle/unemployment.htm Date of access: 15 Jan. 2015.

Mirko, M. 2005. The Maltese labour market and frictional unemployment. *Bank of Valletta Review*, 32:47-61.

Mlambo-Ngcuka., P. 2006. Address delivered at the Third Annual Julius Nyerere Memorial Lecture, at the University of the Western Cape, 06 September 2006. Retrieved from www.gov.za. Date of access: 24 May. 2015

Mlatsheni, C. 2012. The challenges unemployment imposes on youth. (*In* Perold *et al.*, *ed.* Shaping the future of South Africa's youth: rethinking post-school education and skills training. Cape Town: CHET. p. 31-41).

Mohr, P., Fourie, L. & Associates. 2009. Economics for South African students. 4th ed. Pretoria: Van Schaik.

Moleke, P. 2006. Finding work: employment experiences of South African graduates. Cape Town: HSRC Press.

Moleke, P. 2009. Chapter 6: the graduate labour market. Cape Town. HSRC Press.

Moleke, P. 2010. The graduate labour market. (*In* Letseka *et al.*, *ed.* Student retention and graduate destination: higher education and labour market access and success. Cape Town: HSRC Press. p. 1-20).

Monette, D.R., Sullivan, T.J., Dejong, C.R. & Hilton, T.P. 2014. Applied social research: a tool for the human services. 9th ed. Belmont: Brooks/Cole.

Monga, C. 2013. Jobs: an African manifesto. Duke University, John Hope Franklin Center, Durham. September 19, 2013. Lecture.

Morrissey, H. 2013. Your career is not predestined by degree choice. *Telegraph*, 24 Aug. http://www.telegraph.co.uk/finance/comment/10264114/Your-career-is-not-predestined-by-degree-choice.html Date of access: 15 Apr. 2015.

Mouton, J. & Marais, H.K. 1988. Basic concepts and methodology of the social sciences. Pretoria: HSRC.

Msimanga, T.H. 2013. Determining the factors that affect female unemployment in a South African township. Vanderbijlpark: NWU. (Dissertation-MCom).

Mueller, A.I. 2012. Separations, sorting and cyclical unemployment. Institute for Study of Labor, Germany.

Munnell, A.H., Sass, S.A. & Soto, M. 2006. Employer attributes towards older workers: survey results. Center for Retirement Research, issue no 4.

Murwirapachena, G. 2011. Fiscal policy and unemployment in South Africa 1980 to 2010. South Africa: University of Fort Hare. (Dissertation-MCom).

Mwesigwa, A. 2014. Uganda's unemployed graduates held back by skills gap. *The guardian*, 16 Jan. http://www.theguardian.com/global-development/2014/jan/16/uganda-unemployed-graduates-held-back-skills-gap Date of access: 14 Jan. 2015.

National Treasury. 2011. Confronting youth unemployment: policy options for South Africa. Discussion paper. Pretoria.

National Statistical Office of Malawi. 2014. Malawi Labour Force Survey 2013. Retrieved from www.nsomalawi.mw Date of access: 24 Jun. 2015.

Nel, H. & Neale-Shutte, M. 2013. Examining the evidence: graduate employability at NMMU. *South African Journal of Higher Education*, 27(2):437–453.

Neuman, W.L. 2011. Social research methods: qualitative and quantitative methods. 7th ed. New York: Pearson.

NPC (National Planning Commission). 2011. Diagnostic report. Pretoria.

Odhav, K. 2009. South Africa post-apartheid Higher Education policy and its marginalisations: 1994-2002. *SA-Educ Journal*, 6(1):33-57.

OECD (Organisation for Economic Cooperation and Development). 2008. Education at a glance: OECD Indicators. OECD, Paris.

OECD (Organisation for Economic Cooperation and Development). 2013. OECD economic surveys: South Africa 2013. OECD, Paris.

OECD (Organisation for Economic Co-Operation and Development). 2014a. Preventing unemployment and underemployment from becoming structural. OECD, Paris.

OECD (Organisation for Economic Co-operation and Development). 2014b. How does South Africa Compare? OECD, Paris.

OECD (Organisation for Economic Co-operation and Development). 2014c. Registered unemployed and job vacancies. OECD, Paris.

O'Higgins, N. 2003. Trends in the youth labour market in developing and transition countries. *Social Protection Discussion Paper Series*, 0321. Human Development Network, The World Bank.

O'Higgins, N. 2015. Youth unemployment. IZA Policy Paper, 103. Institute for the Study of Labor, Germany.

Ohio (Department of job and Family Services). 2013. Unemployment rate methodology. http://ohiolmi.com/laus%5CUR_Methodology2013.pdf Date of access: 21 Apr. 2015.

Oluwajodu, F., Blaauw, D., Greyling, L. & Kleynhans, E.P.J. 2015. Graduate unemployment in South Africa: perspectives from the banking sector. *SA Journal of Human Resource Management*, 13(1). Article 656:9 pages.

Ortiz, I. & Cummins, M. 2012. When the global crisis and youth bulge collide: double the jobs trouble for youth. UNICEF, New York.

O'Sullivan, A., Rey, M.E., & Mendez, J.G. 2011. Opportunities and challenges in the MENA region. OECD, Paris.

Oxford English Dictionary for Students. 2006. Oxford: Oxford University Press.

Page, J. 2012. Youth, jobs, and structural change: confronting Africa's "employment problem". Working Paper 155 African Development Bank, Tunisia.

Pauw, K., Oosthuizen, M. & Van Der Westhuizen, C. 2006. Graduate unemployment in the face of skills shortage: a labour market paradox. Working Papers 06/114, University of Cape Town, Development Policy Research Unit.

Pauw, K., Oosthuizen, M. & Van Der Westhuizen, C. 2008. Graduate unemployment in the face of skills shortage: a labour market paradox. *South African Journal of Economics,* 76(1).

PCI (Peace Child International). 2013. Youth unemployment in Sub-Saharan Africa. http://peacechild.org/youth-unemployment-in-sub-saharan-africa/ Date of access: 13 Aug. 2015.

Plaut, M. 2013. Really worrying: South Africa's economy 'is in decline'. http://martinplaut.wordpress.com/2013/11/14/really-worrying-south-africas-economy-is-in-decline/ Date of access: 25 Nov. 2014.

Posel, D. & Casale, D. 2013. Differences in subjective well-being within households: an analysis of married and cohabiting couples in South Africa. http://www.essa2013.org.za/fullpaper/essa2013_2588.pdf. Date of access: 15 Aug. 2015.

Posel, D., Casale, D., & Vermaak, C. 2014. Job search and the measurement of unemployment in South Africa. *South African Journal of Economics*, *82*(1),66–80. doi:10.1111/saje.12035

Rajasekar, S., Philominathan, P., & Chinnathambi, V. 2006. Research Methodology. *Regional Anesthesia and Pain Medicine*, *36*(4),23. doi:arXiv:physics/0601009v3

Rankin, N.A. & Roberts, G.A. 2010. Youth unemployment, firm size and reservation wages in South Africa. MIPRA Paper 24027. African Micro-Economic Research Unit.

Rasool, F. & Botha, C.J. 2011. The nature, extent and effect of skills shortages on skills migration in South Africa. *SA Journal of Human Resource Management*, 9(1), Art. 287, 12 p.

Razak, M.I.M., Yusof, A.M., Syazana, W.N., Jaafar, W.E. & Talib, A.H. 2014. Factors influencing unemployment among graduates in Malaysia: an overview. *Journal of Economics and Sustainable Development*, 5(11):168-174.

Rees, A. 1986. An essay on youth joblessness. *Journal of Economic Literature*, 24(2):613-628.

Riddel, W.C. 2000. Measuring unemployment and structural unemployment. *Canadian Public Policy*, 26:S101-S18p.

Riddell, W.C. & Song, X. 2011. The impact of education on unemployment incidence and re-employment sucsess: evidence from the U.S. labour market. Discussion paper, 5572. Institute of the Study of Labour, Germany.

ROA (Research Centre For Education and the Labour Market). 2012. Maastricht University graduate surveyes: 2012. *ROA-F2012/3*. Maatricht University.

Rodríguez, A., Dahlman, C. and Salmi, J. 2008. Knowledge and innovation for competitiveness in Brazil. The International Bank for Reconstruction and Development/World Bank, Washington DC.

Ryan, A. 2006. Post-positivist approaches to research. *Researching and writing your thesis: a guide for postgraduate students*, 12–26.

Ryan, C. 2013. Field of degree and earnings by selected employment characteristics: 2011.   https://www.census.gov/prod/2012pubs/acsbr11-10.pdf Date of access: 12 Apr. 2015.

SADC (Southern African Development Community). 2012. Employment and labour. SADC, Botswana.

SAGDA (South African Graduate Development Association). 2012. Profile presentation. Retrieved from www.sadga.org.za Date of access: 20 Jan. 2015.

SARPN (South African Regional Poverty Network). 2008. Youth voluntarism in South Africa: who are youth in South Africa. http://www.sarpn.org/CountryPovertyPapers/SouthAfrica/june2002/mkandawire/page 3.php Date of access: 29 Apr. 2015.

Saunders, M., Lewis, P. & Thornhill, A. 2007.   Research methods for business students. 4th ed. Boston: Pearson.

Seekings, J. 2003. Do South Africa's unemployed constitute an underclass? Working paper, 32. University of Cape Town: Centre for Social Science Research.

Sekatane, M.B. 2004. The role of clothing manufacturing co-operatives in job creation and poverty alleviation in Sharpeville. Vanderbijlpark-NWU. (Dissertation: MCom)

Sengenberger, W. 2011. Beyond the measurement of unemployment and underemployment: the case for extending and amending labour market statistics. ILO, Geneva.

Sharp, K.L. 2012. Internet's influence on the marketing activities of South Africa. Vanderbijlpark - NWU. (Dissertation-MCom).

Shierholz, H., Davis, A. & Kimball, W. 2014. The class of 2014: the weak economy is idling too many young graduates. EPI Briefing paper 377. Economic Policy Institute.

Singleton, R., Straits, B.C. & Straits, M.M. 1993. Approaches to social research. 2nd ed. London: Oxford University Press.

Sirat, M., Heng, C.L., Shuib, M. 2012. Employability of graduates in Malaysia. Bangkok, Thailand: Asia and Pacific Regional Bureau for Education, UNESCO.

South Africa. 2009. National Youth Policy 2009-2014. Pretoria.

South Africa. 2011. The New Growth Path. Pretoria.

South Africa. Department of Labour. 2012. Job opportunities and unemployment in the South African labour market. Pretoria.

South Africa. 2013. National Development Plan. Pretoria.

South Africa. Department of Higher Education and Training. 2013. Statistics on post-school education and training in South Africa: 2011. Pretoria.

South Africa. Department of Higher Education South Africa. 2014. Statistics on post-school education and training in South Africa: 2012. Pretoria.

South Africa. The Presidency. 2014. Twenty year review South Africa 1994 – 2014. Pretoria.

South Africa. Department of labour. 2014. Annual labour market bulletin. Pretoria.

South Africa. 2015. GDP growth slows, jobless numbers up. http://www.southafrica.info/news/gdp-down-270515.htm#.VkLz47cwiM8 Date of access: 15 Oct. 2015.

South Africa. 2015. National youth policy 2014 – 2019. Pretoria.

Spaull, N. 2013. South Africa's education crisis: the quality of education in South Africa 1994-2011. Centre for Development & Enterprise.

Stampini, M. & Verdier-Chouchane, A. 2011. Labour market dynamics in Tunisia: the issue of youth unemployment. Discussion paper 5611. Institute for Study of Labor, Germany.

Statistics Norway. 2007. Unemployment measured by survey and register data: a comparison of the two measurements. https://www.stat.fi/registerseminar/session2_pedersen_pres.pdf Date of access: 22 Apr. 2015.

Stats SA (Statistics South Africa). 2002. The South African labour market: selected time-based social and international comparisons. Pretoria.

Stats SA (Statistics South Africa). 2008. South African Statistics. Pretoria.

Stats SA (Statistics South Africa). 2013. Labour market dynamics in South Africa. Pretoria: Government Printer.

Stats SA (Statistics South Africa). 2014a. Employment, unemployment, skills and economic growth: an exploration of household survey evidence on skills development and unemployment between 1994 and 2014. Pretoria.

Stats SA (Statistics South Africa). 2014b. Education: a roadmap out of poverty? http://www.statssa.gov.za/?p=2566 Date of access: 25 Mar. 2015.

Stats SA (Statistics South Africa). 2014c. Quarterly labour force survey – Quarter 3, 2014. Pretoria.

Stats SA (Statistics South Africa). 2015a. Quarterly labour force survey – Quarter 4, 2014. Pretoria.

Stats SA (Statistics South Africa). 2015b. National and provincial labour market: Quarter 3 2008 – Quarter 3 2014. Pretoria: Government Printer.

Stats SA (Statistics South Africa). 2015c. Labour market dynamics in South Africa, 2014 report. Pretoria.

Stats SA (Statistics South Africa). 2015d. Quarterly labour force Survey – Quarter 3 2015. Pretoria.

Strobl, E. & Byrne, D. 2002. Defining unemployment in developing countries: evidence from Trinidad and Tobago. *Discussion Paper,* 659. Institute for the Study of Labor, Germany.

Stryker, J.D., Cassim, F., Rajaratnam, B., Bhorat, H., Leibbrandt, M. & Plunkett, D. 2001. Increasing demand for labour in South Africa. http://pdf.usaid.gov/pdf_docs/PNACM723.pdf Date of access: 8 March. 2015.

Summers, L.H. 1981. Measuring unemployment. *Brookings Papers on Economic Activity*, 2:610-620.

Swanepoel, D.J. & Van Zyl, J.S. 1999. Economics 2000. Cape Town: Nasou.

Swanepoel, J.W.H., Swanepoel, C.J., Van Graan, F.C., Allison, J.S. & Santana, L. 2010. Elementary statistical methods. 3rd ed. Potchefstroom: AndCork.

Tan, L.C. & French-Arnold, E. 2012. Employability of graduates in Asia: an overview of case studies. Bangkok, Thailand: Asia and Pacific Regional Bureau for Education, UNESCO.

Tanzania Bureau of Statistics. 2015. Integrated labour force survey 2014: Provisional tables. Retrieved from www.nbs.go.tz. Date of access: 15 Aug. 2015.

The Conference Board. 2006. Are they really ready to work? employers' perspectives on the basic knowledge and applied skills of new entrants to the 21st century U.S. workforce. http://files.eric.ed.gov/fulltext/ED519465.pdf Date of access: 2 Oct. 2015.

The Economist. 2012. Education in South Africa is still dysfunctional. http://www.economist.com/node/21543214 Date of access: 20 Dec. 2014.

The Economist. 2013. Youth unemployment: generation jobless. http://www.economist.com/news/international/21576657-around-world-almost-300m-15-24-year-olds-are-not-working-what-has-caused Date of access: 4 Aug. 2015.

The World FactBook. 2015. Median age (years). Retrieved from www.cia.gov Date of access: 25 Sep. 2015.

Tregenna, F. & Tsela, M. 2008. Inequality, unemployment and poverty in South Africa. http://www.tips.org.za/files/inequality_unemployment_and_poverty_-_tregenna_and_tsela.pdf Date of access: 25 Apr. 2015.

Trochim, W. 2006. Research methods knowledge base: positivism and post-positivism. http://www.socialresearchmethods.net/kb/positvsm.php Date of access: 3 May. 2015.

UNDP (United Nations Development Programme). 2014. Youth and employment among the BRICS. Policy in Focus, 28. UNDP, New York.

UNESCO (United Nations Educational, Scientific and Cultural Organisation). 2012. Youth and skills: putting education to work. UNESCO, Paris.

UNESCO (United Nations Educational, Scientific and Cultural Organisation). 2014. Learning to live together. UNESCO, Paris.

UNIDO (United Nations Industrial Development Organization). 2008. Creating an enabling environment for private sector development in sub-Saharan Africa. UNIDO, Vienna.

UN (United Nations). 2007. Vulnerable Indicator. UN, New York.

UN (United Nations). 2009. Regional overview: youth in Africa. UN, New York.

UN (United Nations). 2011. Youth employment: youth perspectives on the pursuit. UN, New York.

UN (United Nations). 2012. World youth report. Youth unemployment challenge and solutions. UN, New York.

Urdal, H. 2006. A clash of generations? youth bulges and political violence. *International Studies Quarterly.* 50(3):607–630.

Van Broekhuizen, H. 2012. Higher education quality and graduate labour market status in South Africa. https://editorialexpress.com/cgibin/conference/download.cgi?db_name=CSAE2013&paper_id=543 Date of access: 15 Jan. 2015.

Van Broekhuizen, H. & Van Der Berg, S. 2013. How high is graduate unemployment in South Africa? A much-needed update. Retrieved from www.econ3x3.org Date of access: 15 Jan. 2015.

Van Der Berg, S. & Van Broekhuizen, H. 2012. Graduate unemployment in South Africa: a much exaggerated problem. Working Paper 22/12. University of Stellenbosch, Bureau of Economic Research.

Van Der Walt, J.L. & Potgieter, F. 2012. Research methods in education: the frame by which the picture hangs. *International Journal of Multiple Research Approach*, 6(3):220-232.

Van Wyk, B. 2012. Research design and methods: part. Post –graduate enrolment and throughput. http://www.uwc.ac.za/Students/Postgraduate/Documents/ Research_and_Design_I.pdf Date of access: 26 Jun. 2015. [PowerPoint presentation].

Verick, S. 2011. Giving up job search during a recession: the impact of the global financial crisis on the South African labour market. Discussion Paper 6116. Institute of the Study of Labor, Germany.

Wanjiku, C. 2015. To be young, educated, unemployed or underemployed: please meet the new Africans. *Mail & Guardian*, 12 Apr. http://mgafrica.com/article/2015-04-12-to-be-young-educated-unemployed-or-underemployed-please-meet-the-new-africans Date of access: 12 Apr. 2015.

WEF (World Economic Forum). 2013. The global competitiveness report 2013-2014. WEF, Geneva.

WEF (World Economic Forum). 2013a. Global agenda councils -youth unemployment visualization 2013. WEF, Geneva.

WEF (World Economic Forum). 2014. Global risk 2014. 9th ed. WEF, Geneva, Switzerland.

Weligamage, S. & Siengthai, S. 2003. Employer needs and graduate skills: the gap between employer expectations and job expectations of Sri Lankan university graduates. 9TH International conference on Sri Lanka Studies, Matara, Sri Lanka, 28-30 November 2003.

Wolcott, H.F. 1990. Writing up qualitative research. *Qualitative Research Methods Series*, 20.

World Bank. 2006. World development report: equity and development. Washington, DC.

World Bank. 2008. Youth in Africa's labor market. Washington, DC.

World Bank. 2011. World development report: conflict, security and development. Washington, DC.

World Bank. 2013. World development report: jobs. Washington, DC.

Yate, M. 2013. The importance of communication skills in job search.
https://knockemdead.com/the-importance-of-communication-skills-in-job-search/
Date of access: 5 Jan. 2016.

Yu, D. 2013. Youth unemployment in South Africa since 2000 revisited. Working
Paper 04/13. University of Stellenbosch, Bureau of Economic Research.

Zarnowitz, V. 1992. Rational Expectations and Macroeconomic. *Forecasts of
Economic Research Volume.*

Zuze, L. 2013. The challenge of youth-to-work transitions: an international
perspective. (*I*n Perold *et al., ed.* Shaping the future of South Africa's youth:
rethinking post-school education and skills training. Cape Town: CHET. p. 31-41).

ANNEXURES

Annexure A: Graduate Employment Status Questionnaire 2015

NB: The information in this questionnaire will be treated confidentially

A	DEMOGRAPHICAL INFORMATION				
1	Gender	(0) Male		(1) Female	
2	Age *(in years on last birthday)*				
3	Race	(1) African/Black	(2) White	(3) Coloured	(4) Indian/Asian
4	Marital Status	(1) Married or living with a partner		(2) Unmarried or living without a partner	
5	Religion (1) No religion	(2) Christian	(3) Hindu	(4) Muslim	(5) Other
6	How many languages do you speak?				
6a	*Please specify the languages*				

B	EMPLOYMENT AND EDUCATION INFORMATION					
1	**Please indicate your level of education**	(1)1st Degree	(2) Honours	(3)Postgraduate Diploma	(4) Masters/MBA	(5) PhD (6) Other
1a	**Please indicate your field of study**	(1) Commerce.	(2) Science	(3) Humanities	(4) Education	(5) Other *(Specify)*
2	**Please indicate your specialisation/major** *(specify, e.g. Economics, Statistics, Marketing, HR)*					
3	**Please indicate your employment status**	(0) Employed		(1) Unemployed		
4	*What is the nature of your employment?*	(0) Unemployed	(1) Employed full time		(2) Employed Part time	
4a	**If unemployed, have you ever been employed before?**			(0) Yes	(1) No	
5	**How long did it take you to get your first job in months or years?**					
6	*If unemployed*, for how long have you been unemployed?					
7	*If employed*, are you currently employed in your field of study? *(months or years)*		(0) Yes		(1) No	
7a	**If you are not employed in your field of study, what is the state of your job?**		(1) Better	(2) The same	(3) Below	
8	**Have you changed jobs before?**	(0) I am unemployed	(1) Yes		(2) No	
9	**What were the reasons?** *Please specify*					
10	**How would you rate your job searching skills (***verbal, writing, listening and technological*	(1) Excellent	(2) Good	(3) Adequate	(4) Poor	

	skills)?		
11	**During your studies, did you ever make use of career guidance services offered by the campus Career Centre**	(0) Yes	(1) No
11a	*If no, please specify the reasons*	(1) I did not know they exist	(2) I did not have time	(3) Other (Please specify)
12	**Did you further your studies after your first study course?**	(0) Yes	(1) No
12a	*If no, please specify reasons*	(1) Lack of money	(2) Lack of time (very busy)	(3) I am not interested
13	**Would you change your study course if you would start again?**		
	(1) Yes, I would choose a different course	(2) No, I would choose the same course I did	(3) No, I would not enter a higher education institution again

C	PERCEPTIONS OF GRADUATE UNEMPLOYMENT

Please indicate the extent to which you think the following factors influence unemployment among graduates

		Strongly Agree	Agree	Disagree	Strongly Disagree
1	Lack of information about the job market				
2	Lack of job searching skills (e.g. not knowing about the company and the position you are applying for)				
3	No professional networks				
4	Lack of formal working experience				
5	Mismatch between degree/studies attained and those that are required by employers				
6	Higher education institution attended				
7	Age (e.g. being too young or too old)				
8	Race (e.g. Back graduates are more likely to struggle in getting jobs than white graduates)				
9	The high cost of searching for employment				
10	Geographical area one lives in (e.g. living in a secluded area far away from the city)				
11	Psychological behaviour (e.g. lack of self-esteem/self-confidence)				
12	No connections (inside people)				
13	Other reasons, please specify				

Thank you for your participation

Annexure B-1: Survey cover letter (English)

School of Economic Sciences
Department of Economics
P. O. Box 1174
Vanderbijlpark

27 July 2015

Dear Graduate/Participant

My name is Precious Mncayi and I am currently completing my Master's degree in Economics at North-West University (Vaal Triangle Campus) under the supervision of Dr Steve Dunga. My focus area is on unemployment, and as such the objective of this research study is to identify the determinants of the employment status of young graduates from a South African university. The target population includes all male and female graduates who completed their higher education qualification at a South African university between 2004 and 2014; or who are 35 years or younger. Through your participation, I eventually hope to provide a clear picture of the dynamics of graduate unemployment in South Africa.

The value of your opinion as a young graduate is crucial here. All survey responses will be held in strict confidence and only be disclosed in the form of aggregate statistical summaries. Your responses will not be identified with you personally. Participation is voluntary.

If you have any questions or concerns about completing the survey (questionnaire) or about participating in this study, you may contact me at 016 910-3384 or at Precious.Mncayi@nwu.ac.za. Alternatively, contact my supervisor, Dr Dunga at 016 910-3408 or at Steve.Dunga@nwu.ac.za.

Thank you for taking the time to assist me with my educational endeavours. The survey will take approximately ten minutes to complete and I hope you will take these few minutes to complete it.

The survey link is: https://www.surveymonkey.com/r/PMncayi

Sincerely

Precious Mncayi.

Annexure B-2: Survey cover letter (Afrikaans)

NORTH-WEST UNIVERSITY
YUNIBESITI YA BOKONE-BOPHIRIMA
NOORDWES-UNIVERSITEIT
VAAL TRIANGLE CAMPUS

School of Economic Sciences
Department of Economics
P. O. Box 1174
Vanderbijlpark

27 Julie 2015

Beste Gegradueerde/Deelnemer

My naam is Precious Mncayi en ek is tans besig met my meestergraad in Ekonomie aan die Noordwes Universiteit (Vaal Kampus) onder die leiding van dr. Steve Dunga. My fokusarea is werkloosheid. Derhalwe is die doelstelling van hierdie navorsingstudie om die bepalende elemente van die werkloosheidstatus van jong gegradueerdes van 'n Suid-Afrikaanse universiteit, te identifiseer. Die teikenpopulasie sluit alle manlike en vroulike gegradueerdes in wat hulle tersiëre kwalifikasie aan 'n Suid-Afrikaanse universiteit tussen 2004 en 2014 verwerf het; of wie 35 jaar of jonger is. Deur u deelname, hoop ek om uiteindelik 'n duidelike beeld van die dinamika van gegradueerde werkloosheid in Suid-Afrika daar te stel.

Die waarde van u mening as 'n jong gegradueerde is van uiterste belang hier. Alle opnamevrae (vraelys) sal streng vertroulik hanteer word en slegs bekendgemaak word in die vorm van saamgevoegde statistiese opsommings. U antwoorde kan nie direk met u verbind word nie. Deelname is vrywillig.

Indien u enige vrae of kommer het oor die voltooiing van die opname of u deelname aan hierdie studie, mag u my kontak by 016 910-3384 of per e-pos by Precious.Mncayi@nwu.ac.za. As alternatief kan u my studieleier, dr. Dunga, kontak by 016 910-3408 of per e-pos by Steve.Dunga@nwu.ac.za.

Dankie dat u die tyd afstaan om my by te staan met my opvoedkundige pogings. Hierdie opname sal ongeveer tien minute neem om te voltooi en ek hoop dat u hierdie paar minute sal neem om dit te voltooi. Die skakel na die opname is: https://www.surveymonkey.com/r/PMncayi

Die uwe,

Precious Mncayi

ANNEXURE C Employment status * Major or specialisation Crosstabulation

			Major or specialisation													Total
			Eonomics/ Risk Management	Accountin g/Finance	HR/Industrual Psychology/Labour Relations	Marketing/Business Managem ent/Logistics	Psychology/Sociology	Physical Sciences/ Maths/Engineering	Languages/Communications	Law	Computer Sciences/IT	Public and Political studies	Education	Health	Arts and History	
Employment status	Employed	Count	40	33	39	22	10	11	13	2	16	6	7	6	2	207
		% within New employment status	19.30%	15.90%	18.80%	10.60%	4.80%	5.30%	6.30%	1.00%	7.70%	2.90%	3.40%	2.90%	1.00%	100.00%
		% within Major or specialisation	93.00%	89.20%	86.70%	91.70%	76.90%	91.70%	92.90%	100.00%	100.00%	60.00%	87.50%	85.70%	100.00%	88.80%
	Unemployed	Count	3	4	6	2	3	1	1	0	0	4	1	1	0	26
		% within New employment status	11.50%	15.40%	23.10%	7.70%	11.50%	3.80%	3.80%	0.00%	0.00%	15.40%	3.80%	3.80%	0.00%	100.00%
		% within Major or specialisation	7.00%	10.80%	13.30%	8.30%	23.10%	8.30%	7.10%	0.00%	0.00%	40.00%	12.50%	14.30%	0.00%	11.20%
Total		Count	43	37	45	24	13	12	14	2	16	10	8	7	2	233
		% within New employment status	18.50%	15.90%	19.30%	10.30%	5.60%	5.20%	6.00%	0.90%	6.90%	4.30%	3.40%	3.00%	0.90%	100.00%
		% within Major or specialisation	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

Annexure D: Crosstabulation on employment status, marital status and gender

Marital status of the participant				GENDER		Total
				Male	Female	
Married or living with a partner	Employment status	Employed	Count	39	47	86
			% within Employment status	45.3%	54.7%	100%
			% within GENDER	92.9%	87.0%	89.6%
			% of Total	40.6%	49.0%	89.6%
		Unemployed	Count	3	7	10
			% within Employment status	30%	70%	100%
			% within GENDER	7.1%	13.0%	10.4%
			% of Total	3.1%	7.3%	10.4%
	Total		Count	42	54	96
			% within Employment status	43.8%	56.3%	100%
			% within GENDER	100%	100%	100%
			% of Total	43.8%	56.3%	100%
Unmarried or living without a partner	Employment status	Employed	Count	50	71	121
			% within New employment status	41.3%	58.7%	100%
			% within GENDER	89.3%	87.7%	88.3%
			% of Total	36.5%	51.8%	88.3%
		Unemployed	Count	6	10	16
			% within New employment status	37.5%	62.5%	100%
			% within GENDER	10.7%	12.3%	11.7%
			% of Total	4.4%	7.3%	11.7%
	Total		Count	56	81	137
			% within New employment status	40.9%	59.1%	100%
			% within GENDER	100%	100%	100%
			% of Total	40.9%	59.1%	100%

Annexure E: Proof of editing (cover letters)

PO Box 1174, Vanderbijlpark, 1900

Tel: (016) 910-3485
Fax: (016) 910 3463
Web: www.nwu.ac.za

Mrs. Wendy Barrow
Email: wendy.barrow@nwu.ac.za
Mr. Jacques Heyns
Email: jacques.heyns@nwu.ac.za

29 July 2015

To whom it may concern

This letter serves to confirm that this document has been edited by the *Centre for Translation and Professional Language Services* (CTrans). CTrans is a registered corporate member of the South African Translators' Institute (SATI) that makes use of qualified and experienced language practitioners to provide professional translation and language editing services.

CTrans hereby acknowledges that Ms Precious Mncayi's cover letter for her dissertation survey has undergone a proper and professional language edit (including the checking of spelling, grammar, register and punctuation) and translation. The onus rests on the client to work through the proposed changes after the edit and accept or reject these changes.

Yours sincerely

pp. Wendy Barrow

CTrans Management